Concept Paper

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A Catalog of XRF-escape Peaks from Radiation Detectors Compounds for Nuclear Molecular Medicine and Gamma-ray Spectrometry

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Abstract

A catalog of values of predicted energies of the K-XRF escape-peaks from compounds, used for radiation detectors, is presented for given incident gamma-rays suited for nuclear molecular medicine and low-energy spectrometry. The information relating to the compounds adds to that relating to the individual natural elements recently posted [RSC2025a]. The results of power-functions best-fit of XRF energy values vs. Z are listed in Table 1 for Kα2 orbital and Kedge. These expressions, allow simple calculations, avoiding the development of complex software. An extensive literature survey has been carried out mainly considering text-books, review articles and research reports. A final number compounds (**Nc**) equal to 729 has been obtained, whose distribution per number of constituting elements (**Ne**) is reported in Table 2. The predicted energy peaks are arranged in Tables 3 to 7 per Ne in the range from 2 to 8, showing the average value of 3.92 elements per compound. The catalog is conceived for nuclear molecular medicine and gamma-ray spectrometry where such peaks need to be recognized and their underlying area known in order to allow quantitative information.

Keywords: radiation detector; nuclear molecular medicine; gamma-ray spectrometry

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Introduction

Since the XRF photons are typical of the element making-up the detector, the escape-process changes the detector response function by moving away events from the full-energy peak towards an additional peak, sometimes completely separate from the photopeak, located at Egamma-EXRF, for Egamma > EXRF. Due to this reason, the evaluations based on the value of the integral of the counts underlying the full-energy peak are systematically underestimated if the escape photons corrections are not taken into account.

In particular assemblies (like thin and/or discretized detectors) the number of events whose energy falls under the escape peak may even equal or even exceed that of photons under the full-energy peak making necessary to apply corrections [PAX1954].

It must be remarked that this is due to unavoidable edge-effect since a real detector has limited dimensions and fluorescence photons undergo to non-zero probability to escape from the sensitive volume, not being revealed. Only the ideal case of a detector with infinite dimensions is free from this effect, as schematized in [JBR1954].

It is to be noted that the emissions from the L and the other lower-energy orbitals are discarded in the present evaluation since the involved values are negligible with respect to the K-ones, and so also occur for the respective fluorescence yields.

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The values of energy of K-XRF-escape gamma-ray are predicted per 12 incident photons-energy values from 100 to 700 keV. Results are presented in Tables 3 to 7, arranged per Ne = 2, … , 8 and per compound id. This will confirm as the detector transfer function is perturbed more and more as Ne increases, due to the multiple presence of escape energies in the pulse-height spectrum.

The elements sequence utilized in the chemical formula, from left to right, is the same identifying the lines from top to bottom.

The first line of the compound shows, from left to right, the compound-id and the citing reference.

The format of the compound id. takes into account the different symbol-length by doubling the single-character ones (so, as an example, BB stays for B – boron and so on).

The format of reference code (AAAYYYYa) is made by sub-strings related to (a) first-Author, (b) year of first publication, and (c) a code of multiple publication in the year.

The following Ne rows of the compound show, from left to right.

- the atomic number *Z* of the element and their symbol;

- the value of the energy-spread (in keV) between Kedge and Kα2 lines, representing the gap of the rest of K-orbital emissions, i.e. Kβ2, Kβ1, Kβ3, and Kα1; and

- a dozen of numbers representing the escape-peak energy predicted for the correspondent mono-energetic incident photons.

Policies

Literature Coverage

Fundamentals of radiation detection including the concepts herein exposed are deeply and clearly given in Ref.[GKN1999]. The basic X-rays data are from Kaye & Laby, UK National Physical Laboratory [K&L2013], whose completeness and accuracy fulfill the requirements of the Catalog. The other literature citations are from text-books, review articles, research reports, conference papers, etc… whose titles are reported in the Reference list.

Data Selected

Data for this catalog are taken from [K&L2013], limited to those of XRF energy in the columns Kα2 and Kedge (for $4 \leq Z \leq 92$) that are used for power-function best fit performing whose parameters are needed for calculations.

Incident Gamma-Rays

Listed in each result Table is the header specifying the dozen of values of mono-energetic incident gamma-rays considered for the calculations of escape-peaks of different elements.

The values considered in calculations are: 100, 125, 150, 175, 200, 250, 300, 350, 400, 500, 600 and 700 keV. The range includes the energies from all the radio-isotopes used for tracing pharmaceutical administered in SPECT and PET protocols. The last interval is extended up to 700 keV for considering also the 662 keV photons from Cs-137 sources, widely used for energy-calibration.

Escape-Energy Uncertainty

The uncertainty of 0.2-0.3 keV can be assumed, despite submission to the fitting process. On the other hand the tabulated X-rays can be considered affected by uncertainties in the order of a few eV because they are listed in keV with 3 decimal places.

Escape Gamma-Ray Intensity

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The intensity of escape-gamma-ray cannot be easily estimated like their energy. Appropriate Monte Carlo simulation studies of the detector-source systems must be performed aimed to predict intensity values.

Element and Compound Identification

Both the atomic number Z and the symbol of chemical element are given in the results Tables 3 to 7.

The format of the compound id. takes into account the different symbol-length by doubling the single-character ones (so, as an example, BB stays for B – boron and so on).

Photo-Electric Peak

The response of a detector to mono-energetic gamma-rays $E\gamma$ is mainly made, in an ideal pulse-height spectrum, of a vertical segment, representing the photo-electric interactions, whose abscissa is proportional to $E\gamma$ and whose length is proportional to the number of incident gammas. In the reality, the segment becomes a Gaussian curve, due to the enlargement produced by the detector-energy-resolution.

Compton-Effect

Another process affecting the detector response is the Compton scattering, that produces a continuum ranging from zero to the so-called Compton-edge, arising at the end of this continuum. The energy-distance between the Compton edge and the centroid of photo-electric peak can be calculated as (see [GKN1999], p.310):

$EC = E\gamma \,/\, (\, 1 + 2 \,(\, E\gamma \,/\, m0\ c^2 \,)\,)$, that is < $E\gamma$.

Detector Response-Function (DRF)

If $E\gamma < 2\ m0\ c^2$ the response function shows only the two items above described. Based on these values it is reasonable, in a first approximation, to localize the energy at which a valley occurs between the photoelectric-peak and the Compton-edge, as: $Evalley \approx ½\,(\, E\gamma + EC\,)$.

Escape Peaks

Energies of gamma-ray peaks which result from escape of XRF photons from the detector are calculated, according to [GKN1999], as: $EEscape = E\gamma - EXRF$, for $E\gamma > EXRF$. Based on the energy of a given escape photon and on the above considerations regarding the DRF, these photons can be classified according to their position on the DRF. The three following styles are used in Tables 3 to 7 to show the predicted values of escape photon energy: (a) for values overlapping the Compton continuum; (b) for those falling in the region between Compton edge and photo-electric peak; (c) for those overlapped to the photo-peak left-tail.

Table 1. Results of power-function best fit of XRF energy vs. Z for Kα2 orbital and Kedge. See Policies and Explanation

K Orbital	a (keV)	b	R_{square}
$\alpha 2$	0.00560144430106232	2.19086250995425	0.99995
edge	0.00628705594993865	2.12213694400228	0.99990

XRF characteristic energy Vs. atomic number, for a given orbital:

$E_{XRF} = a * (Z \wedge b)$, where a and b characterize the orbitals for Z = 4 to 92.

Table 2. Statistics of compounds per number of elements Ne = 2, …, 8, See Policies and Explanation.

N° of elements	N° of compounds	Table

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Ne	Nc	
2	77	III
3	198	IV
4	222	V
5	179	VI
6	43	VII
7	9	VII
8	1	VII
Total	729	

The distribution shows the average value of 3.92 elements per compound.

Table 3. part (1/5) – Predicted values of XRF-escape energy Eγ-EKα2 for two-component detectors.

Compd. / Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
	[Ref]	incident-photon energy Eγ (keV)											
AgBr	[RHF1947]												
47-Ag	3.5	[a]77.8	[b]102.8	[b]102.8	[b]102.8	[b]102.8	[c]227.8	[c]277.8	[c]327.8	[c]377.8	[c]477.8	[c]577.8	[c]677.8
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
AgCl	[RHF1947a,b]												
47-Ag	3.5	[a]77.8	[b]102.8	[b]102.8	[b]102.8	[b]102.8	[c]227.8	[c]277.8	[c]327.8	[c]377.8	[c]477.8	[c]577.8	[c]677.8
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
ArXe	[TDK1976]												
18-Ar	0.2	[c]97.1	[c]122.1	[c]147.1	[c]172.1	[c]197.1	[c]247.1	[c]297.1	[c]347.1	[c]397.1	[c]497.1	[c]597.1	[c]697.1
54-Xe	5.1	[a]70.2	[b]95.2	[b]120.2	[b]145.2	[b]170.2	[c]220.2	[c]270.2	[c]320.2	[c]370.2	[c]470.2	[c]570.2	[c]670.2
BaBr	[PDR2019]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
BaCl	[JSL2025]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
BaFF	[MLV1983]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
BaOO	[NCH2009]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
BeOO	[PLC2006a]												
04-Be	0.0	[c]99.9	[c]124.9	[c]149.9	[c]174.9	[c]199.9	[c]249.9	[c]299.9	[c]349.9	[c]399.9	[c]499.9	[c]599.9	[c]699.9
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CaBr	[AGR2013]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4

35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CaFF		[CEJ1993]											
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
CaII		[RHF1964]											
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CCHH			[NKR1986a]										
06-C	0.0	[c]99.7	[c]124.7	[c]149.7	[c]174.7	[c]199.7	[c]249.7	[c]299.7	[c]349.7	[c]399.7	[c]499.7	[c]599.7	[c]699.7
01-H	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
CdSe		[MBK2018]											
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8
34-Se	1.5	[b]88.8	[b]113.8	[c]138.8	[c]163.8	[c]188.8	[c]238.8	[c]288.8	[c]338.8	[c]388.8	[c]488.8	[c]588.8	[c]688.8
CdSS		[CRN2016]											
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
CdTe		[CSZ2004]											
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8
52-Te	4.6	[a]72.5	[b]97.5	[b]122.5	[b]147.5	[b]172.5	[c]222.5	[c]272.5	[c]322.5	[c]372.5	[c]472.5	[c]572.5	[c]672.5
CeBr		[KSH2004]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CeCl		[PLC2006t]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CeFF		[WMS1989]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 3. part (2/5) – Predicted values of XRF-escape energy Eγ-EKα2 for two-component detectors.

Compd.			[Ref]										
Z-Sy	E_{edge}-$E_{K\alpha2}$	——incident-photon energy Eγ (keV)——											
	(keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsBr		[SKB1988]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1

CsCl	[[SKB1988a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsFF	[WSC1952]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
CsII	[ESK1987]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CuII	[SDR2001a]												
29-Cu	1.0	[b]92.0	[c]117.0	[c]142.0	[c]167.0	[c]192.0	[c]242.0	[c]292.0	[c]342.0	[c]392.0	[c]492.0	[c]592.0	[c]692.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
DySS	[VVN2024]												
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
ErSS	[VVN2024a]												
68-Er	9.2	[a]51.5	[a]76.5	[a]101.5	[b]126.5	[b]151.5	[b]201.5	[b]251.5	[c]301.5	[c]351.5	[c]451.5	[c]551.5	[c]651.5
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
GaAs	[JGR2013]												
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
33-As	1.4	[b]89.5	[b]114.5	[c]139.5	[c]164.5	[c]189.5	[c]239.5	[c]289.5	[c]339.5	[c]389.5	[c]489.5	[c]589.5	[c]689.5
GaPP	[CRN2016a]												
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
GaSb	[JGR2013a]												
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
51-Sb	4.4	[a]73.6	[b]98.6	[b]123.6	[b]148.6	[b]173.6	[c]223.6	[c]273.6	[c]323.6	[c]373.6	[c]473.6	[c]573.6	[c]673.6
GdOO	[NCH2009c]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
GdSS	[VVN2024b]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
GeLi	[JEB2008]												
32-Ge	1.3	[b]90.2	[c]115.2	[c]140.2	[c]165.2	[c]190.2	[c]240.2	[c]290.2	[c]340.2	[c]390.2	[c]490.2	[c]590.2	[c]690.2
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
HfOO	[CDJ2018p]												
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
HgII	[SDR2001b]												
80-Hg	14.2	[a]31.6	[a]56.6	[a]81.6	[a]106.6	[a]131.6	[b]181.6	[b]231.6	[b]281.6	[b]331.6	[c]431.6	[c]531.6	[c]631.6
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4

InAs		[MBK2018d]											
49-In	4.0	[a] 75.8	[b] 100.8	[b] 125.8	[b] 150.8	[b] 175.8	[c] 225.8	[c] 275.8	[c] 325.8	[c] 375.8	[c] 475.8	[c] 575.8	[c] 675.8
33-As	1.4	[b] 89.5	[b] 114.5	[c] 139.5	[c] 164.5	[c] 189.5	[c] 239.5	[c] 289.5	[c] 339.5	[c] 389.5	[c] 489.5	[c] 589.5	[c] 689.5
InPP		[MBK2018e]											
49-In	4.0	[a] 75.8	[b] 100.8	[b] 125.8	[b] 150.8	[b] 175.8	[c] 225.8	[c] 275.8	[c] 325.8	[c] 375.8	[c] 475.8	[c] 575.8	[c] 675.8
15-P	0.1	[c] 98.0	[c] 123.0	[c] 148.0	[c] 173.0	[c] 198.0	[c] 248.0	[c] 298.0	[c] 348.0	[c] 398.0	[c] 498.0	[c] 598.0	[c] 698.0
InSb		[JGR2013c]											
49-In	4.0	[a] 75.8	[b] 100.8	[b] 125.8	[b] 150.8	[b] 175.8	[c] 225.8	[c] 275.8	[c] 325.8	[c] 375.8	[c] 475.8	[c] 575.8	[c] 675.8
51-Sb	4.4	[a] 73.6	[b] 98.6	[b] 123.6	[b] 148.6	[b] 173.6	[c] 223.6	[c] 273.6	[c] 323.6	[c] 373.6	[c] 473.6	[c] 573.6	[c] 673.6

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 3. part (3/5) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for two-component detectors

Compd. / Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	[Ref] / incident-photon energy $E\gamma$ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
KKBr		[CEJ1993a]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
KKCl		[CEJ1993c]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
KKFF		[CEJ1993d, JJN1993e]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
KKII		[RHF1948]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
LaBr		[MWB2004b]											
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
LaCl		[MWB2004c]											
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
LaCr		[MMS2016b]											
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
24-Cr	0.6	[c]94.7	[c]119.7	[c]144.7	[c]169.7	[c]194.7	[c]244.7	[c]294.7	[c]344.7	[c]394.7	[c]494.7	[c]594.7	[c]694.7
LaFF		[MWB2004d]											
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
LaSS		[VVN2024c]											
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
LiEu		[GKN1999]											
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
LuBr		[MWB2004e]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
LuCl		[MWB2004f]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4

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LuII		[MWB2004g]											
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
LuOO		[MWB2004h]											
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
LuSS		[VVN2024e]											
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
16-S	0.2	[c] 97.7	[c] 122.7	[c] 147.7	[c] 172.7	[c] 197.7	[c] 247.7	[c] 297.7	[c] 347.7	[c] 397.7	[c] 497.7	[c] 597.7	[c] 697.7
NaII		[ESK1987c]											
11-Na	0.0	[c] 99.0	[c] 124.0	[c] 149.0	[c] 174.0	[c] 199.0	[c] 249.0	[c] 299.0	[c] 349.0	[c] 399.0	[c] 499.0	[c] 599.0	[c] 699.0
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
PbFF		[RZH2009]											
82-Pb	15.2	[a] 27.9	[a] 52.9	[a] 77.9	[a] 102.9	[a] 127.9	[b] 177.9	[b] 227.9	[b] 277.9	[b] 327.9	[c] 427.9	[c] 527.9	[c] 627.9
09-F	0.0	[c] 99.3	[c] 124.3	[c] 149.3	[c] 174.3	[c] 199.3	[c] 249.3	[c] 299.3	[c] 349.3	[c] 399.3	[c] 499.3	[c] 599.3	[c] 699.3
PbII		[SDR2001c]											
82-Pb	15.2	[a] 27.9	[a] 52.9	[a] 77.9	[a] 102.9	[a] 127.9	[b] 177.9	[b] 227.9	[b] 277.9	[b] 327.9	[c] 427.9	[c] 527.9	[c] 627.9
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 3. part (4/5) – Predicted values of XRF-escape energy Eγ-EKα2 for two-component detectors

Compd. / Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
PbOO		[CRN2016b]											
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
PbSe		[MBK2018f]											
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
34-Se	1.5	[b]88.8	[b]113.8	[c]138.8	[c]163.8	[c]188.8	[c]238.8	[c]288.8	[c]338.8	[c]388.8	[c]488.8	[c]588.8	[c]688.8
PbSS		[MBK2018g]											
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
PbTe		[MBK2018h]											
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
52-Te	4.6	[a]72.5	[b]97.5	[b]122.5	[b]147.5	[b]172.5	[c]222.5	[c]272.5	[c]322.5	[c]372.5	[c]472.5	[c]572.5	[c]672.5
PrBr		[MBR2007h]											
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
PrCl		[MBR2007i]											
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
RbBr		[CEJ1993i]											
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
RbCl		[CEJ1993j]											
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
RbFF		[SKB1988b]											
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
RbII		[CEJ1993k]											
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
ScOO		[AFK2012]											
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
SmSS		[VVN2024g]											
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7

SrFF		[CEJ1993l]											
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
SrII		[NCH2009h]											
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
TlBr		[RHF1947e]											
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
TlCl		[RHF1947f]											
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
TlII		[RHF1947g]											
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
YbOO		[JDH2023b]											
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 3. part (5/5) – Predicted values of XRF-escape energy Eγ-EKα2 for two-component detectors

Compd. Z-Sy	Eedge-EKα2 (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
YbSS [VVN2024h]													
70-Yb	10.0	a 48.4	a 73.4	a 98.4	b 123.4	b 148.4	b 198.4	b 248.4	c 298.4	c 348.4	c 448.4	c 548.4	c 648.4
16-S	0.2	c 97.7	c 122.7	c 147.7	c 172.7	c 197.7	c 247.7	c 297.7	c 347.7	c 397.7	c 497.7	c 597.7	c 697.7
YYOO [GBL1994d]													
39-Y	2.2	b 85.1	b 110.1	b 135.1	c 160.1	c 185.1	c 235.1	c 285.1	c 335.1	c 385.1	c 485.1	c 585.1	c 685.1
08-O	0.0	c 99.5	c 124.5	c 149.5	c 174.5	c 199.5	c 249.5	c 299.5	c 349.5	c 399.5	c 499.5	c 599.5	c 699.5
YYSS [VVN2024i]													
39-Y	2.2	b 85.1	b 110.1	b 135.1	c 160.1	c 185.1	c 235.1	c 285.1	c 335.1	c 385.1	c 485.1	c 585.1	c 685.1
16-S	0.2	c 97.7	c 122.7	c 147.7	c 172.7	c 197.7	c 247.7	c 297.7	c 347.7	c 397.7	c 497.7	c 597.7	c 697.7
ZnOO [EGR2008]													
30-Zn	1.1	b 91.4	c 116.4	c 141.4	c 166.4	c 191.4	c 241.4	c 291.4	c 341.4	c 391.4	c 491.4	c 591.4	c 691.4
08-O	0.0	c 99.5	c 124.5	c 149.5	c 174.5	c 199.5	c 249.5	c 299.5	c 349.5	c 399.5	c 499.5	c 599.5	c 699.5
ZnSS [GBL1994f]													
30-Zn	1.1	b 91.4	c 116.4	c 141.4	c 166.4	c 191.4	c 241.4	c 291.4	c 341.4	c 391.4	c 491.4	c 591.4	c 691.4
16-S	0.2	c 97.7	c 122.7	c 147.7	c 172.7	c 197.7	c 247.7	c 297.7	c 347.7	c 397.7	c 497.7	c 597.7	c 697.7

Table 4. part (1/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd. Z-Sy	Eedge-EKα2 (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
AlOOCe [CDJ2018]													
13-Al	0.1	c 98.5	c 123.5	c 148.5	c 173.5	c 198.5	c 248.5	c 298.5	c 348.5	c 398.5	c 498.5	c 598.5	c 698.5
08-O	0.0	c 99.5	c 124.5	c 149.5	c 174.5	c 199.5	c 249.5	c 299.5	c 349.5	c 399.5	c 499.5	c 599.5	c 699.5
58-Ce	6.1	a 65.4	a 90.4	b 115.4	b 140.4	b 165.4	b 215.4	c 265.4	c 315.4	c 365.4	c 465.4	c 565.4	c 665.4
ArCCHH [NKR1986]													
18-Ar	0.2	c 97.1	c 122.1	c 147.1	c 172.1	c 197.1	c 247.1	c 297.1	c 347.1	c 397.1	c 497.1	c 597.1	c 697.1
06-C	0.0	c 99.7	c 124.7	c 149.7	c 174.7	c 199.7	c 249.7	c 299.7	c 349.7	c 399.7	c 499.7	c 599.7	c 699.7
01-H	0.0	c 100.0	c 125.0	c 150.0	c 175.0	c 200.0	c 250.0	c 300.0	c 350.0	c 400.0	c 500.0	c 600.0	c 700.0
BaBrCe [JSL2008], see also [FQR2014]													
56-Ba	5.6	a 67.9	a 92.9	b 117.9	b 142.9	b 167.9	b 217.9	c 267.9	c 317.9	c 367.9	c 467.9	c 567.9	c 667.9
35-Br	1.6	b 88.1	b 113.1	c 138.1	c 163.1	c 188.1	c 238.1	c 288.1	c 338.1	c 388.1	c 488.1	c 588.1	c 688.1
58-Ce	6.1	a 65.4	a 90.4	b 115.4	b 140.4	b 165.4	b 215.4	c 265.4	c 315.4	c 365.4	c 465.4	c 565.4	c 665.4

BaBrEu			[KRJ2005]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
BaBrII		[CDJ2018a]											
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
BaClCe			[JSL2008a]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
BaClEu			[KRJ2005c]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
BaFFCd			[ERD2005]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (2/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd.			[Ref]										
Z-Sy	E_{edge}-$E_{K\alpha 2}$	incident-photon energy Eγ (keV)											
	(keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
BaFFCe			[CML1989]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
BaFFEu			[KRJ2005f]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
BaFFLa			[ERD2005a]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3

57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
BaFFYY			[ERD2005b]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
BaIICe			[JSL2008b]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
BaIIEu			[KRJ2005h]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
BaLiFF			[PRD1994], see also [JJN1993k]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
BaLuFF			[MWB2002b]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
BaMgFF			[JJN1993]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
12-Mg	0.1	*[c]98.8*	*[c]123.8*	*[c]148.8*	*[c]173.8*	*[c]198.8*	*[c]248.8*	*[c]298.8*	*[c]348.8*	*[c]398.8*	*[c]498.8*	*[c]598.8*	*[c]698.8*
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
BaYYFF			[PRD1994a]										
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
BiGeOO			[MMS1981]										
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
32-Ge	1.3	[b]90.2	[c]115.2	[c]140.2	[c]165.2	[c]190.2	[c]240.2	[c]290.2	[c]340.2	[c]390.2	[c]490.2	[c]590.2	[c]690.2
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
BiIICe		[NCH2009a]											
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
BiSiOO			[MKB1996]										
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

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Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 4. part (3/16) – Predicted values of XRF-escape energy E_γ-$E_{K\alpha 2}$ for three-component detectors

Compd. Z-Sy	E_{edge}-$E_{K\alpha 2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CaBrEu	[AGR2013a]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CaFFBa	[VKH2023]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
CaFFCe	[CEJ2001]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CaFFEu	[JMN1966]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CaIIEu	[RHF1964a]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CaIITl	[WSC1951]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
CaMoOO	[GKM2016]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
42-Mo	2.6	[b]82.5	[b]107.5	[b]132.5	[c]157.5	[c]182.5	[c]232.5	[c]282.5	[c]332.5	[c]382.5	[c]482.5	[c]582.5	[c]682.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CaWWOO	[LBR1987]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
74-W	11.5	[a]42.0	[a]67.0	[a]92.0	[a]117.0	[b]142.0	[b]192.0	[b]242.0	[b]292.0	[c]342.0	[c]442.0	[c]542.0	[c]642.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CdSSIn	[SDR2001]												
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7

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49-In	4.0	[a]75.8	[b]100.8	[b]125.8	[b]150.8	[b]175.8	[c]225.8	[c]275.8	[c]325.8	[c]375.8	[c]475.8	[c]575.8	[c]675.8
CdSSTe			[SDR2000]										
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
52-Te	4.6	[a]72.5	[b]97.5	[b]122.5	[b]147.5	[b]172.5	[c]222.5	[c]272.5	[c]322.5	[c]372.5	[c]472.5	[c]572.5	[c]672.5
CdWWOO		[BGR1984]											
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8
74-W	11.5	[a]42.0	[a]67.0	[a]92.0	[a]117.0	[b]142.0	[b]192.0	[b]242.0	[b]292.0	[c]342.0	[c]442.0	[c]542.0	[c]642.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CdZnTe			[CSZ2004a]										
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
52-Te	4.6	[a]72.5	[b]97.5	[b]122.5	[b]147.5	[b]172.5	[c]222.5	[c]272.5	[c]322.5	[c]372.5	[c]472.5	[c]572.5	[c]672.5
CeBrBa			[FQR2014], see also [JSL2008]										
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (4/16) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for three-component detectors

Compd. Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	[Ref] incident-photon energy $E\gamma$ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CeBrCa		[FQR2014a], [PGS2014]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
CeBrMg		[FQR2014b											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
12-Mg	0.1	[c]*98.8*	[c]*123.8*	[c]*148.8*	[c]*173.8*	[c]*198.8*	[c]*248.8*	[c]*298.8*	[c]*348.8*	[c]*398.8*	[c]*498.8*	[c]*598.8*	[c]*698.8*
CeBrNa		[FQR2014c]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
CeBrPr		[JGL2007], see also [MBR2006d]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
CeBrSm		[CAR2023]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
CeBrSr		[FQR2014d]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
CeFFBa		[PLC2006c]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
CeFFDy		[WMS1989a]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5
CeFFEr		[WMS1989b]											
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3

68-Er	9.2	[a] 51.5	[a] 76.5	[a] 101.5	[b] 126.5	[b] 151.5	[b] 201.5	[b] 251.5	[c] 301.5	[c] 351.5	[c] 451.5	[c] 551.5	[c] 651.5
CeFFPr			[WMS1989c]										
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
09-F	0.0	[c] 99.3	[c] 124.3	[c] 149.3	[c] 174.3	[c] 199.3	[c] 249.3	[c] 299.3	[c] 349.3	[c] 399.3	[c] 499.3	[c] 599.3	[c] 699.3
59-Pr	6.4	[a] 64.1	[a] 89.1	[a] 114.1	[b] 139.1	[b] 164.1	[b] 214.1	[c] 264.1	[c] 314.1	[c] 364.1	[c] 464.1	[c] 564.1	[c] 664.1
CeLaFF			[ALM1993], see also [GBL1994]										
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
57-La	5.9	[a] 66.6	[a] 91.6	[b] 116.6	[b] 141.6	[b] 166.6	[b] 216.6	[c] 266.6	[c] 316.6	[c] 366.6	[c] 466.6	[c] 566.6	[c] 666.6
09-F	0.0	[c] 99.3	[c] 124.3	[c] 149.3	[c] 174.3	[c] 199.3	[c] 249.3	[c] 299.3	[c] 349.3	[c] 399.3	[c] 499.3	[c] 599.3	[c] 699.3
CePPOO			[ALM1993a]										
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
15-P	0.1	[c] 98.0	[c] 123.0	[c] 148.0	[c] 173.0	[c] 198.0	[c] 248.0	[c] 298.0	[c] 348.0	[c] 398.0	[c] 498.0	[c] 598.0	[c] 698.0
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
CsBaCl			[EBC2012]										
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
56-Ba	5.6	[a] 67.9	[a] 92.9	[b] 117.9	[b] 142.9	[b] 167.9	[b] 217.9	[c] 267.9	[c] 317.9	[c] 367.9	[c] 467.9	[c] 567.9	[c] 667.9
17-Cl	0.2	[c] 97.4	[c] 122.4	[c] 147.4	[c] 172.4	[c] 197.4	[c] 247.4	[c] 297.4	[c] 347.4	[c] 397.4	[c] 497.4	[c] 597.4	[c] 697.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (5/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd. [Ref]

Z-Sy Eedge-EKα2 ———————————incident-photon energy Eγ (keV)———————————

Z-Sy	Eedge-EKα2 (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsBrI	[OSD2014d]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CsCaBr	[PRD1994b]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsCaCl	[JJN1993a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsCeBr	[NCH2009b]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsCeCl	[GRH2008]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsCuI	[LLN2020], [SCH2020]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
29-Cu	1.0	[b]92.0	[c]117.0	[c]142.0	[c]167.0	[c]192.0	[c]242.0	[c]292.0	[c]342.0	[c]392.0	[c]492.0	[c]592.0	[c]692.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CsEuBr	[SCH2020a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsHfBr	[KSK2018]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsHfCl	[SKR2016]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3

17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsHfII			[PDR2019f]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CsIIn		[YWU2015]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
49-In	4.0	[a]75.8	[b]100.8	[b]125.8	[b]150.8	[b]175.8	[c]225.8	[c]275.8	[c]325.8	[c]375.8	[c]475.8	[c]575.8	[c]675.8
CsIINa			[DAT1967]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
CsIITl		[WSC1951a]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (6/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd. Z-Sy	$E_{edge}-E_{K\alpha2}$ (keV)	[Ref] incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsLaII		[GGN2014a]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CsLuII		[MBR2025]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CsMgCl		[PRD1994c]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
12-Mg	0.1	[c]*98.8*	[c]*123.8*	[c]*148.8*	[c]*173.8*	[c]*198.8*	[c]*248.8*	[c]*298.8*	[c]*348.8*	[c]*398.8*	[c]*498.8*	[c]*598.8*	[c]*698.8*
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsPbBr		[MBK2018a], [QCH2018]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsPbCl		[JZH2017]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsPbII		[MBK2018c, QCH2018c]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CsSbBr		[JZH2017b]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
51-Sb	4.4	[a]73.6	[b]98.6	[b]123.6	[b]148.6	[b]173.6	[c]223.6	[c]273.6	[c]323.6	[c]373.6	[c]473.6	[c]573.6	[c]673.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsSbCl		[JZH2017c]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
51-Sb	4.4	[a]73.6	[b]98.6	[b]123.6	[b]148.6	[b]173.6	[c]223.6	[c]273.6	[c]323.6	[c]373.6	[c]473.6	[c]573.6	[c]673.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsSbII		[JZH2017d]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
51-Sb	4.4	[a]73.6	[b]98.6	[b]123.6	[b]148.6	[b]173.6	[c]223.6	[c]273.6	[c]323.6	[c]373.6	[c]473.6	[c]573.6	[c]673.6

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53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CsSrBr			[PRD1994d]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsSrCl			[JJN1993b]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsZnCl			[DRT2022]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsZrBr			[KSK2018a]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
40-Zr	2.3	[b]84.2	[b]109.2	[b]134.2	[c]159.2	[c]184.2	[c]234.2	[c]284.2	[c]334.2	[c]384.2	[c]484.2	[c]584.2	[c]684.2
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (7/16) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for three-component detectors

Compd.			[Ref]										
Z-Sy	E_{edge}-$E_{K\alpha2}$	incident-photon energy $E\gamma$ (keV)											
	(keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsZrCl			[JBL2025a]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
40-Zr	2.3	[b]84.2	[b]109.2	[b]134.2	[c]159.2	[c]184.2	[c]234.2	[c]284.2	[c]334.2	[c]384.2	[c]484.2	[c]584.2	[c]684.2
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
GaOOSn			[YUS2018]										
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
50-Sn	4.2	[a]74.7	[b]99.7	[b]124.7	[b]149.7	[b]174.7	[c]224.7	[c]274.7	[c]324.7	[c]374.7	[c]474.7	[c]574.7	[c]674.7
GdAlOO			[HLO2016]										
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
GdBrCe			[ELF2001]										
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdClCe			[CDJ2018s]										
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdHfOO			[DNK2018]										
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
GdIICe			[ELF2008], [MBR2008a]										
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdOOEu			[MWB2004a]										
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
GdSiOO			[TLD1995]										
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3

08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
GdTaOO			[JDH2023]										
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
73-Ta	11.1	[a] 43.6	[a] 68.6	[a] 93.6	[a] 118.6	[b] 143.6	[b] 193.6	[b] 243.6	[b] 293.6	[c] 343.6	[c] 443.6	[c] 543.6	[c] 643.6
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
GdYYGa			[CDJ2018o]										
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
31-Ga	1.2	[b] 90.8	[c] 115.8	[c] 140.8	[c] 165.8	[c] 190.8	[c] 240.8	[c] 290.8	[c] 340.8	[c] 390.8	[c] 490.8	[c] 590.8	[c] 690.8
HfOOYY		[NCH2009e]											
72-Hf	10.7	[a] 45.3	[a] 70.3	[a] 95.3	[a] 120.3	[b] 145.3	[b] 195.3	[b] 245.3	[b] 295.3	[c] 345.3	[c] 445.3	[c] 545.3	[c] 645.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
InGaNN			[JGR2013b]										
49-In	4.0	[a] 75.8	[b] 100.8	[b] 125.8	[b] 150.8	[b] 175.8	[c] 225.8	[c] 275.8	[c] 325.8	[c] 375.8	[c] 475.8	[c] 575.8	[c] 675.8
31-Ga	1.2	[b] 90.8	[c] 115.8	[c] 140.8	[c] 165.8	[c] 190.8	[c] 240.8	[c] 290.8	[c] 340.8	[c] 390.8	[c] 490.8	[c] 590.8	[c] 690.8
07-N	0.0	[c] 99.6	[c] 124.6	[c] 149.6	[c] 174.6	[c] 199.6	[c] 249.6	[c] 299.6	[c] 349.6	[c] 399.6	[c] 499.6	[c] 599.6	[c] 699.6

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (8/16) – Predicted values of XRF-escape energy E_{γ}-$E_{K\alpha 2}$ for three-component detectors

Compd. / Z-Sy	E_{edge}-$E_{K\alpha 2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
		incident-photon energy E_{γ} (keV)											
KKBeFF		[JJN1993c]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
04-Be	0.0	[c]99.9	[c]124.9	[c]149.9	[c]174.9	[c]199.9	[c]249.9	[c]299.9	[c]349.9	[c]399.9	[c]499.9	[c]599.9	[c]699.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
KKCaFF		[CEJ1993b], [JJN1993d]											
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
KKCdCl		[SCH2020b]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
KKCeBr		[PDR2019j]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
KKCeCl		[URY2007]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
KKGdCl		[MZH2011]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
KKGeFF		[VKH2023b]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
32-Ge	1.3	[b]90.2	[c]115.2	[c]140.2	[c]165.2	[c]190.2	[c]240.2	[c]290.2	[c]340.2	[c]390.2	[c]490.2	[c]590.2	[c]690.2
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
KKITl		[IHL1988]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
KKLuFF		[CEJ1993e]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7

71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
KKMgFF	[CEJ1993f], [JJN1993g]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
12-Mg	0.1	[c]*98.8*	[c]*123.8*	[c]*148.8*	[c]*173.8*	[c]*198.8*	[c]*248.8*	[c]*298.8*	[c]*348.8*	[c]*398.8*	[c]*498.8*	[c]*598.8*	[c]*698.8*
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
KKRbFF		[CEJ1993g]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
KKSiFF		[JJN1993i]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
KKSrII		[LST2015a]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (9/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd. / Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
KKYYFF	[CEJ1993h], [JJN1993j]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
LaBrCe		[CEJ2001h], [ELF2001a]											
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaBrEu		[CAR2023d]											
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

LaBrPr			[JGL2005]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LaBrSm			[CAR2023f]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
LaClCe			[OGN1999]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaFFCe			[GBL1994] see also [ALM1993]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaFFNd			[CEJ1994c]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
LaFFPr			[ASR2016c]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LaHfOO			[NCH2009f]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
LaIICe			[PLC2006f]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaNbOO			[SDR2011o]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
41-Nb	2.5	[b]83.4	[b]108.4	[b]133.4	[c]158.4	[c]183.4	[c]233.4	[c]283.4	[c]333.4	[c]383.4	[c]483.4	[c]583.4	[c]683.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
LaOOSS			[GBL1994a]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7

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Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (10/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd. / Z-Sy	[Ref] / Eedge-EKα2 (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LaSSCe	[VVN2024d]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LiBaFF	[JJN1993k], see also [PRD1994]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
LiBBOO	[KKM2016a]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
LiCaII	[LSP2016]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
LiFFCa	[KKM2017a]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
LiFFGd	[KKM2017c]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
LiFFSr	[KKM2017d]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
LiGdCl	[CDJ2018q]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
LiIIEu	[ESK1987b]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4

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63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
LiIISn		[KSJ2016]											
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
50-Sn	4.2	[a]74.7	[b]99.7	[b]124.7	[b]149.7	[b]174.7	[c]224.7	[c]274.7	[c]324.7	[c]374.7	[c]474.7	[c]574.7	[c]674.7
LiSrBr		[LSP2016b]											
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
LiSrII		[LSP2016d]											
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
LiTaOO			[SDR2011t]										
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
73-Ta	11.1	[a]43.6	[a]68.6	[a]93.6	[a]118.6	[b]143.6	[b]193.6	[b]243.6	[b]293.6	[c]343.6	[c]443.6	[c]543.6	[c]643.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 4. part (11/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LiYYCl	[CCM1999b]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
LuAlOO	[WMS1995]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
LuBrCe	[OGN1999a]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuClCe	[OGN1999b]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuClPr	[ASR2016i]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LuFFCe	[AAN2002a]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuHfOO	[DNK2018a]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
LuIICe	[KSH2004a]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuOOEu	[ALM2002]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

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63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
LuOOYb			[JDH2023a]										
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
LuPPOO			[GBL1994b]										
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
LuSiCe			[MNK2006a]										
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuSiOO			[GKN1999a]										
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (12/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
		incident-photon energy Eγ (keV)											
LuSSCe	[AAN2002b]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuSSPr	[VVN2024f]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LuTaOO	[MWB2002a]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
73-Ta	11.1	[a]43.6	[a]68.6	[a]93.6	[a]118.6	[b]143.6	[b]193.6	[b]243.6	[b]293.6	[c]343.6	[c]443.6	[c]543.6	[c]643.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
NaITl	[RHF1947b]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
NaYYFF	[JBR2019]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
PbBrCe	[CDJ2018v]												
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
PbSSOO	[PLC2006l]												
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
PbWWOO	[MKB1993]												
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
74-W	11.5	[a]42.0	[a]67.0	[a]92.0	[a]117.0	[b]142.0	[b]192.0	[b]242.0	[b]292.0	[c]342.0	[c]442.0	[c]542.0	[c]642.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
PrBrCe	[MBR2006d], see also [JGL2007]												
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1

58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
PrClCe			[MBR2007j]										
59-Pr	6.4	[a] 64.1	[a] 89.1	[a] 114.1	[b] 139.1	[b] 164.1	[b] 214.1	[c] 264.1	[c] 314.1	[c] 364.1	[c] 464.1	[c] 564.1	[c] 664.1
17-Cl	0.2	[c] 97.4	[c] 122.4	[c] 147.4	[c] 172.4	[c] 197.4	[c] 247.4	[c] 297.4	[c] 347.4	[c] 397.4	[c] 497.4	[c] 597.4	[c] 697.4
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
RbCaBr			[KPS2023]										
37-Rb	1.9	[b] 86.6	[b] 111.6	[c] 136.6	[c] 161.6	[c] 186.6	[c] 236.6	[c] 286.6	[c] 336.6	[c] 386.6	[c] 486.6	[c] 586.6	[c] 686.6
20-Ca	0.3	[c] 96.4	[c] 121.4	[c] 146.4	[c] 171.4	[c] 196.4	[c] 246.4	[c] 296.4	[c] 346.4	[c] 396.4	[c] 496.4	[c] 596.4	[c] 696.4
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1
RbCaFF			[JJN1993l]										
37-Rb	1.9	[b] 86.6	[b] 111.6	[c] 136.6	[c] 161.6	[c] 186.6	[c] 236.6	[c] 286.6	[c] 336.6	[c] 386.6	[c] 486.6	[c] 586.6	[c] 686.6
20-Ca	0.3	[c] 96.4	[c] 121.4	[c] 146.4	[c] 171.4	[c] 196.4	[c] 246.4	[c] 296.4	[c] 346.4	[c] 396.4	[c] 496.4	[c] 596.4	[c] 696.4
09-F	0.0	[c] 99.3	[c] 124.3	[c] 149.3	[c] 174.3	[c] 199.3	[c] 249.3	[c] 299.3	[c] 349.3	[c] 399.3	[c] 499.3	[c] 599.3	[c] 699.3
RbCeBr			[SKM2009]										
37-Rb	1.9	[b] 86.6	[b] 111.6	[c] 136.6	[c] 161.6	[c] 186.6	[c] 236.6	[c] 286.6	[c] 336.6	[c] 386.6	[c] 486.6	[c] 586.6	[c] 686.6
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 4. part (13/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd.	[Ref]												
Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
RbClPr	[ASR2016k]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
RbCsBr	[PRD2004]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
RbCsCl	[VKH2023f]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
RbCuBr	[BYG2019]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
29-Cu	1.0	[b]92.0	[c]117.0	[c]142.0	[c]167.0	[c]192.0	[c]242.0	[c]292.0	[c]342.0	[c]392.0	[c]492.0	[c]592.0	[c]692.0
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
RbCuCl	[SCH2020c]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
29-Cu	1.0	[b]92.0	[c]117.0	[c]142.0	[c]167.0	[c]192.0	[c]242.0	[c]292.0	[c]342.0	[c]392.0	[c]492.0	[c]592.0	[c]692.0
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
RbITl	[KMY2022]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
RbMgFF	[PRD1994e]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
12-Mg	0.1	[c]*98.8*	[c]*123.8*	[c]*148.8*	[c]*173.8*	[c]*198.8*	[c]*248.8*	[c]*298.8*	[c]*348.8*	[c]*398.8*	[c]*498.8*	[c]*598.8*	[c]*698.8*
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
RbSrII	[KPS2024]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
RbYYFF	[PRD1994f]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1

09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
RbZnCl			[VKH2023g]										
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
ScSiOO			[PLC2006p]										
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
SrBrEu			[NCH2009g]										
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
SrFFBa			[VKH2023h]										
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (14/16) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for three-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy $E\gamma$ (keV): 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
SrFFCd	[ERD2005c]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8
SrHfOO	[MWB2004j]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
SrIIEu	[NCH2008]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
SrIITb	[CDJ2018y]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
SrIIYb	[ERW2013a]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
TbSiOO	[CRN2016c]												
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
TlBaCl	[TYN2020]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
TlCaBr	[ELF2023]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
TlCaCl	[AKH2017]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4

17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
TlCaII		[RHW2017]											
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
TlCdCl			[TYN2020a]										
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
48-Cd	3.7	[a]76.8	[b]101.8	[b]126.8	[b]151.8	[b]176.8	[c]226.8	[c]276.8	[c]326.8	[c]376.8	[c]476.8	[c]576.8	[c]676.8
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
TlHfCl			[YFJ2018]										
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
TlLaBr			[HKM2017]										
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 4. part (15/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd. / Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
TlMgCl	[RHW2017b]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
12-Mg	0.1	[c]*98.8*	[c]*123.8*	[c]*148.8*	[c]*173.8*	[c]*198.8*	[c]*248.8*	[c]*298.8*	[c]*348.8*	[c]*398.8*	[c]*498.8*	[c]*598.8*	[c]*698.8*
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
TlSrBr	[GRH2017a]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
TlSrCl	[TYN2020b]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
TlSrII	[JBL2025b]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
TlZrCl	[YFJ2018a]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
40-Zr	2.3	[b]84.2	[b]109.2	[b]134.2	[c]159.2	[c]184.2	[c]234.2	[c]284.2	[c]334.2	[c]384.2	[c]484.2	[c]584.2	[c]684.2
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
YYAlOO	[ALM1995b], [WMS1995b]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
YYBrCe	[CDJ2018z]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
YYFFCe	[PLC2006q]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
YYFFPr	[ASR2016q]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3

59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
YYIICe			[CKY2008a]										
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
YYSiOO			[CML1992a]										
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
YYTaOO			[MWB2004l]										
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
73-Ta	11.1	[a]43.6	[a]68.6	[a]93.6	[a]118.6	[b]143.6	[b]193.6	[b]243.6	[b]293.6	[c]343.6	[c]443.6	[c]543.6	[c]643.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
YYVVOO		[GBL1994e]											
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
23-V	0.5	[c]*95.1*	[c]*120.1*	[c]*145.1*	[c]*170.1*	[c]*195.1*	[c]*245.1*	[c]*295.1*	[c]*345.1*	[c]*395.1*	[c]*495.1*	[c]*595.1*	[c]*695.1*
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 4. part (16/16) – Predicted values of XRF-escape energy Eγ-EKα2 for three-component detectors

Compd. / Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	[Ref] incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
ZnGePP		[ZLI2014]											
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
32-Ge	1.3	[b]90.2	[c]115.2	[c]140.2	[c]165.2	[c]190.2	[c]240.2	[c]290.2	[c]340.2	[c]390.2	[c]490.2	[c]590.2	[c]690.2
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
ZnOOGa		[SDR2000a]											
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
ZnOOLi		[PRD2012]											
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
ZnSeOO		[CDJ2018aa]											
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
34-Se	1.5	[b]88.8	[b]113.8	[c]138.8	[c]163.8	[c]188.8	[c]238.8	[c]288.8	[c]338.8	[c]388.8	[c]488.8	[c]588.8	[c]688.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
ZnSeTe		[CRN2016d]											
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
34-Se	1.5	[b]88.8	[b]113.8	[c]138.8	[c]163.8	[c]188.8	[c]238.8	[c]288.8	[c]338.8	[c]388.8	[c]488.8	[c]588.8	[c]688.8
52-Te	4.6	[a]72.5	[b]97.5	[b]122.5	[b]147.5	[b]172.5	[c]222.5	[c]272.5	[c]322.5	[c]372.5	[c]472.5	[c]572.5	[c]672.5
ZnSSAg		[RHF1947d]											
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
47-Ag	3.5	[a]77.8	[b]102.8	[b]102.8	[b]102.8	[b]102.8	[c]227.8	[c]277.8	[c]327.8	[c]377.8	[c]477.8	[c]577.8	[c]677.8
ZnTaOO		[SDR2011ad]											
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
73-Ta	11.1	[a]43.6	[a]68.6	[a]93.6	[a]118.6	[b]143.6	[b]193.6	[b]243.6	[b]293.6	[c]343.6	[c]443.6	[c]543.6	[c]643.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
ZnWWOO	[BGR1984a]												
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
74-W	11.5	[a]42.0	[a]67.0	[a]92.0	[a]117.0	[b]142.0	[b]192.0	[b]242.0	[b]292.0	[c]342.0	[c]442.0	[c]542.0	[c]642.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

Table 5. part (1/23) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for four-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy $E\gamma$ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
BaYYFFNd	[CEJ1994]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
BiGeOOEu	[GSN2007]												
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
32-Ge	1.3	[b]90.2	[c]115.2	[c]140.2	[c]165.2	[c]190.2	[c]240.2	[c]290.2	[c]340.2	[c]390.2	[c]490.2	[c]590.2	[c]690.2
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
BiGeOONd	[GSN2007a]												
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
32-Ge	1.3	[b]90.2	[c]115.2	[c]140.2	[c]165.2	[c]190.2	[c]240.2	[c]290.2	[c]340.2	[c]390.2	[c]490.2	[c]590.2	[c]690.2
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (2/23) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for four-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy $E\gamma$ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
BiGeSiOO	[OSD2014a]												
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
32-Ge	1.3	[b]90.2	[c]115.2	[c]140.2	[c]165.2	[c]190.2	[c]240.2	[c]290.2	[c]340.2	[c]390.2	[c]490.2	[c]590.2	[c]690.2
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
BrLiCeCl	[JBL2025]												
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4

BrSrIIEu [KPS2023]

35-Br 1.6 [b]88.1 [b]113.1 [c]138.1 [c]163.1 [c]188.1 [c]238.1 [c]288.1 [c]338.1 [c]388.1 [c]488.1 [c]588.1 [c]688.1

38-Sr 2.0 [b]85.9 [b]110.9 [c]135.9 [c]160.9 [c]185.9 [c]235.9 [c]285.9 [c]335.9 [c]385.9 [c]485.9 [c]585.9 [c]685.9

53-I 4.9 [a]71.4 [a]96.4 [b]121.4 [b]146.4 [b]171.4 [c]221.4 [c]271.4 [c]321.4 [c]371.4 [c]471.4 [c]571.4 [c]671.4

63-Eu 7.6 [a]58.8 [a]83.8 [a]108.8 [b]133.8 [b]158.8 [b]208.8 [b]258.8 [c]308.8 [c]358.8 [c]458.8 [c]558.8 [c]658.8

CaBaBrEu [PDR2019b]

20-Ca 0.3 [c]96.4 [c]121.4 [c]146.4 [c]171.4 [c]196.4 [c]246.4 [c]296.4 [c]346.4 [c]396.4 [c]496.4 [c]596.4 [c]696.4

56-Ba 5.6 [a]67.9 [a]92.9 [b]117.9 [b]142.9 [b]167.9 [b]217.9 [c]267.9 [c]317.9 [c]367.9 [c]467.9 [c]567.9 [c]667.9

35-Br 1.6 [b]88.1 [b]113.1 [c]138.1 [c]163.1 [c]188.1 [c]238.1 [c]288.1 [c]338.1 [c]388.1 [c]488.1 [c]588.1 [c]688.1

63-Eu 7.6 [a]58.8 [a]83.8 [a]108.8 [b]133.8 [b]158.8 [b]208.8 [b]258.8 [c]308.8 [c]358.8 [c]458.8 [c]558.8 [c]658.8

CaBrIIEu [CGN2015]

20-Ca 0.3 [c]96.4 [c]121.4 [c]146.4 [c]171.4 [c]196.4 [c]246.4 [c]296.4 [c]346.4 [c]396.4 [c]496.4 [c]596.4 [c]696.4

35-Br 1.6 [b]88.1 [b]113.1 [c]138.1 [c]163.1 [c]188.1 [c]238.1 [c]288.1 [c]338.1 [c]388.1 [c]488.1 [c]588.1 [c]688.1

53-I 4.9 [a]71.4 [a]96.4 [b]121.4 [b]146.4 [b]171.4 [c]221.4 [c]271.4 [c]321.4 [c]371.4 [c]471.4 [c]571.4 [c]671.4

63-Eu 7.6 a 58.8 a 83.8 a 108.8 b 133.8 b 158.8 b 208.8 b 258.8 c 308.8 c 358.8 c 458.8 c 558.8 c 658.8

CaHfOOCe [CEJ2002a]

20-Ca 0.3 [c]96.4 [c]121.4 [c]146.4 [c]171.4 [c]196.4 [c]246.4 [c]296.4 [c]346.4 [c]396.4 [c]496.4 [c]596.4 [c]696.4

72-Hf 10.7 [a]45.3 [a]70.3 [a]95.3 [a]120.3 [b]145.3 [b]195.3 [b]245.3 [b]295.3 [c]345.3 [c]445.3 [c]545.3 [c]645.3

08-O 0.0 [c]99.5 [c]124.5 [c]149.5 [c]174.5 [c]199.5 [c]249.5 [c]299.5 [c]349.5 [c]399.5 [c]499.5 [c]599.5 [c]699.5

58-Ce 6.1 [a]65.4 [a]90.4 [b]115.4 [b]140.4 [b]165.4 [b]215.4 [c]265.4 [c]315.4 [c]365.4 [c]465.4 [c]565.4 [c]665.4

CaSrSSCe [OSD2014cb]

20-Ca 0.3 [c]96.4 [c]121.4 [c]146.4 [c]171.4 [c]196.4 [c]246.4 [c]296.4 [c]346.4 [c]396.4 [c]496.4 [c]596.4 [c]696.4

38-Sr 2.0 [b]85.9 [b]110.9 [c]135.9 [c]160.9 [c]185.9 [c]235.9 [c]285.9 [c]335.9 [c]385.9 [c]485.9 [c]585.9 [c]685.9

16-S 0.2 [c]97.7 [c]122.7 [c]147.7 [c]172.7 [c]197.7 [c]247.7 [c]297.7 [c]347.7 [c]397.7 [c]497.7 [c]597.7 [c]697.7

58-Ce 6.1 [a]65.4 [a]90.4 [b]115.4 [b]140.4 [b]165.4 [b]215.4 [c]265.4 [c]315.4 [c]365.4 [c]465.4 [c]565.4 [c]665.4

CaSSEuDy [DRB2014]

20-Ca 0.3 [c]96.4 [c]121.4 [c]146.4 [c]171.4 [c]196.4 [c]246.4 [c]296.4 [c]346.4 [c]396.4 [c]496.4 [c]596.4 [c]696.4

16-S 0.2 [c]97.7 [c]122.7 [c]147.7 [c]172.7 [c]197.7 [c]247.7 [c]297.7 [c]347.7 [c]397.7 [c]497.7 [c]597.7 [c]697.7

63-Eu 7.6 [a]58.8 [a]83.8 [a]108.8 [b]133.8 [b]158.8 [b]208.8 [b]258.8 [c]308.8 [c]358.8 [c]458.8 [c]558.8 [c]658.8

66-Dy 8.6 [a]54.5 [a]79.5 [a]104.5 [b]129.5 [b]154.5 [b]204.5 [b]254.5 [c]304.5 [c]354.5 [c]454.5 [c]554.5 [c]654.5

CaWWOOBi [YZR2014]

20-Ca 0.3 [c]96.4 [c]121.4 [c]146.4 [c]171.4 [c]196.4 [c]246.4 [c]296.4 [c]346.4 [c]396.4 [c]496.4 [c]596.4 [c]696.4

74-W 11.5 [a]42.0 [a]67.0 [a]92.0 [a]117.0 [b]142.0 [b]192.0 [b]242.0 [b]292.0 [c]342.0 [c]442.0 [c]542.0 [c]642.0

08-O 0.0 [c]99.5 [c]124.5 [c]149.5 [c]174.5 [c]199.5 [c]249.5 [c]299.5 [c]349.5 [c]399.5 [c]499.5 [c]599.5 [c]699.5

83-Bi 15.7 [a]26.0 [a]51.0 [a]76.0 [a]101.0 [a]126.0 [b]176.0 [b]226.0 [b]276.0 [b]326.0 [c]426.0 [c]526.0 [c]626.0

CdSSTeIn [MWB2004]

48-Cd 3.7 [a]76.8 [b]101.8 [b]126.8 [b]151.8 [b]176.8 [c]226.8 [c]276.8 [c]326.8 [c]376.8 [c]476.8 [c]576.8 [c]676.8

16-S 0.2 [c]97.7 [c]122.7 [c]147.7 [c]172.7 [c]197.7 [c]247.7 [c]297.7 [c]347.7 [c]397.7 [c]497.7 [c]597.7 [c]697.7

52-Te 4.6 [a]72.5 [b]97.5 [b]122.5 [b]147.5 [b]172.5 [c]222.5 [c]272.5 [c]322.5 [c]372.5 [c]472.5 [c]572.5 [c]672.5

49-In 4.0 [a]75.8 [b]100.8 [b]125.8 [b]150.8 [b]175.8 [c]225.8 [c]275.8 [c]325.8 [c]375.8 [c]475.8 [c]575.8 [c]675.8

CdZnTeSe [URY2019]

48-Cd	3.7	[a] 76.8	[b] 101.8	[b] 126.8	[b] 151.8	[b] 176.8	[c] 226.8	[c] 276.8	[c] 326.8	[c] 376.8	[c] 476.8	[c] 576.8	[c] 676.8
30-Zn	1.1	[b] 91.4	[c] 116.4	[c] 141.4	[c] 166.4	[c] 191.4	[c] 241.4	[c] 291.4	[c] 341.4	[c] 391.4	[c] 491.4	[c] 591.4	[c] 691.4
52-Te	4.6	[a] 72.5	[b] 97.5	[b] 122.5	[b] 147.5	[b] 172.5	[c] 222.5	[c] 272.5	[c] 322.5	[c] 372.5	[c] 472.5	[c] 572.5	[c] 672.5
34-Se	1.5	[b] 88.8	[b] 113.8	[c] 138.8	[c] 163.8	[c] 188.8	[c] 238.8	[c] 288.8	[c] 338.8	[c] 388.8	[c] 488.8	[c] 588.8	[c] 688.8

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (3/23) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for four-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
		incident-photon energy $E\gamma$ (keV)											
CsAgBiBr	[SKH2019]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
47-Ag	3.5	[a]77.8	[b]102.8	[b]102.8	[b]102.8	[b]102.8	[c]227.8	[c]277.8	[c]327.8	[c]377.8	[c]477.8	[c]577.8	[c]677.8
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsAgBiBr	[LLU2019a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
47-Ag	3.5	[a]77.8	[b]102.8	[b]102.8	[b]102.8	[b]102.8	[c]227.8	[c]277.8	[c]327.8	[c]377.8	[c]477.8	[c]577.8	[c]677.8
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsAgBiCl	[SKH2019a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
47-Ag	3.5	[a]77.8	[b]102.8	[b]102.8	[b]102.8	[b]102.8	[c]227.8	[c]277.8	[c]327.8	[c]377.8	[c]477.8	[c]577.8	[c]677.8
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsBaBrCe	[CDJ2018c]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsBaBrEu	[CDJ2018d]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsBaClEu	[CDJ2018e]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsBaIEu	[GBZ2011]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

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CsBaIIIn		[CDJ2018f]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
49-In	4.0	[a]75.8	[b]100.8	[b]125.8	[b]150.8	[b]175.8	[c]225.8	[c]275.8	[c]325.8	[c]375.8	[c]475.8	[c]575.8	[c]675.8
CsBaIINa		[CDJ2018g]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
CsBaIITl		[CDJ2018h]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (4/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd.	[Ref]												
Z-Sy	Eedge-EKα2	incident-photon energy Eγ (keV)											
	(keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsBaIYb	[ERW2013]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
CsCaBrEu	[AGR2013b]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsCaClCe	[YFJ2016]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsCaClEu	[PDR2019d]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsCaIIEu	[CDJ2018j], [LST2018]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsEuBrSm	[CAR2023a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
CsEuIISm	[CAR2023b]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1

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CsGdBrCe	[ESM2014]												
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
CsGdClCe	[ESM2014a]												
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
17-Cl	0.2	[c] 97.4	[c] 122.4	[c] 147.4	[c] 172.4	[c] 197.4	[c] 247.4	[c] 297.4	[c] 347.4	[c] 397.4	[c] 497.4	[c] 597.4	[c] 697.4
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
CsGdFFCe	[CEJ2001a]												
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
09-F	0.0	[c] 99.3	[c] 124.3	[c] 149.3	[c] 174.3	[c] 199.3	[c] 249.3	[c] 299.3	[c] 349.3	[c] 399.3	[c] 499.3	[c] 599.3	[c] 699.3
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (5/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha 2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsGdIICe	[MBR2007e]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsHfIICe	[SKD2019]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsHfIIEu	[SKD2018a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsIICCOO	[CDJ2018l]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
06-C	0.0	[c]99.7	[c]124.7	[c]149.7	[c]174.7	[c]199.7	[c]249.7	[c]299.7	[c]349.7	[c]399.7	[c]499.7	[c]599.7	[c]699.7
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CsIITlBi	[DTS2012]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
CsIITlEu	[CBR2006], [RBR2006]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsIITlSm	[VNG2008]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1

CsIITlYb			[YWU2014]										
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
81-Tl	14.7	[a] 29.7	[a] 54.7	[a] 79.7	[a] 104.7	[a] 129.7	[b] 179.7	[b] 229.7	[b] 279.7	[b] 329.7	[c] 429.7	[c] 529.7	[c] 629.7
70-Yb	10.0	[a] 48.4	[a] 73.4	[a] 98.4	[b] 123.4	[b] 148.4	[b] 198.4	[b] 248.4	[c] 298.4	[c] 348.4	[c] 448.4	[c] 548.4	[c] 648.4
CsLaBrCe		[MBR2007f]											
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
57-La	5.9	[a] 66.6	[a] 91.6	[b] 116.6	[b] 141.6	[b] 166.6	[b] 216.6	[c] 266.6	[c] 316.6	[c] 366.6	[c] 466.6	[c] 566.6	[c] 666.6
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
CsLaClCe		[GGN2014]											
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
57-La	5.9	[a] 66.6	[a] 91.6	[b] 116.6	[b] 141.6	[b] 166.6	[b] 216.6	[c] 266.6	[c] 316.6	[c] 366.6	[c] 466.6	[c] 566.6	[c] 666.6
17-Cl	0.2	[c] 97.4	[c] 122.4	[c] 147.4	[c] 172.4	[c] 197.4	[c] 247.4	[c] 297.4	[c] 347.4	[c] 397.4	[c] 497.4	[c] 597.4	[c] 697.4
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (6/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd.	[Ref]												
Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsLiCeBr	[JCH2011]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsLiCeCl	[GRH2010]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsLiLaBr	[RHW2016]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsLiLaCl	[JGL2009]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsLiYYCl	[CCM1999]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsLuClCe	[PLC2006d]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsLuIICe	[MBR2007g]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

CsMgClZn	[DRT2024]												
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
12-Mg	0.1	[c] *98.8*	[c] *123.8*	[c] *148.8*	[c] *173.8*	[c] *198.8*	[c] *248.8*	[c] *298.8*	[c] *348.8*	[c] *398.8*	[c] *498.8*	[c] *598.8*	[c] *698.8*
17-Cl	0.2	[c] 97.4	[c] 122.4	[c] 147.4	[c] 172.4	[c] 197.4	[c] 247.4	[c] 297.4	[c] 347.4	[c] 397.4	[c] 497.4	[c] 597.4	[c] 697.4
30-Zn	1.1	[b] 91.4	[c] 116.4	[c] 141.4	[c] 166.4	[c] 191.4	[c] 241.4	[c] 291.4	[c] 341.4	[c] 391.4	[c] 491.4	[c] 591.4	[c] 691.4
CsNaCeBr	[SKM2010]												
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
11-Na	0.0	[c] 99.0	[c] 124.0	[c] 149.0	[c] 174.0	[c] 199.0	[c] 249.0	[c] 299.0	[c] 349.0	[c] 399.0	[c] 499.0	[c] 599.0	[c] 699.0
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1
CsNaCeCl	[CEJ2001b]												
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
11-Na	0.0	[c] 99.0	[c] 124.0	[c] 149.0	[c] 174.0	[c] 199.0	[c] 249.0	[c] 299.0	[c] 349.0	[c] 399.0	[c] 499.0	[c] 599.0	[c] 699.0
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
17-Cl	0.2	[c] 97.4	[c] 122.4	[c] 147.4	[c] 172.4	[c] 197.4	[c] 247.4	[c] 297.4	[c] 347.4	[c] 397.4	[c] 497.4	[c] 597.4	[c] 697.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (7/23) – Predicted values of XRF-escape energy E_γ-$E_{K\alpha2}$ for four-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
		incident-photon energy E_γ (keV)											
CsNaEuCl	[QHU2018]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsNaLaCl	[VKH2023a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsNaLaII	[GGN2014b]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CsNaTbCl	[QHU2018a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsPbBrAl	[MLU2017]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
CsPbBrCl	[MBK2018b], see also [QCH2018b]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsPbBrII	[QCH2018a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4

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CsPbBrRb	[JLI2020]												
55-Cs 5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1	
82-Pb 15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9	
35-Br 1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1	
37-Rb 1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6	
CsPbClBr	[QCH2018b], see also [MBK2018b]												
55-Cs 5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1	
82-Pb 15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9	
17-Cl 0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4	
35-Br 1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1	
CsPbMnCl	[JZH2017a]												
55-Cs 5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1	
82-Pb 15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9	
25-Mn	0.6	[c]94.2	[c]119.2	[c]144.2	[c]169.2	[c]194.2	[c]244.2	[c]294.2	[c]344.2	[c]394.2	[c]494.2	[c]594.2	[c]694.2
17-Cl 0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4	

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 5. part (8/23) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha 2}$ for four-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha 2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsSrBrEu	[SGK2016], see also [VCH2014]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsSrClCe	[YFJ2017]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsSrClEu	[CDJ2018m], see also [VCH2014a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsSrEuBr	[VCH2014], see also [SGK2016]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CsSrEuCl	[VCH2014a], see also [CDJ2018m]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CsSrEuII	[KYG2011], see also [CDJ2018n]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
CsSrIIEu	[CDJ2018n], see also [KYG2011]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

CsSrIIEu		[LST2018a]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsYbBrSm		[CAR2022]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
CsYbIISm		[CAR2022a]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 5. part (9/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsYYFFCe	[CEJ2001e]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsYYFFNd	[CEJ1994a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
GdAlOOCe	[CEJ2001f]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdBBOOCe	[MKN2000e]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdGaOOEu	[LWL2025]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
GdNbTaOO	[OVL2014], see also [OSD2014e]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
41-Nb	2.5	[b]83.4	[b]108.4	[b]133.4	[c]158.4	[c]183.4	[c]233.4	[c]283.4	[c]333.4	[c]383.4	[c]483.4	[c]583.4	[c]683.4
73-Ta	11.1	[a]43.6	[a]68.6	[a]93.6	[a]118.6	[b]143.6	[b]193.6	[b]243.6	[b]293.6	[c]343.6	[c]443.6	[c]543.6	[c]643.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
GdOOBrCe	[SDR2011l]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

GdOOClCe	[SDR2011m]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdOOIICe	[SDR2011n]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdOOSSPr	[CEJ2002c]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (10/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd.	[Ref]												
Z-Sy	E_{edge}-$E_{K\alpha2}$	incident-photon energy Eγ (keV)											
	(keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
GdOOSSTb	[LBR1987a], see also [LLU2019b]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
GdOOTbCe	[PLC2016b]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdSiOOCe	[ESK1987a]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdSSOOTb	[LLU2019b], see also [LBR1987a]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
GdTaNbOO	[OSD2014e], see also [OVL2014]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
73-Ta	11.1	[a]43.6	[a]68.6	[a]93.6	[a]118.6	[b]143.6	[b]193.6	[b]243.6	[b]293.6	[c]343.6	[c]443.6	[c]543.6	[c]643.6
41-Nb	2.5	[b]83.4	[b]108.4	[b]133.4	[c]158.4	[c]183.4	[c]233.4	[c]283.4	[c]333.4	[c]383.4	[c]483.4	[c]583.4	[c]683.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
GdTaOOBi	[FPN2014]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
73-Ta	11.1	[a]43.6	[a]68.6	[a]93.6	[a]118.6	[b]143.6	[b]193.6	[b]243.6	[b]293.6	[c]343.6	[c]443.6	[c]543.6	[c]643.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
83-Bi	15.7	[a]26.0	[a]51.0	[a]76.0	[a]101.0	[a]126.0	[b]176.0	[b]226.0	[b]276.0	[b]326.0	[c]426.0	[c]526.0	[c]626.0
GdTaOOEu	[FPN2014a]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
73-Ta	11.1	[a]43.6	[a]68.6	[a]93.6	[a]118.6	[b]143.6	[b]193.6	[b]243.6	[b]293.6	[c]343.6	[c]443.6	[c]543.6	[c]643.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

GdTaOONd	[FPN2014b]												
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
73-Ta	11.1	[a] 43.6	[a] 68.6	[a] 93.6	[a] 118.6	[b] 143.6	[b] 193.6	[b] 243.6	[b] 293.6	[c] 343.6	[c] 443.6	[c] 543.6	[c] 643.6
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
60-Nd	6.7	[a] 62.8	[a] 87.8	[b] 112.8	[b] 137.8	[b] 162.8	[b] 212.8	[c] 262.8	[c] 312.8	[c] 362.8	[c] 462.8	[c] 562.8	[c] 662.8
GdTaOOTb	[FPN2014c]												
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
73-Ta	11.1	[a] 43.6	[a] 68.6	[a] 93.6	[a] 118.6	[b] 143.6	[b] 193.6	[b] 243.6	[b] 293.6	[c] 343.6	[c] 443.6	[c] 543.6	[c] 643.6
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
65-Tb	8.2	[a] 55.9	[a] 80.9	[a] 105.9	[b] 130.9	[b] 155.9	[b] 205.9	[b] 255.9	[c] 305.9	[c] 355.9	[c] 455.9	[c] 555.9	[c] 655.9
KKBaIIEu	[LST2016]												
19-K	0.3	[c] 96.7	[c] 121.7	[c] 146.7	[c] 171.7	[c] 196.7	[c] 246.7	[c] 296.7	[c] 346.7	[c] 396.7	[c] 496.7	[c] 596.7	[c] 696.7
56-Ba	5.6	[a] 67.9	[a] 92.9	[b] 117.9	[b] 142.9	[b] 167.9	[b] 217.9	[c] 267.9	[c] 317.9	[c] 367.9	[c] 467.9	[c] 567.9	[c] 667.9
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (11/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
KKCaIIEu	[ALN2015]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
KKGdClCe	[MZH2011a]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
KKLaBrCe	[ELF2005]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
KKLaIICe	[ELF2005a]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
KKLiGaFF	[JJN1993f]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
KKMgFFPr	[ASR2016a]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
12-Mg	0.1	[c]*98.8*	[c]*123.8*	[c]*148.8*	[c]*173.8*	[c]*198.8*	[c]*248.8*	[c]*298.8*	[c]*348.8*	[c]*398.8*	[c]*498.8*	[c]*598.8*	[c]*698.8*
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
KKNaAlFF	[JJN1993h]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3

KKRbPbBr		[VKH2023c]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
KKSrBrEu		[LST2015]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
KKSrIIEu		[MRS2016]											
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (12/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
KKYYFFPr	[CEJ1994b]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LaAlOOCe	[MWB2002]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaBBOOCe	[MKN2000f]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaBBOOPr	[ASR2016b]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LaBeOOCe	[PLC2006e]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
04-Be	0.0	[c]99.9	[c]124.9	[c]149.9	[c]174.9	[c]199.9	[c]249.9	[c]299.9	[c]349.9	[c]399.9	[c]499.9	[c]599.9	[c]699.9
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaBrCeBa	[KYN2012]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
LaBrCeSm	[CAR2023c]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1

LaBrCeSr		[KYN2012a]											
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
LaBrClCe		[OSD2014f]											
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaBrIICe			[MBR2008c]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (13/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd.	[Ref]												
Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LaBrPrSm	[CAR2023e]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
LaFFNdPr	[PSC1988a]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LaHfOOTi	[PLC2016c]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
22-Ti	0.5	[c]95.6	[c]120.6	[c]145.6	[c]170.6	[c]195.6	[c]245.6	[c]295.6	[c]345.6	[c]395.6	[c]495.6	[c]595.6	[c]695.6
LaOOBrCe	[SDR2011p]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaOOBrTb	[MNK2006]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
LaOOBrTm	[LBR1987b]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
69-Tm	9.6	[a]50.0	[a]75.0	[a]100.0	[b]125.0	[b]150.0	[b]200.0	[b]250.0	[c]300.0	[c]350.0	[c]450.0	[c]550.0	[c]650.0
LaOOIICe	[SDR2011q]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

LaPPOOPr	[ASR2016e]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LaScOOCe	[SDR2011r]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaSSClCe	[SDR2011s]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 5. part (14/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha 2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LiBaAlFF	[VKH2023d]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
LiBaFFCe	[MKN1996]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LiCaAlFF	[KKM2016b]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
LiCaIIEu	[LSP2016a]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
LiFFCaBa	[KKM2017b]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
LiGdClCe	[PDR2019k]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LiInPPSe	[DCH2020]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
49-In	4.0	[a]75.8	[b]100.8	[b]125.8	[b]150.8	[b]175.8	[c]225.8	[c]275.8	[c]325.8	[c]375.8	[c]475.8	[c]575.8	[c]675.8
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
34-Se	1.5	[b]88.8	[b]113.8	[c]138.8	[c]163.8	[c]188.8	[c]238.8	[c]288.8	[c]338.8	[c]388.8	[c]488.8	[c]588.8	[c]688.8

LiSrBrEu		[LSP2016c]											
03-Li	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
38-Sr	2.0	[b] 85.9	[b] 110.9	[c] 135.9	[c] 160.9	[c] 185.9	[c] 235.9	[c] 285.9	[c] 335.9	[c] 385.9	[c] 485.9	[c] 585.9	[c] 685.9
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1
63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8
LiSrIICe		[CDJ2018r]											
03-Li	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
38-Sr	2.0	[b] 85.9	[b] 110.9	[c] 135.9	[c] 160.9	[c] 185.9	[c] 235.9	[c] 285.9	[c] 335.9	[c] 385.9	[c] 485.9	[c] 585.9	[c] 685.9
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
LiSrIIEu		[LSP2016e]											
03-Li	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
38-Sr	2.0	[b] 85.9	[b] 110.9	[c] 135.9	[c] 160.9	[c] 185.9	[c] 235.9	[c] 285.9	[c] 335.9	[c] 385.9	[c] 485.9	[c] 585.9	[c] 685.9
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (15/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LiYYClCe	[CCM1999c]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LiYYFFNd	[CEJ1994d]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
LiYYFFPr	[ASR2016h]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LuAlOOCe	[ALM1995]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuAlOOCe	[WMS1995a]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuAlOONd	[ALM1995a]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
LuAlOOPr	[WDR2005]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1

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LuAlOOPr		[MNK2005]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LuAlOOSc		[WMS2002], see also [PLC2006h]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
LuAlScOO		[PLC2006h], see also [WMS2002]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (16/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LuBBOOCe	[AAN2002]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuGdIICe	[CKY2008]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuGdSiOO	[MBL2000]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
LuIICeCa	[DSC2021h]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
LuOOBrCe	[SDR2011u]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuOOEuTb	[CEJ2002d]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
LuOOIICe	[SDR2011v]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

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LuPPOOCe	[ALM1993b]												
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
15-P	0.1	[c] 98.0	[c] 123.0	[c] 148.0	[c] 173.0	[c] 198.0	[c] 248.0	[c] 298.0	[c] 348.0	[c] 398.0	[c] 498.0	[c] 598.0	[c] 698.0
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
LuPPOOPr	[ASR2016j]												
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
15-P	0.1	[c] 98.0	[c] 123.0	[c] 148.0	[c] 173.0	[c] 198.0	[c] 248.0	[c] 298.0	[c] 348.0	[c] 398.0	[c] 498.0	[c] 598.0	[c] 698.0
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
59-Pr	6.4	[a] 64.1	[a] 89.1	[a] 114.1	[b] 139.1	[b] 164.1	[b] 214.1	[c] 264.1	[c] 314.1	[c] 364.1	[c] 464.1	[c] 564.1	[c] 664.1
LuSiOOBi	[YZR2014a]												
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
83-Bi	15.7	[a] 26.0	[a] 51.0	[a] 76.0	[a] 101.0	[a] 126.0	[b] 176.0	[b] 226.0	[b] 276.0	[b] 326.0	[c] 426.0	[c] 526.0	[c] 626.0

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 5. part (17/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. / Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LuSiOOCe	[CML1992]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuSiOOPr	[PLC2006j]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LuYYAlOO	[MWB2004i], see also [PLC2006r]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
LuYYBBOO	[OSD2014h]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
LuYYSiOO	[IKH2012]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
NaGdClCe	[CDJ2018s]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
NaIITlCa	[KYN2015]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4

NaIITlEu			[CDJ2018t]										
11-Na	0.0	[c] 99.0	[c] 124.0	[c] 149.0	[c] 174.0	[c] 199.0	[c] 249.0	[c] 299.0	[c] 349.0	[c] 399.0	[c] 499.0	[c] 599.0	[c] 699.0
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
81-Tl	14.7	[a] 29.7	[a] 54.7	[a] 79.7	[a] 104.7	[a] 129.7	[b] 179.7	[b] 229.7	[b] 279.7	[b] 329.7	[c] 429.7	[c] 529.7	[c] 629.7
63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8
NaIITlSr			[KYN2015a]										
11-Na	0.0	[c] 99.0	[c] 124.0	[c] 149.0	[c] 174.0	[c] 199.0	[c] 249.0	[c] 299.0	[c] 349.0	[c] 399.0	[c] 499.0	[c] 599.0	[c] 699.0
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
81-Tl	14.7	[a] 29.7	[a] 54.7	[a] 79.7	[a] 104.7	[a] 129.7	[b] 179.7	[b] 229.7	[b] 279.7	[b] 329.7	[c] 429.7	[c] 529.7	[c] 629.7
38-Sr	2.0	[b] 85.9	[b] 110.9	[c] 135.9	[c] 160.9	[c] 185.9	[c] 235.9	[c] 285.9	[c] 335.9	[c] 385.9	[c] 485.9	[c] 585.9	[c] 685.9
NaYYFFEr		[JBR2019a]											
11-Na	0.0	[c] 99.0	[c] 124.0	[c] 149.0	[c] 174.0	[c] 199.0	[c] 249.0	[c] 299.0	[c] 349.0	[c] 399.0	[c] 499.0	[c] 599.0	[c] 699.0
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
09-F	0.0	[c] 99.3	[c] 124.3	[c] 149.3	[c] 174.3	[c] 199.3	[c] 249.3	[c] 299.3	[c] 349.3	[c] 399.3	[c] 499.3	[c] 599.3	[c] 699.3
68-Er	9.2	[a] 51.5	[a] 76.5	[a] 101.5	[b] 126.5	[b] 151.5	[b] 201.5	[b] 251.5	[c] 301.5	[c] 351.5	[c] 451.5	[c] 551.5	[c] 651.5

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (18/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd.	[Ref]												
E_{edge}-$E_{K\alpha2}$	E_{edge}-$E_{K\alpha2}$	incident-photon energy Eγ (keV)											
	(keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
NaYYFFEu	[JBR2019b]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
NaYYFFNd	[JBR2019c]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
NaYYFFYb	[JBR2019d]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
NaZrSiOO	[PLC2006k]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
40-Zr	2.3	[b]84.2	[b]109.2	[b]134.2	[c]159.2	[c]184.2	[c]234.2	[c]284.2	[c]334.2	[c]384.2	[c]484.2	[c]584.2	[c]684.2
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
PbWWOOFF	[CYE2006]												
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
74-W	11.5	[a]42.0	[a]67.0	[a]92.0	[a]117.0	[b]142.0	[b]192.0	[b]242.0	[b]292.0	[c]342.0	[c]442.0	[c]542.0	[c]642.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
PbWWOOYY	[RMO2008]												
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
74-W	11.5	[a]42.0	[a]67.0	[a]92.0	[a]117.0	[b]142.0	[b]192.0	[b]242.0	[b]292.0	[c]342.0	[c]442.0	[c]542.0	[c]642.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
RbCaBrEu	[KPS2023]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

RbCsCaCl		[VKH2023e]											
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
RbGdBrCe		[PDR1997]											
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
RbGdClCe		[PLC2006m]											
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 5. part (19/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha 2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
RbGdFFCe	[SDR2003]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
RbLiCeBr	[PDR2019m]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
RbLiCeCl	[GRH2012a]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
RbLuBrCe	[PLC2006n]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
RbSrBrEu	[LST2017]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
RbSrIIEu	[LST2017a]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
RbSrIIYb	[KPS2024a]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4

ScBBOOCe	[MKN2000j]											
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
ScBBOOPr	[ASR2016l]											
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
SrAlOOPr	[ASR2016m]											
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 5. part (20/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
SrBBOOEu	[KEC2010s]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
SrBrIIEu	[CDJ2018w]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
SrClIIEu	[CDJ2018x]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
SrHfOOAl	[KKM2017e]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
SrHfOOCe	[CEJ2002e]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
72-Hf	10.7	[a]45.3	[a]70.3	[a]95.3	[a]120.3	[b]145.3	[b]195.3	[b]245.3	[b]295.3	[c]345.3	[c]445.3	[c]545.3	[c]645.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
SrIICeNa	[PDR2019n]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
SrIIEuSm	[RAW2019]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1

SrIIEuZr			[PDR2019o]										
38-Sr	2.0	[b] 85.9	[b] 110.9	[c] 135.9	[c] 160.9	[c] 185.9	[c] 235.9	[c] 285.9	[c] 335.9	[c] 385.9	[c] 485.9	[c] 585.9	[c] 685.9
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8
40-Zr	2.3	[b] 84.2	[b] 109.2	[b] 134.2	[c] 159.2	[c] 184.2	[c] 234.2	[c] 284.2	[c] 334.2	[c] 384.2	[c] 484.2	[c] 584.2	[c] 684.2
TbAlOOCe		[NCH2009i]											
65-Tb	8.2	[a] 55.9	[a] 80.9	[a] 105.9	[b] 130.9	[b] 155.9	[b] 205.9	[b] 255.9	[c] 305.9	[c] 355.9	[c] 455.9	[c] 555.9	[c] 655.9
13-Al	0.1	[c] 98.5	[c] 123.5	[c] 148.5	[c] 173.5	[c] 198.5	[c] 248.5	[c] 298.5	[c] 348.5	[c] 398.5	[c] 498.5	[c] 598.5	[c] 698.5
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
TlCdClCe		[HKM2018]											
81-Tl	14.7	[a] 29.7	[a] 54.7	[a] 79.7	[a] 104.7	[a] 129.7	[b] 179.7	[b] 229.7	[b] 279.7	[b] 329.7	[c] 429.7	[c] 529.7	[c] 629.7
48-Cd	3.7	[a] 76.8	[b] 101.8	[b] 126.8	[b] 151.8	[b] 176.8	[c] 226.8	[c] 276.8	[c] 326.8	[c] 376.8	[c] 476.8	[c] 576.8	[c] 676.8
17-Cl	0.2	[c] 97.4	[c] 122.4	[c] 147.4	[c] 172.4	[c] 197.4	[c] 247.4	[c] 297.4	[c] 347.4	[c] 397.4	[c] 497.4	[c] 597.4	[c] 697.4
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 5. part (21/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. / Z-Sy	[Ref] Eedge-EKα2 (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
TlClBeII	[KRS1970]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
04-Be	0.0	[c]99.9	[c]124.9	[c]149.9	[c]174.9	[c]199.9	[c]249.9	[c]299.9	[c]349.9	[c]399.9	[c]499.9	[c]599.9	[c]699.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
TlGdClCe	[AKH2018]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
TlLaBrCe	[HKM2017a]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
TlLaClCe	[RHW2017a]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
TlLaClCe	[HKM2017b]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
TlMgClCe	[HKM2018a]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
12-Mg	0.1	*[c]98.8*	*[c]123.8*	*[c]148.8*	*[c]173.8*	*[c]198.8*	*[c]248.8*	*[c]298.8*	*[c]348.8*	*[c]398.8*	*[c]498.8*	*[c]598.8*	*[c]698.8*
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
TlSrIIEu	[HKM2018b]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

YbClIISm		[CAR2022b]											
70-Yb	10.0	[a] 48.4	[a] 73.4	[a] 98.4	[b] 123.4	[b] 148.4	[b] 198.4	[b] 248.4	[c] 298.4	[c] 348.4	[c] 448.4	[c] 548.4	[c] 648.4
17-Cl	0.2	[c] 97.4	[c] 122.4	[c] 147.4	[c] 172.4	[c] 197.4	[c] 247.4	[c] 297.4	[c] 347.4	[c] 397.4	[c] 497.4	[c] 597.4	[c] 697.4
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
62-Sm	7.3	[a] 60.1	[a] 85.1	[b] 110.1	[b] 135.1	[b] 160.1	[b] 210.1	[c] 260.1	[c] 310.1	[c] 360.1	[c] 460.1	[c] 560.1	[c] 660.1
YYAlOOCe		[JMR1988]											
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
13-Al	0.1	[c] 98.5	[c] 123.5	[c] 148.5	[c] 173.5	[c] 198.5	[c] 248.5	[c] 298.5	[c] 348.5	[c] 398.5	[c] 498.5	[c] 598.5	[c] 698.5
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
YYAlOOCr		[JMR1988a]											
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
13-Al	0.1	[c] 98.5	[c] 123.5	[c] 148.5	[c] 173.5	[c] 198.5	[c] 248.5	[c] 298.5	[c] 348.5	[c] 398.5	[c] 498.5	[c] 598.5	[c] 698.5
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
24-Cr	0.6	[c] 94.7	[c] 119.7	[c] 144.7	[c] 169.7	[c] 194.7	[c] 244.7	[c] 294.7	[c] 344.7	[c] 394.7	[c] 494.7	[c] 594.7	[c] 694.7

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 5. part (22/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd. [Ref] Z-Sy	E_{edge}-$E_{K\alpha 2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
YYAlOONd [JMR1988b]													
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
YYAlOOPr [CEJ1994e]													
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
YYBBOOCe [MKN2000l]													
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
YYBBOOPr [ASR2016p]													
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
YYFFNdPr [PSC1988b]													
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
YYGdOOCe [MWB2002b]													
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
YYGdOOEu [GBL1994c]													
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

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YYLuAlOO	[PLC2006r], see also [MWB2004i]												
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
13-Al	0.1	[c] 98.5	[c] 123.5	[c] 148.5	[c] 173.5	[c] 198.5	[c] 248.5	[c] 298.5	[c] 348.5	[c] 398.5	[c] 498.5	[c] 598.5	[c] 698.5
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
YYOOBrCe	[SDR2011aa]												
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
YYOOClCe	[SDR2011ab]												
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
17-Cl	0.2	[c] 97.4	[c] 122.4	[c] 147.4	[c] 172.4	[c] 197.4	[c] 247.4	[c] 297.4	[c] 347.4	[c] 397.4	[c] 497.4	[c] 597.4	[c] 697.4
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 5. part (23/23) – Predicted values of XRF-escape energy Eγ-EKα2 for four-component detectors

Compd.	[Ref]												
Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
YYOOIICe	[SDR2011ac]												
39-Y	2.2	^{b}85.1	^{b}110.1	^{b}135.1	^{c}160.1	^{c}185.1	^{c}235.1	^{c}285.1	^{c}335.1	^{c}385.1	^{c}485.1	^{c}585.1	^{c}685.1
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
53-I	4.9	^{a}71.4	^{a}96.4	^{b}121.4	^{b}146.4	^{b}171.4	^{c}221.4	^{c}271.4	^{c}321.4	^{c}371.4	^{c}471.4	^{c}571.4	^{c}671.4
58-Ce	6.1	^{a}65.4	^{a}90.4	^{b}115.4	^{b}140.4	^{b}165.4	^{b}215.4	^{c}265.4	^{c}315.4	^{c}365.4	^{c}465.4	^{c}565.4	^{c}665.4
YYPPOOCe	[IKH2012b]												
39-Y	2.2	^{b}85.1	^{b}110.1	^{b}135.1	^{c}160.1	^{c}185.1	^{c}235.1	^{c}285.1	^{c}335.1	^{c}385.1	^{c}485.1	^{c}585.1	^{c}685.1
15-P	0.1	^{c}98.0	^{c}123.0	^{c}148.0	^{c}173.0	^{c}198.0	^{c}248.0	^{c}298.0	^{c}348.0	^{c}398.0	^{c}498.0	^{c}598.0	^{c}698.0
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
58-Ce	6.1	^{a}65.4	^{a}90.4	^{b}115.4	^{b}140.4	^{b}165.4	^{b}215.4	^{c}265.4	^{c}315.4	^{c}365.4	^{c}465.4	^{c}565.4	^{c}665.4
YYPPOOPr	[CEJ1994f]												
39-Y	2.2	^{b}85.1	^{b}110.1	^{b}135.1	^{c}160.1	^{c}185.1	^{c}235.1	^{c}285.1	^{c}335.1	^{c}385.1	^{c}485.1	^{c}585.1	^{c}685.1
15-P	0.1	^{c}98.0	^{c}123.0	^{c}148.0	^{c}173.0	^{c}198.0	^{c}248.0	^{c}298.0	^{c}348.0	^{c}398.0	^{c}498.0	^{c}598.0	^{c}698.0
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
59-Pr	6.4	^{a}64.1	^{a}89.1	^{a}114.1	^{b}139.1	^{b}164.1	^{b}214.1	^{c}264.1	^{c}314.1	^{c}364.1	^{c}464.1	^{c}564.1	^{c}664.1
YYSiOOBi	[YZR2014b]												
39-Y	2.2	^{b}85.1	^{b}110.1	^{b}135.1	^{c}160.1	^{c}185.1	^{c}235.1	^{c}285.1	^{c}335.1	^{c}385.1	^{c}485.1	^{c}585.1	^{c}685.1
14-Si	0.1	^{c}98.3	^{c}123.3	^{c}148.3	^{c}173.3	^{c}198.3	^{c}248.3	^{c}298.3	^{c}348.3	^{c}398.3	^{c}498.3	^{c}598.3	^{c}698.3
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
83-Bi	15.7	^{a}26.0	^{a}51.0	^{a}76.0	^{a}101.0	^{a}126.0	^{b}176.0	^{b}226.0	^{b}276.0	^{b}326.0	^{c}426.0	^{c}526.0	^{c}626.0
YYSiOOCe	[RLC1997]												
39-Y	2.2	^{b}85.1	^{b}110.1	^{b}135.1	^{c}160.1	^{c}185.1	^{c}235.1	^{c}285.1	^{c}335.1	^{c}385.1	^{c}485.1	^{c}585.1	^{c}685.1
14-Si	0.1	^{c}98.3	^{c}123.3	^{c}148.3	^{c}173.3	^{c}198.3	^{c}248.3	^{c}298.3	^{c}348.3	^{c}398.3	^{c}498.3	^{c}598.3	^{c}698.3
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
58-Ce	6.1	^{a}65.4	^{a}90.4	^{b}115.4	^{b}140.4	^{b}165.4	^{b}215.4	^{c}265.4	^{c}315.4	^{c}365.4	^{c}465.4	^{c}565.4	^{c}665.4
YYSiOOPr	[CEJ1994g]												
39-Y	2.2	^{b}85.1	^{b}110.1	^{b}135.1	^{c}160.1	^{c}185.1	^{c}235.1	^{c}285.1	^{c}335.1	^{c}385.1	^{c}485.1	^{c}585.1	^{c}685.1
14-Si	0.1	^{c}98.3	^{c}123.3	^{c}148.3	^{c}173.3	^{c}198.3	^{c}248.3	^{c}298.3	^{c}348.3	^{c}398.3	^{c}498.3	^{c}598.3	^{c}698.3
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
59-Pr	6.4	^{a}64.1	^{a}89.1	^{a}114.1	^{b}139.1	^{b}164.1	^{b}214.1	^{c}264.1	^{c}314.1	^{c}364.1	^{c}464.1	^{c}564.1	^{c}664.1
YYTaOONb	[LBR1987c]												
39-Y	2.2	^{b}85.1	^{b}110.1	^{b}135.1	^{c}160.1	^{c}185.1	^{c}235.1	^{c}285.1	^{c}335.1	^{c}385.1	^{c}485.1	^{c}585.1	^{c}685.1
73-Ta	11.1	^{a}43.6	^{a}68.6	^{a}93.6	^{a}118.6	^{b}143.6	^{b}193.6	^{b}243.6	^{b}293.6	^{c}343.6	^{c}443.6	^{c}543.6	^{c}643.6
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
41-Nb	2.5	^{b}83.4	^{b}108.4	^{b}133.4	^{c}158.4	^{c}183.4	^{c}233.4	^{c}283.4	^{c}333.4	^{c}383.4	^{c}483.4	^{c}583.4	^{c}683.4

ZnMgWWOO			[OSD2014m]										
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
12-Mg	0.1		[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
74-W	11.5	[a]42.0	[a]67.0	[a]92.0	[a]117.0	[b]142.0	[b]192.0	[b]242.0	[b]292.0	[c]342.0	[c]442.0	[c]542.0	[c]642.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (1/20) – Predicted values of XRF-escape energy Eγ-EKα2 for five-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
AgGdPPOOCe	[SDR2011]												
47-Ag	3.5	[a]77.8	[b]102.8	[b]102.8	[b]102.8	[b]102.8	[c]227.8	[c]277.8	[c]327.8	[c]377.8	[c]477.8	[c]577.8	[c]677.8
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
BaAlMgOOEu	[SDR2011a]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
BaAlOOEuDy	[KEC2010]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5
BaBBOOClEu	[SDR2011c]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
BaBBPPOOEu	[SDR2011d]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
BaBrIIEuSm	[WWL2020]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

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62-Sm	7.3	[a] 60.1	[a] 85.1	[b] 110.1	[b] 135.1	[b] 160.1	[b] 210.1	[c] 260.1	[c] 310.1	[c] 360.1	[c] 460.1	[c] 560.1	[c] 660.1
BaKKPPOOEu				[SDR2011f]									
56-Ba	5.6	[a] 67.9	[a] 92.9	[b] 117.9	[b] 142.9	[b] 167.9	[b] 217.9	[c] 267.9	[c] 317.9	[c] 367.9	[c] 467.9	[c] 567.9	[c] 667.9
19-K	0.3	[c] 96.7	[c] 121.7	[c] 146.7	[c] 171.7	[c] 196.7	[c] 246.7	[c] 296.7	[c] 346.7	[c] 396.7	[c] 496.7	[c] 596.7	[c] 696.7
15-P	0.1	[c] 98.0	[c] 123.0	[c] 148.0	[c] 173.0	[c] 198.0	[c] 248.0	[c] 298.0	[c] 348.0	[c] 398.0	[c] 498.0	[c] 598.0	[c] 698.0
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8
BaMgSiOOEu				[SDR2011g]									
56-Ba	5.6	[a] 67.9	[a] 92.9	[b] 117.9	[b] 142.9	[b] 167.9	[b] 217.9	[c] 267.9	[c] 317.9	[c] 367.9	[c] 467.9	[c] 567.9	[c] 667.9
12-Mg	0.1	[c] 98.8	[c] 123.8	[c] 148.8	[c] 173.8	[c] 198.8	[c] 248.8	[c] 298.8	[c] 348.8	[c] 398.8	[c] 498.8	[c] 598.8	[c] 698.8
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8
BaYYFFNdPr				[PSC1988]									
56-Ba	5.6	[a] 67.9	[a] 92.9	[b] 117.9	[b] 142.9	[b] 167.9	[b] 217.9	[c] 267.9	[c] 317.9	[c] 367.9	[c] 467.9	[c] 567.9	[c] 667.9
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
09-F	0.0	[c] 99.3	[c] 124.3	[c] 149.3	[c] 174.3	[c] 199.3	[c] 249.3	[c] 299.3	[c] 349.3	[c] 399.3	[c] 499.3	[c] 599.3	[c] 699.3
60-Nd	6.7	[a] 62.8	[a] 87.8	[b] 112.8	[b] 137.8	[b] 162.8	[b] 212.8	[c] 262.8	[c] 312.8	[c] 362.8	[c] 462.8	[c] 562.8	[c] 662.8
59-Pr	6.4	[a] 64.1	[a] 89.1	[a] 114.1	[b] 139.1	[b] 164.1	[b] 214.1	[c] 264.1	[c] 314.1	[c] 364.1	[c] 464.1	[c] 564.1	[c] 664.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (2/20) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for five-component detectors

Compd. [Ref]

Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
BaZnSiOOEu	[SDR2011k]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CaAlOOEuNd	[KEC2010e]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
CaAlSiOOCe	[TOG2019]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CaAlSiOOPr	[KEC2010g]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
CaGaSSEuCe	[KEC2010h]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CaGaSSEuHo	[KEC2010i]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

67-Ho	8.9	[a] 53.0	[a] 78.0	[a] 103.0	[b] 128.0	[b] 153.0	[b] 203.0	[b] 253.0	[c] 303.0	[c] 353.0	[c] 453.0	[c] 553.0	[c] 653.0
CaLaBBOOCe				[MKN2000a]									
20-Ca	0.3	[c] 96.4	[c] 121.4	[c] 146.4	[c] 171.4	[c] 196.4	[c] 246.4	[c] 296.4	[c] 346.4	[c] 396.4	[c] 496.4	[c] 596.4	[c] 696.4
57-La	5.9	[a] 66.6	[a] 91.6	[b] 116.6	[b] 141.6	[b] 166.6	[b] 216.6	[c] 266.6	[c] 316.6	[c] 366.6	[c] 466.6	[c] 566.6	[c] 666.6
05-B	0.0	[c] 99.8	[c] 124.8	[c] 149.8	[c] 174.8	[c] 199.8	[c] 249.8	[c] 299.8	[c] 349.8	[c] 399.8	[c] 499.8	[c] 599.8	[c] 699.8
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
CaLaBBOOEu				[MKN2000b]									
20-Ca	0.3	[c] 96.4	[c] 121.4	[c] 146.4	[c] 171.4	[c] 196.4	[c] 246.4	[c] 296.4	[c] 346.4	[c] 396.4	[c] 496.4	[c] 596.4	[c] 696.4
57-La	5.9	[a] 66.6	[a] 91.6	[b] 116.6	[b] 141.6	[b] 166.6	[b] 216.6	[c] 266.6	[c] 316.6	[c] 366.6	[c] 466.6	[c] 566.6	[c] 666.6
05-B	0.0	[c] 99.8	[c] 124.8	[c] 149.8	[c] 174.8	[c] 199.8	[c] 249.8	[c] 299.8	[c] 349.8	[c] 399.8	[c] 499.8	[c] 599.8	[c] 699.8
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8
CaMoOOLaNb				[PLC2006b]									
20-Ca	0.3	[c] 96.4	[c] 121.4	[c] 146.4	[c] 171.4	[c] 196.4	[c] 246.4	[c] 296.4	[c] 346.4	[c] 396.4	[c] 496.4	[c] 596.4	[c] 696.4
42-Mo	2.6	[b] 82.5	[b] 107.5	[b] 132.5	[c] 157.5	[c] 182.5	[c] 232.5	[c] 282.5	[c] 332.5	[c] 382.5	[c] 482.5	[c] 582.5	[c] 682.5
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
57-La	5.9	[a] 66.6	[a] 91.6	[b] 116.6	[b] 141.6	[b] 166.6	[b] 216.6	[c] 266.6	[c] 316.6	[c] 366.6	[c] 466.6	[c] 566.6	[c] 666.6
41-Nb	2.5	[b] 83.4	[b] 108.4	[b] 133.4	[c] 158.4	[c] 183.4	[c] 233.4	[c] 283.4	[c] 333.4	[c] 383.4	[c] 483.4	[c] 583.4	[c] 683.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (3/20) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for five-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy $E\gamma$ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CaPPOOEuCe	[KEC2010l]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CaSiNNEuTm	[KEC2010m]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
07-N	0.0	[c]99.6	[c]124.6	[c]149.6	[c]174.6	[c]199.6	[c]249.6	[c]299.6	[c]349.6	[c]399.6	[c]499.6	[c]599.6	[c]699.6
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
69-Tm	9.6	[a]50.0	[a]75.0	[a]100.0	[b]125.0	[b]150.0	[b]200.0	[b]250.0	[c]300.0	[c]350.0	[c]450.0	[c]550.0	[c]650.0
CaSiSSEuNd	[KEC2010n]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
CaSSEuTmCe	[KEC2010o]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
16-S	0.2	[c]97.7	[c]122.7	[c]147.7	[c]172.7	[c]197.7	[c]247.7	[c]297.7	[c]347.7	[c]397.7	[c]497.7	[c]597.7	[c]697.7
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
69-Tm	9.6	[a]50.0	[a]75.0	[a]100.0	[b]125.0	[b]150.0	[b]200.0	[b]250.0	[c]300.0	[c]350.0	[c]450.0	[c]550.0	[c]650.0
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CaYYBBOOCe	[MKN2000c], see also [KKM2016c]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CaYYBBOOEu	[MKN2000d]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8
CCHHNNPbBr				[HWI2016]									
06-C	0.0	[c] 99.7	[c] 124.7	[c] 149.7	[c] 174.7	[c] 199.7	[c] 249.7	[c] 299.7	[c] 349.7	[c] 399.7	[c] 499.7	[c] 599.7	[c] 699.7
01-H	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
07-N	0.0	[c] 99.6	[c] 124.6	[c] 149.6	[c] 174.6	[c] 199.6	[c] 249.6	[c] 299.6	[c] 349.6	[c] 399.6	[c] 499.6	[c] 599.6	[c] 699.6
82-Pb	15.2	[a] 27.9	[a] 52.9	[a] 77.9	[a] 102.9	[a] 127.9	[b] 177.9	[b] 227.9	[b] 277.9	[b] 327.9	[c] 427.9	[c] 527.9	[c] 627.9
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1
CCHHNNPbII				[LLU2019]									
06-C	0.0	[c] 99.7	[c] 124.7	[c] 149.7	[c] 174.7	[c] 199.7	[c] 249.7	[c] 299.7	[c] 349.7	[c] 399.7	[c] 499.7	[c] 599.7	[c] 699.7
01-H	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
07-N	0.0	[c] 99.6	[c] 124.6	[c] 149.6	[c] 174.6	[c] 199.6	[c] 249.6	[c] 299.6	[c] 349.6	[c] 399.6	[c] 499.6	[c] 599.6	[c] 699.6
82-Pb	15.2	[a] 27.9	[a] 52.9	[a] 77.9	[a] 102.9	[a] 127.9	[b] 177.9	[b] 227.9	[b] 277.9	[b] 327.9	[c] 427.9	[c] 527.9	[c] 627.9
53-I	4.9	[a] 71.4	[a] 96.4	[b] 121.4	[b] 146.4	[b] 171.4	[c] 221.4	[c] 271.4	[c] 321.4	[c] 371.4	[c] 471.4	[c] 571.4	[c] 671.4
CdLaSiOOCe				[PLC2016a]									
48-Cd	3.7	[a] 76.8	[b] 101.8	[b] 126.8	[b] 151.8	[b] 176.8	[c] 226.8	[c] 276.8	[c] 326.8	[c] 376.8	[c] 476.8	[c] 576.8	[c] 676.8
57-La	5.9	[a] 66.6	[a] 91.6	[b] 116.6	[b] 141.6	[b] 166.6	[b] 216.6	[c] 266.6	[c] 316.6	[c] 366.6	[c] 466.6	[c] 566.6	[c] 666.6
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 6. part (4/20) – Predicted values of XRF-escape energy Eγ-EKα2 for five-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CeGdAlGaOO	[QCH2015]												
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CeGdLaSiOO	[WCH2016]												
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CeLuCaSiOO	[MMS2016]												
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CeLuEuSiOO	[DSC2021]												
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CeLuGdSiOO	[DSC2021a], see also [MKP1999]												
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CeLuLaSiOO	[DSC2021b]												
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3

08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CeLuScSiOO				[DSC2021c]									
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CeLuTbSiOO				[DSC2021d]									
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CeLuYYSiOO				[DSC2021e]									
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 6. part (5/20) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha 2}$ for five-component detectors

Compd.		[Ref]											
Z-Sy	E_{edge}-$E_{K\alpha 2}$ (keV)	incident-photon energy $E\gamma$ (keV)											
		100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsBaIIEuSm		[WWL2019]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
CsBaIIYbSm		[CAR2021]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
CsCaBaIIEu		[PDR2019c]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsCaBrIIEu		[MLY2017], see also [PDR2019e]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsCaClBrEu		[CDJ2018i]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsCaIIBrEu		[PDR2019e], see also [MLY2017]											
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1

63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsCuIILiNa			[JBL2025]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
29-Cu	1.0	[b]92.0	[c]117.0	[c]142.0	[c]167.0	[c]192.0	[c]242.0	[c]292.0	[c]342.0	[c]392.0	[c]492.0	[c]592.0	[c]692.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
CsDySiOOFF				[KMY2022]									
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
CsErSiOOFF			[GMR2017]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
68-Er	9.2	[a]51.5	[a]76.5	[a]101.5	[b]126.5	[b]151.5	[b]201.5	[b]251.5	[c]301.5	[c]351.5	[c]451.5	[c]551.5	[c]651.5
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (6/20) – Predicted values of XRF-escape energy Eγ-EKα2 for five-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsEuSiOOFF	[GMR2017a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
CsGdPPOOCe	[CDJ2018k]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsGdSiOOFF	[GMR2017b]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
CsHoSiOOFF	[GMR2017c]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
67-Ho	8.9	[a]53.0	[a]78.0	[a]103.0	[b]128.0	[b]153.0	[b]203.0	[b]253.0	[c]303.0	[c]353.0	[c]453.0	[c]553.0	[c]653.0
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
CsKKCaIIEu	[JJH2018]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsKKSrIIEu	[JJH2018a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4

63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8
CsLiGdBrCe		[GRH2014]											
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
03-Li	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
CsLiGdClCe		[GRH2010a]											
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
03-Li	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
17-Cl	0.2	[c] 97.4	[c] 122.4	[c] 147.4	[c] 172.4	[c] 197.4	[c] 247.4	[c] 297.4	[c] 347.4	[c] 397.4	[c] 497.4	[c] 597.4	[c] 697.4
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
CsLiLaBrCe		[JGL2011]											
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1
03-Li	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
57-La	5.9	[a] 66.6	[a] 91.6	[b] 116.6	[b] 141.6	[b] 166.6	[b] 216.6	[c] 266.6	[c] 316.6	[c] 366.6	[c] 466.6	[c] 566.6	[c] 666.6
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (7/20) – Predicted values of XRF-escape energy E_{γ}-$E_{K\alpha2}$ for five-component detectors

Compd.	[Ref]												
Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy E_{γ} (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsLiLaClCe	[JGL2011a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsLiLuClCe	[PDR2019g]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsLiLuIICe	[MBR2008]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsLiYYBrCe	[ABS2004]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsLiYYClCe	[CCM1999a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsLiYYClPr	[FMD2019]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4

59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
CsLuSiOOFF				[GMR2017d]									
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
CsNaGdBrCe				[GRH2012]									
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsNaGdClCe				[GRH2014a]									
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (8/20) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for five-component detectors

Compd. Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsNaGdClCe	[ESM2014b]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsNaLaBrCe	[MBR2006a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsNaLaClCe	[CEJ2001c]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsNaLaIICe	[GGN2014]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsNaLuBrCe	[MBR2006b]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsNaLuClCe	[CEJ2001d]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4

58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsNaYYBrCe				[MBR2006c]									
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsPbBrIIAl			[MLU2017a]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
CsPbIIBrEu			[WXG2019]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (9/20) – Predicted values of XRF-escape energy Eγ-EKα2 for five-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha 2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsRbCaIIEu	[JJH2018b]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsRbSrIIEu	[JJH2018c]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsSrBrIIEu	[PDR2019h]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsSrBrIIEu	[LST2019]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsSrClBrEu	[PDR2019i]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsSrClBrEu	[LST2019a]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1

63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CsSrIIEuSm			[WWL2020a]										
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
CsTbSiOOFF				[GMR2017e]									
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
CsTmSiOOFF				[GMR2017f]									
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
69-Tm	9.6	[a]50.0	[a]75.0	[a]100.0	[b]125.0	[b]150.0	[b]200.0	[b]250.0	[c]300.0	[c]350.0	[c]450.0	[c]550.0	[c]650.0
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 6. part (10/20) – Predicted values of XRF-escape energy Eγ-EKα2 for five-component detectors

Compd. / Z-Sy	$E_{edge}-E_{K\alpha 2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CsYbSiOOFF	[GMR2017g]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
CsYYSiOOFF	[GMR2017h]												
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
GdAlCeOOCe	[MMS2016c], mixture of 2 compounds]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdAlGaOOCe	[WDR2014]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdAlGaOOCe	[OSD2014e], see also [YWU2015a]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdGaAlOOCe	[MNK2015], see also [OSD2014e]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdGaAlOOCe				[YWU2015a], see also [MNK2015]									
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdGaOOCrCe				[CEJ2002b]									
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
24-Cr	0.6	[c]94.7	[c]119.7	[c]144.7	[c]169.7	[c]194.7	[c]244.7	[c]294.7	[c]344.7	[c]394.7	[c]494.7	[c]594.7	[c]694.7
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdLaSiOOCe				[MNK2015a], see also [AYS2016], [WCH2016a]									
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 6. part (11/20) – Predicted values of XRF-escape energy E_γ-$E_{K\alpha 2}$ for five-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha 2}$ (keV)	incident-photon energy E_γ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
GdScAlOOCe	[CEJ2001g]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdSiOOCeZr	[MMS2016a]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
40-Zr	2.3	[b]84.2	[b]109.2	[b]134.2	[c]159.2	[c]184.2	[c]234.2	[c]284.2	[c]334.2	[c]384.2	[c]484.2	[c]584.2	[c]684.2
GdYYAlOOCe	[NCH2009d], see also [MKC2020]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
KKBaIIEuSm	[WWL2020b]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
KKCaIIEuGd	[YWU2017c]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
KKCaIIEuLa	[YWU2017d]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

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57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
KKCaIIEuSc			[YWU2017e]										
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
KKCaIIEuSm				[WWL2020c]									
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
KKCaIIEuYY				[YWU2017f]									
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (12/20) – Predicted values of XRF-escape energy Eγ-EKα2 for five-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
KKCaIIEuZr	[YWU2018]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
40-Zr	2.3	[b]84.2	[b]109.2	[b]134.2	[c]159.2	[c]184.2	[c]234.2	[c]284.2	[c]334.2	[c]384.2	[c]484.2	[c]584.2	[c]684.2
KKCaSrIIEu	[YWU2016]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
KKLiYYBrCe	[MBR2008b]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
KKLuPPOOCe	[DWS2004]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
KKLuPPOOPr	[ASR2016]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
KKSrBrEuSm	[WWL2020d]												
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
KKSrIIEuSm				[WWL2020e]									
19-K	0.3	[c]96.7	[c]121.7	[c]146.7	[c]171.7	[c]196.7	[c]246.7	[c]296.7	[c]346.7	[c]396.7	[c]496.7	[c]596.7	[c]696.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
LaBrCeSrBa			[KYN2012b]										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
LaBrCeSrCa			[MAL2013a										
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (13/20) – Predicted values of XRF-escape energy Eγ-EKα2 for five-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LaGdSiOOCe	[WCH2016a], see also [MNK2015a], [AYS2016]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaGdSiOOCe	[AYS2016], see also [WCH2016a], [MNK2015a]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaMgBBOOCe	[MKN2000g]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LaMgBBOOPr	[ASR2016d]												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LiGdBBOOCe	[MKN2000h]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LiLaPPOOPr	[ASR2016f]												
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

59-Pr	6.4	[a] 64.1	[a] 89.1	[a] 114.1	[b] 139.1	[b] 164.1	[b] 214.1	[c] 264.1	[c] 314.1	[c] 364.1	[c] 464.1	[c] 564.1	[c] 664.1
LiLuSiOOCe				[PLC2006g], see also [YWU2019]									
03-Li	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
LiLuSiOOPr			[ASR2016g]										
03-Li	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
59-Pr	6.4	[a] 64.1	[a] 89.1	[a] 114.1	[b] 139.1	[b] 164.1	[b] 214.1	[c] 264.1	[c] 314.1	[c] 364.1	[c] 464.1	[c] 564.1	[c] 664.1
LiNaYYBrCe				[MBR2008d]									
03-Li	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
11-Na	0.0	[c] 99.0	[c] 124.0	[c] 149.0	[c] 174.0	[c] 199.0	[c] 249.0	[c] 299.0	[c] 349.0	[c] 399.0	[c] 499.0	[c] 599.0	[c] 699.0
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
35-Br	1.6	[b] 88.1	[b] 113.1	[c] 138.1	[c] 163.1	[c] 188.1	[c] 238.1	[c] 288.1	[c] 338.1	[c] 388.1	[c] 488.1	[c] 588.1	[c] 688.1
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (14/20) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for five-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy $E\gamma$ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LiYYBBOOCe		[MKN2000i]											
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuAlOOCeMg	2014	[MNK2014]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
LuAlOOCeMo		[WDR2006]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
42-Mo	2.6	[b]82.5	[b]107.5	[b]132.5	[c]157.5	[c]182.5	[c]232.5	[c]282.5	[c]332.5	[c]382.5	[c]482.5	[c]582.5	[c]682.5
LuAlOOCePr		[JMR2012]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LuAlScOOPr		[PLC2006i]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LuGdAlOOCe		[JCV2000]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuGdGaAlOO				[EMH2013]									
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
LuGdSiOOCe				[MKP1999], see also [DSC2021a]									
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuScBBOOCe				[OSD2014n]									
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
21-Sc	0.4	[c]96.0	[c]121.0	[c]146.0	[c]171.0	[c]196.0	[c]246.0	[c]296.0	[c]346.0	[c]396.0	[c]496.0	[c]596.0	[c]696.0
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 6. part (15/20) – Predicted values of XRF-escape energy Eγ-EKα2 for five-component detectors

Compd. / Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LuSiOOCeCa	[PCT2009]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
LuSiOOCeLi	[YWU2019], see also [PLC2006g]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
LuYYAlOOCe	[JCV2000a], see also [PLC2006s]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuYYAlOOPr	[WDR2014a]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
LuYYBBOOCe	[OSD2014i]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuYYBBOOEu	[OSD2014j]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

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63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
LuYYSiOOCe				[CPN2004]									
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuYYSiOOCe				[LPD2004]									
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
MgSrSiOOEu				[SDR2011w], see also [TOG2019b]									
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (16/20) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha2}$ for five-component detectors

Compd.	[Ref]												
Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy $E\gamma$ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
NaBaPPOOEu	[SDR2011x]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
NaCeFFGdTb	[XZH2019]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
NaGdBBOOCe	[SDR2011y]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
NaIlTlCaEu	[NSH2010], see also [CDJ2018u]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
NaIlTlCaSr	[PDR2019l]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
NaIlTlEuCa	[CDJ2018u], see also [NSH2010]												
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8

20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
NaLaSiOOCe				[SDR2011z]									
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
NaYYFFYbEr				[HDN2015]									
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
09-F	0.0	[c]99.3	[c]124.3	[c]149.3	[c]174.3	[c]199.3	[c]249.3	[c]299.3	[c]349.3	[c]399.3	[c]499.3	[c]599.3	[c]699.3
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
68-Er	9.2	[a]51.5	[a]76.5	[a]101.5	[b]126.5	[b]151.5	[b]201.5	[b]251.5	[c]301.5	[c]351.5	[c]451.5	[c]551.5	[c]651.5
PbWWOOMoNb				[CEJ2002g]									
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
74-W	11.5	[a]42.0	[a]67.0	[a]92.0	[a]117.0	[b]142.0	[b]192.0	[b]242.0	[b]292.0	[c]342.0	[c]442.0	[c]542.0	[c]642.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
42-Mo	2.6	[b]82.5	[b]107.5	[b]132.5	[c]157.5	[c]182.5	[c]232.5	[c]282.5	[c]332.5	[c]382.5	[c]482.5	[c]582.5	[c]682.5
41-Nb	2.5	[b]83.4	[b]108.4	[b]133.4	[c]158.4	[c]183.4	[c]233.4	[c]283.4	[c]333.4	[c]383.4	[c]483.4	[c]583.4	[c]683.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 6. part (17/20) – Predicted values of XRF-escape energy Eγ-EKα2 for five-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
		incident-photon energy Eγ (keV)											
PbWWOOMoYY	[CEJ2002h]												
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
74-W	11.5	[a]42.0	[a]67.0	[a]92.0	[a]117.0	[b]142.0	[b]192.0	[b]242.0	[b]292.0	[c]342.0	[c]442.0	[c]542.0	[c]642.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
42-Mo	2.6	[b]82.5	[b]107.5	[b]132.5	[c]157.5	[c]182.5	[c]232.5	[c]282.5	[c]332.5	[c]382.5	[c]482.5	[c]582.5	[c]682.5
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
RbLiGdClCe	[GRH2013]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
RbLiLaBrCe	[MBR2008e]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
RbLiYYBrCe	MBR2007k]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
RbLiYYICe	[MBR2008f]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
RbLuPPOOCe	[PLC2006o]												
37-Rb	1.9	[b]86.6	[b]111.6	[c]136.6	[c]161.6	[c]186.6	[c]236.6	[c]286.6	[c]336.6	[c]386.6	[c]486.6	[c]586.6	[c]686.6
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
SrAlOOEuDy				[KEC2010p]									
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5
SrIIEuCeNa			[CWL2008]										
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
SrMgBBOOPr				ASR2016n]									
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 6. part (18/20) – Predicted values of XRF-escape energy Eγ-E$_{K\alpha 2}$ for five-component detectors

Compd. / Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
SrMgSiOOEu	[TOG2019b], see also [SDR2011w]												
38-Sr	2.0	^{b}85.9	^{b}110.9	^{c}135.9	^{c}160.9	^{c}185.9	^{c}235.9	^{c}285.9	^{c}335.9	^{c}385.9	^{c}485.9	^{c}585.9	^{c}685.9
12-Mg	0.1	^{c}98.8	^{c}123.8	^{c}148.8	^{c}173.8	^{c}198.8	^{c}248.8	^{c}298.8	^{c}348.8	^{c}398.8	^{c}498.8	^{c}598.8	^{c}698.8
14-Si	0.1	^{c}98.3	^{c}123.3	^{c}148.3	^{c}173.3	^{c}198.3	^{c}248.3	^{c}298.3	^{c}348.3	^{c}398.3	^{c}498.3	^{c}598.3	^{c}698.3
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
63-Eu	7.6	^{a}58.8	^{a}83.8	^{a}108.8	^{b}133.8	^{b}158.8	^{b}208.8	^{b}258.8	^{c}308.8	^{c}358.8	^{c}458.8	^{c}558.8	^{c}658.8
SrPPOOEuYY	[KEC2010w]												
38-Sr	2.0	^{b}85.9	^{b}110.9	^{c}135.9	^{c}160.9	^{c}185.9	^{c}235.9	^{c}285.9	^{c}335.9	^{c}385.9	^{c}485.9	^{c}585.9	^{c}685.9
15-P	0.1	^{c}98.0	^{c}123.0	^{c}148.0	^{c}173.0	^{c}198.0	^{c}248.0	^{c}298.0	^{c}348.0	^{c}398.0	^{c}498.0	^{c}598.0	^{c}698.0
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
63-Eu	7.6	^{a}58.8	^{a}83.8	^{a}108.8	^{b}133.8	^{b}158.8	^{b}208.8	^{b}258.8	^{c}308.8	^{c}358.8	^{c}458.8	^{c}558.8	^{c}658.8
39-Y	2.2	^{b}85.1	^{b}110.1	^{b}135.1	^{c}160.1	^{c}185.1	^{c}235.1	^{c}285.1	^{c}335.1	^{c}385.1	^{c}485.1	^{c}585.1	^{c}685.1
SrSiOOEuDy	[KEC2010x]												
38-Sr	2.0	^{b}85.9	^{b}110.9	^{c}135.9	^{c}160.9	^{c}185.9	^{c}235.9	^{c}285.9	^{c}335.9	^{c}385.9	^{c}485.9	^{c}585.9	^{c}685.9
14-Si	0.1	^{c}98.3	^{c}123.3	^{c}148.3	^{c}173.3	^{c}198.3	^{c}248.3	^{c}298.3	^{c}348.3	^{c}398.3	^{c}498.3	^{c}598.3	^{c}698.3
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
63-Eu	7.6	^{a}58.8	^{a}83.8	^{a}108.8	^{b}133.8	^{b}158.8	^{b}208.8	^{b}258.8	^{c}308.8	^{c}358.8	^{c}458.8	^{c}558.8	^{c}658.8
66-Dy	8.6	^{a}54.5	^{a}79.5	^{a}104.5	^{b}129.5	^{b}154.5	^{b}204.5	^{b}254.5	^{c}304.5	^{c}354.5	^{c}454.5	^{c}554.5	^{c}654.5
SrYYBBOOPr	[ASR2016o]												
38-Sr	2.0	^{b}85.9	^{b}110.9	^{c}135.9	^{c}160.9	^{c}185.9	^{c}235.9	^{c}285.9	^{c}335.9	^{c}385.9	^{c}485.9	^{c}585.9	^{c}685.9
39-Y	2.2	^{b}85.1	^{b}110.1	^{b}135.1	^{c}160.1	^{c}185.1	^{c}235.1	^{c}285.1	^{c}335.1	^{c}385.1	^{c}485.1	^{c}585.1	^{c}685.1
05-B	0.0	^{c}99.8	^{c}124.8	^{c}149.8	^{c}174.8	^{c}199.8	^{c}249.8	^{c}299.8	^{c}349.8	^{c}399.8	^{c}499.8	^{c}599.8	^{c}699.8
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
59-Pr	6.4	^{a}64.1	^{a}89.1	^{a}114.1	^{b}139.1	^{b}164.1	^{b}214.1	^{c}264.1	^{c}314.1	^{c}364.1	^{c}464.1	^{c}564.1	^{c}664.1
TbLuAlOOCe	[ZXA2017a]												
65-Tb	8.2	^{a}55.9	^{a}80.9	^{a}105.9	^{b}130.9	^{b}155.9	^{b}205.9	^{b}255.9	^{c}305.9	^{c}355.9	^{c}455.9	^{c}555.9	^{c}655.9
71-Lu	10.3	^{a}46.9	^{a}71.9	^{a}96.9	^{b}121.9	^{b}146.9	^{b}196.9	^{b}246.9	^{b}296.9	^{c}346.9	^{c}446.9	^{c}546.9	^{c}646.9
13-Al	0.1	^{c}98.5	^{c}123.5	^{c}148.5	^{c}173.5	^{c}198.5	^{c}248.5	^{c}298.5	^{c}348.5	^{c}398.5	^{c}498.5	^{c}598.5	^{c}698.5
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5
58-Ce	6.1	^{a}65.4	^{a}90.4	^{b}115.4	^{b}140.4	^{b}165.4	^{b}215.4	^{c}265.4	^{c}315.4	^{c}365.4	^{c}465.4	^{c}565.4	^{c}665.4
TbScAlOOPr	[DPW2006]												
65-Tb	8.2	^{a}55.9	^{a}80.9	^{a}105.9	^{b}130.9	^{b}155.9	^{b}205.9	^{b}255.9	^{c}305.9	^{c}355.9	^{c}455.9	^{c}555.9	^{c}655.9
21-Sc	0.4	^{c}96.0	^{c}121.0	^{c}146.0	^{c}171.0	^{c}196.0	^{c}246.0	^{c}296.0	^{c}346.0	^{c}396.0	^{c}496.0	^{c}596.0	^{c}696.0
13-Al	0.1	^{c}98.5	^{c}123.5	^{c}148.5	^{c}173.5	^{c}198.5	^{c}248.5	^{c}298.5	^{c}348.5	^{c}398.5	^{c}498.5	^{c}598.5	^{c}698.5
08-O	0.0	^{c}99.5	^{c}124.5	^{c}149.5	^{c}174.5	^{c}199.5	^{c}249.5	^{c}299.5	^{c}349.5	^{c}399.5	^{c}499.5	^{c}599.5	^{c}699.5

59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
TlLiGdBrCe	2016		[HKM2016]										
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
TlLiGdClCe			[HKM2015]										
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
TlLiLuClCe			[GRH2017]										
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (19/20) – Predicted values of XRF-escape energy Eγ-EKα2 for five-component detectors

Compd. [Ref]

Z-Sy	$E_{edge}-E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
TlLiYYClCe 2016	[RHW2016a]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
TlLiYYClCe	[HKM2016a]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
TlSrIIEuSm	[WWL2020f]												
81-Tl	14.7	[a]29.7	[a]54.7	[a]79.7	[a]104.7	[a]129.7	[b]179.7	[b]229.7	[b]279.7	[b]329.7	[c]429.7	[c]529.7	[c]629.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
62-Sm	7.3	[a]60.1	[a]85.1	[b]110.1	[b]135.1	[b]160.1	[b]210.1	[c]260.1	[c]310.1	[c]360.1	[c]460.1	[c]560.1	[c]660.1
YYAlBBOOCe	[MKN2000k]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
YYAlGaOOCe	[OSD2014k]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
YYAlOOCeCC	[IGR2023]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

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06-C	0.0	[c] 99.7	[c] 124.7	[c] 149.7	[c] 174.7	[c] 199.7	[c] 249.7	[c] 299.7	[c] 349.7	[c] 399.7	[c] 499.7	[c] 599.7	[c] 699.7
YYAlOOCePr			[JMR2012b]										
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
13-Al	0.1	[c] 98.5	[c] 123.5	[c] 148.5	[c] 173.5	[c] 198.5	[c] 248.5	[c] 298.5	[c] 348.5	[c] 398.5	[c] 498.5	[c] 598.5	[c] 698.5
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
59-Pr	6.4	[a] 64.1	[a] 89.1	[a] 114.1	[b] 139.1	[b] 164.1	[b] 214.1	[c] 264.1	[c] 314.1	[c] 364.1	[c] 464.1	[c] 564.1	[c] 664.1
YYCaOOBBCe			[KKM2016c], see also [MKN2000c]										
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
20-Ca	0.3	[c] 96.4	[c] 121.4	[c] 146.4	[c] 171.4	[c] 196.4	[c] 246.4	[c] 296.4	[c] 346.4	[c] 396.4	[c] 496.4	[c] 596.4	[c] 696.4
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
05-B	0.0	[c] 99.8	[c] 124.8	[c] 149.8	[c] 174.8	[c] 199.8	[c] 249.8	[c] 299.8	[c] 349.8	[c] 399.8	[c] 499.8	[c] 599.8	[c] 699.8
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
YYCaOOBBPr			[KKM2016d]										
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
20-Ca	0.3	[c] 96.4	[c] 121.4	[c] 146.4	[c] 171.4	[c] 196.4	[c] 246.4	[c] 296.4	[c] 346.4	[c] 396.4	[c] 496.4	[c] 596.4	[c] 696.4
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
05-B	0.0	[c] 99.8	[c] 124.8	[c] 149.8	[c] 174.8	[c] 199.8	[c] 249.8	[c] 299.8	[c] 349.8	[c] 399.8	[c] 499.8	[c] 599.8	[c] 699.8
59-Pr	6.4	[a] 64.1	[a] 89.1	[a] 114.1	[b] 139.1	[b] 164.1	[b] 214.1	[c] 264.1	[c] 314.1	[c] 364.1	[c] 464.1	[c] 564.1	[c] 664.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 6. part (20/20) – Predicted values of XRF-escape energy E_{γ}-$E_{K\alpha2}$ for five-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
YYGdAlOOCe	[MKC2020], see also [NCH2009d]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
YYGdOOEuPr	[CEJ2002f]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
YYGdPrBBOO	[ASR2016r]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
YYLuAlGaYb	[MWB2004k]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
70-Yb	10.0	[a]48.4	[a]73.4	[a]98.4	[b]123.4	[b]148.4	[b]198.4	[b]248.4	[c]298.4	[c]348.4	[c]448.4	[c]548.4	[c]648.4
YYLuAlOOCe	[PLC2006s], see also [JCV2000a]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
YYMgBBOOCe	[MKN2000m]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5

58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
YYSiOOCeCa				[PCT2009a]									
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
20-Ca	0.3	[c] 96.4	[c] 121.4	[c] 146.4	[c] 171.4	[c] 196.4	[c] 246.4	[c] 296.4	[c] 346.4	[c] 396.4	[c] 496.4	[c] 596.4	[c] 696.4
YYSiOOCeCs				[HRT2009]									
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
55-Cs	5.3	[a] 69.1	[a] 94.1	[b] 119.1	[b] 144.1	[b] 169.1	[b] 219.1	[c] 269.1	[c] 319.1	[c] 369.1	[c] 469.1	[c] 569.1	[c] 669.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 7. part (1/8) – Predicted values of XRF-escape energy Eγ-EKα2 for six and more-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
BaMgAlOOEuCo	[KEC2010a]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
27-Co	0.8	[c]93.2	[c]118.2	[c]143.2	[c]168.2	[c]193.2	[c]243.2	[c]293.2	[c]343.2	[c]393.2	[c]493.2	[c]593.2	[c]693.2
BaMgSiOOEuDy	[KEC2010b]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5
BaMgSiOOEuTm	[KEC2010c]												
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
69-Tm	9.6	[a]50.0	[a]75.0	[a]100.0	[b]125.0	[b]150.0	[b]200.0	[b]250.0	[c]300.0	[c]350.0	[c]450.0	[c]550.0	[c]650.0
CaAlBBOOEuNd	[KEC2010d]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
05-B	0.0	[c]99.8	[c]124.8	[c]149.8	[c]174.8	[c]199.8	[c]249.8	[c]299.8	[c]349.8	[c]399.8	[c]499.8	[c]599.8	[c]699.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
60-Nd	6.7	[a]62.8	[a]87.8	[b]112.8	[b]137.8	[b]162.8	[b]212.8	[c]262.8	[c]312.8	[c]362.8	[c]462.8	[c]562.8	[c]662.8
CaAlSiOOEuDy	[KEC2010f]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5

CaMgSiOOCeEu		[TOG2019a]											
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
CaMgSiOOEuDy		[KEC2010j]											
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 7. part (2/8) – Predicted values of XRF-escape energy Eγ-EKα2 for six and more-component detectors

Compd. [Ref]

Z-Sy Eedge-EKα2 ——incident-photon energy Eγ (keV)——

Z-Sy	E_{edge}-$E_{K\alpha 2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
CaMgSiOOEuTb	[KEC2010k]												
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9
CCHHBrNNUUOO	[JXE2017]												
06-C	0.0	[c]99.7	[c]124.7	[c]149.7	[c]174.7	[c]199.7	[c]249.7	[c]299.7	[c]349.7	[c]399.7	[c]499.7	[c]599.7	[c]699.7
01-H	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
07-N	0.0	[c]99.6	[c]124.6	[c]149.6	[c]174.6	[c]199.6	[c]249.6	[c]299.6	[c]349.6	[c]399.6	[c]499.6	[c]599.6	[c]699.6
92-U	20.9	[a]100.0	[a]33.0	[a]58.0	[a]83.0	[a]108.0	[b]158.0	[b]208.0	[b]258.0	[b]308.0	[b]408.0	[c]508.0	[c]608.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
CCHHNNPbBrCl	[QXU2019], see also [YLI2019]												
06-C	0.0	[c]99.7	[c]124.7	[c]149.7	[c]174.7	[c]199.7	[c]249.7	[c]299.7	[c]349.7	[c]399.7	[c]499.7	[c]599.7	[c]699.7
01-H	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
07-N	0.0	[c]99.6	[c]124.6	[c]149.6	[c]174.6	[c]199.6	[c]249.6	[c]299.6	[c]349.6	[c]399.6	[c]499.6	[c]599.6	[c]699.6
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
CCHHNNPbClBr	[YLI2019], see also [QXU2019]												
06-C	0.0	[c]99.7	[c]124.7	[c]149.7	[c]174.7	[c]199.7	[c]249.7	[c]299.7	[c]349.7	[c]399.7	[c]499.7	[c]599.7	[c]699.7
01-H	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
07-N	0.0	[c]99.6	[c]124.6	[c]149.6	[c]174.6	[c]199.6	[c]249.6	[c]299.6	[c]349.6	[c]399.6	[c]499.6	[c]599.6	[c]699.6
82-Pb	15.2	[a]27.9	[a]52.9	[a]77.9	[a]102.9	[a]127.9	[b]177.9	[b]227.9	[b]277.9	[b]327.9	[c]427.9	[c]527.9	[c]627.9
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
CCHHPPNNSbCl	[QHE2020]												
06-C	0.0	[c]99.7	[c]124.7	[c]149.7	[c]174.7	[c]199.7	[c]249.7	[c]299.7	[c]349.7	[c]399.7	[c]499.7	[c]599.7	[c]699.7
01-H	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
07-N	0.0	[c]99.6	[c]124.6	[c]149.6	[c]174.6	[c]199.6	[c]249.6	[c]299.6	[c]349.6	[c]399.6	[c]499.6	[c]599.6	[c]699.6
51-Sb	4.4	[a]73.6	[b]98.6	[b]123.6	[b]148.6	[b]173.6	[c]223.6	[c]273.6	[c]323.6	[c]373.6	[c]473.6	[c]573.6	[c]673.6
17-Cl	0.2	[c]97.4	[c]122.4	[c]147.4	[c]172.4	[c]197.4	[c]247.4	[c]297.4	[c]347.4	[c]397.4	[c]497.4	[c]597.4	[c]697.4

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CsNaLaBrIICe				[HWI2014]									
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
CsNaYYBrIICe				[HWI2014a]									
55-Cs	5.3	[a]69.1	[a]94.1	[b]119.1	[b]144.1	[b]169.1	[b]219.1	[c]269.1	[c]319.1	[c]369.1	[c]469.1	[c]569.1	[c]669.1
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1
53-I	4.9	[a]71.4	[a]96.4	[b]121.4	[b]146.4	[b]171.4	[c]221.4	[c]271.4	[c]321.4	[c]371.4	[c]471.4	[c]571.4	[c]671.4
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 7. part (3/8) – Predicted values of XRF-escape energy E_γ-$E_{K\alpha2}$ for six and more-component detectors

Compd.		[Ref]											
Z-Sy	E_{edge}-$E_{K\alpha2}$	incident-photon energy E_γ (keV)											
	(keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
GdAlGaOOCeMg		[DSC2021f], see also [KKM2016]											
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
GdGaAlOOCeCa		[XHN2022]											
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
GdGaAlOOCeLi		[KKM2017]											
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
GdGaAlOOCeMg		[KKM2016], see also [DSC2021f]											
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
GdLuAlGaOOCe		[DSC2021g], see also [ZXA2017]											
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4

GdOOSSPrCeFF		[HYM1990]											
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
16-S	0.2	[c] 97.7	[c] 122.7	[c] 147.7	[c] 172.7	[c] 197.7	[c] 247.7	[c] 297.7	[c] 347.7	[c] 397.7	[c] 497.7	[c] 597.7	[c] 697.7
59-Pr	6.4	[a] 64.1	[a] 89.1	[a] 114.1	[b] 139.1	[b] 164.1	[b] 214.1	[c] 264.1	[c] 314.1	[c] 364.1	[c] 464.1	[c] 564.1	[c] 664.1
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
09-F	0.0	[c] 99.3	[c] 124.3	[c] 149.3	[c] 174.3	[c] 199.3	[c] 249.3	[c] 299.3	[c] 349.3	[c] 399.3	[c] 499.3	[c] 599.3	[c] 699.3
GdOOSSTbCCHH		[IJN2008]											
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
16-S	0.2	[c] 97.7	[c] 122.7	[c] 147.7	[c] 172.7	[c] 197.7	[c] 247.7	[c] 297.7	[c] 347.7	[c] 397.7	[c] 497.7	[c] 597.7	[c] 697.7
65-Tb	8.2	[a] 55.9	[a] 80.9	[a] 105.9	[b] 130.9	[b] 155.9	[b] 205.9	[b] 255.9	[c] 305.9	[c] 355.9	[c] 455.9	[c] 555.9	[c] 655.9
06-C	0.0	[c] 99.7	[c] 124.7	[c] 149.7	[c] 174.7	[c] 199.7	[c] 249.7	[c] 299.7	[c] 349.7	[c] 399.7	[c] 499.7	[c] 599.7	[c] 699.7
01-H	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 7. part (4/8) – Predicted values of XRF-escape energy Eγ-EKα2 for six and more-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
GdYYCeGaAlOO	[DZH2023]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
GdYYGaAlOOCe	[ELF2014]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuGdGaAlOOCe	[ZXA2017], see also [DSC2021g]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuYYAlOOCeMo	[WDR2006a]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
42-Mo	2.6	[b]82.5	[b]107.5	[b]132.5	[c]157.5	[c]182.5	[c]232.5	[c]282.5	[c]332.5	[c]382.5	[c]482.5	[c]582.5	[c]682.5
LuYYAlOOCePr	[JMR2012a]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1

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LuYYAlOOPrLi		[CFS2018]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
LuYYSiOOCeCa		[IKH2012a]											
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 7. part (5/8) – Predicted values of XRF-escape energy Eγ-EKα2 for six and more-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha 2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LuYYSiOOCeMg	[SBL2013]												
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
12-Mg	0.1	[c] 98.8	[c] 123.8	[c] 148.8	[c] 173.8	[c] 198.8	[c] 248.8	[c] 298.8	[c] 348.8	[c] 398.8	[c] 498.8	[c] 598.8	[c] 698.8
PbOOPPAlSmGd	[PKR2019]												
82-Pb	15.2	[a] 27.9	[a] 52.9	[a] 77.9	[a] 102.9	[a] 127.9	[b] 177.9	[b] 227.9	[b] 277.9	[b] 327.9	[c] 427.9	[c] 527.9	[c] 627.9
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
15-P	0.1	[c] 98.0	[c] 123.0	[c] 148.0	[c] 173.0	[c] 198.0	[c] 248.0	[c] 298.0	[c] 348.0	[c] 398.0	[c] 498.0	[c] 598.0	[c] 698.0
13-Al	0.1	[c] 98.5	[c] 123.5	[c] 148.5	[c] 173.5	[c] 198.5	[c] 248.5	[c] 298.5	[c] 348.5	[c] 398.5	[c] 498.5	[c] 598.5	[c] 698.5
62-Sm	7.3	[a] 60.1	[a] 85.1	[b] 110.1	[b] 135.1	[b] 160.1	[b] 210.1	[c] 260.1	[c] 310.1	[c] 360.1	[c] 460.1	[c] 560.1	[c] 660.1
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
SiOOMgAlLiCe	[CEJ2001i]												
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
12-Mg	0.1	[c] 98.8	[c] 123.8	[c] 148.8	[c] 173.8	[c] 198.8	[c] 248.8	[c] 298.8	[c] 348.8	[c] 398.8	[c] 498.8	[c] 598.8	[c] 698.8
13-Al	0.1	[c] 98.5	[c] 123.5	[c] 148.5	[c] 173.5	[c] 198.5	[c] 248.5	[c] 298.5	[c] 348.5	[c] 398.5	[c] 498.5	[c] 598.5	[c] 698.5
03-Li	0.0	[c] 100.0	[c] 125.0	[c] 150.0	[c] 175.0	[c] 200.0	[c] 250.0	[c] 300.0	[c] 350.0	[c] 400.0	[c] 500.0	[c] 600.0	[c] 700.0
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
SrAlSiOOEuDy	[KEC2010q]												
38-Sr	2.0	[b] 85.9	[b] 110.9	[c] 135.9	[c] 160.9	[c] 185.9	[c] 235.9	[c] 285.9	[c] 335.9	[c] 385.9	[c] 485.9	[c] 585.9	[c] 685.9
13-Al	0.1	[c] 98.5	[c] 123.5	[c] 148.5	[c] 173.5	[c] 198.5	[c] 248.5	[c] 298.5	[c] 348.5	[c] 398.5	[c] 498.5	[c] 598.5	[c] 698.5
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8
66-Dy	8.6	[a] 54.5	[a] 79.5	[a] 104.5	[b] 129.5	[b] 154.5	[b] 204.5	[b] 254.5	[c] 304.5	[c] 354.5	[c] 454.5	[c] 554.5	[c] 654.5
SrAlSiOOEuHo	[KEC2010r]												
38-Sr	2.0	[b] 85.9	[b] 110.9	[c] 135.9	[c] 160.9	[c] 185.9	[c] 235.9	[c] 285.9	[c] 335.9	[c] 385.9	[c] 485.9	[c] 585.9	[c] 685.9
13-Al	0.1	[c] 98.5	[c] 123.5	[c] 148.5	[c] 173.5	[c] 198.5	[c] 248.5	[c] 298.5	[c] 348.5	[c] 398.5	[c] 498.5	[c] 598.5	[c] 698.5
14-Si	0.1	[c] 98.3	[c] 123.3	[c] 148.3	[c] 173.3	[c] 198.3	[c] 248.3	[c] 298.3	[c] 348.3	[c] 398.3	[c] 498.3	[c] 598.3	[c] 698.3
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
63-Eu	7.6	[a] 58.8	[a] 83.8	[a] 108.8	[b] 133.8	[b] 158.8	[b] 208.8	[b] 258.8	[c] 308.8	[c] 358.8	[c] 458.8	[c] 558.8	[c] 658.8
67-Ho	8.9	[a] 53.0	[a] 78.0	[a] 103.0	[b] 128.0	[b] 153.0	[b] 203.0	[b] 253.0	[c] 303.0	[c] 353.0	[c] 453.0	[c] 553.0	[c] 653.0

SrMgAlOOEuDy		[KEC2010t]											
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5
SrMgPPOOEuYY		[KEC2010u]											
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
15-P	0.1	[c]98.0	[c]123.0	[c]148.0	[c]173.0	[c]198.0	[c]248.0	[c]298.0	[c]348.0	[c]398.0	[c]498.0	[c]598.0	[c]698.0
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 7. part (6/8) – Predicted values of XRF-escape energy Eγ-EKα2 for six and more-component detectors

Compd. Z-Sy	[Ref] E_{edge}-$E_{K\alpha2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
SrMgSiOOEuDy	[KEC2010v]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5
SrZnSiOOEuDy	[KEC2010y]												
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
30-Zn	1.1	[b]91.4	[c]116.4	[c]141.4	[c]166.4	[c]191.4	[c]241.4	[c]291.4	[c]341.4	[c]391.4	[c]491.4	[c]591.4	[c]691.4
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
66-Dy	8.6	[a]54.5	[a]79.5	[a]104.5	[b]129.5	[b]154.5	[b]204.5	[b]254.5	[c]304.5	[c]354.5	[c]454.5	[c]554.5	[c]654.5
YYAlOOCeCCBa	[IGR2023a]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
06-C	0.0	[c]99.7	[c]124.7	[c]149.7	[c]174.7	[c]199.7	[c]249.7	[c]299.7	[c]349.7	[c]399.7	[c]499.7	[c]599.7	[c]699.7
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9
YYAlOOCeCCMg	[IGR2023b]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
06-C	0.0	[c]99.7	[c]124.7	[c]149.7	[c]174.7	[c]199.7	[c]249.7	[c]299.7	[c]349.7	[c]399.7	[c]499.7	[c]599.7	[c]699.7
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
YYAlOOCeCCSr	[IGR2023c]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
06-C	0.0	[c]99.7	[c]124.7	[c]149.7	[c]174.7	[c]199.7	[c]249.7	[c]299.7	[c]349.7	[c]399.7	[c]499.7	[c]599.7	[c]699.7
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9

YYGaAlOOCeMg		[KKM2017f]											
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
YYGdOOEuPrTb		[PLC2016d]											
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
63-Eu	7.6	[a]58.8	[a]83.8	[a]108.8	[b]133.8	[b]158.8	[b]208.8	[b]258.8	[c]308.8	[c]358.8	[c]458.8	[c]558.8	[c]658.8
59-Pr	6.4	[a]64.1	[a]89.1	[a]114.1	[b]139.1	[b]164.1	[b]214.1	[c]264.1	[c]314.1	[c]364.1	[c]464.1	[c]564.1	[c]664.1
65-Tb	8.2	[a]55.9	[a]80.9	[a]105.9	[b]130.9	[b]155.9	[b]205.9	[b]255.9	[c]305.9	[c]355.9	[c]455.9	[c]555.9	[c]655.9

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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Table 7. part (7/8) – Predicted values of XRF-escape energy Eγ-EKα2 for six and more-component detectors

Compd.	[Ref]												
Z-Sy	E_{edge}-$E_{K\alpha2}$ (keV)	incident-photon energy Eγ (keV) 100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
YYLuGdAlGaOO	[OSD2014l]												
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
GdGaAlOOCeCCHH	[SSN2017]	**seven-component detectors**											
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
06-C	0.0	[c]99.7	[c]124.7	[c]149.7	[c]174.7	[c]199.7	[c]249.7	[c]299.7	[c]349.7	[c]399.7	[c]499.7	[c]599.7	[c]699.7
01-H	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
GdGaAlOOCeMgCa	[XHN2022a]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
GdGaLuYYAlOOCe	[MKC2016, see also NCH2011, EMH2012, MKC2014]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
GdYYAlGaOOCeMg	[MKR2020]												
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5

31-Ga	1.2	[b] 90.8	[c] 115.8	[c] 140.8	[c] 165.8	[c] 190.8	[c] 240.8	[c] 290.8	[c] 340.8	[c] 390.8	[c] 490.8	[c] 590.8	[c] 690.8
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4
12-Mg	0.1	[c] 98.8	[c] 123.8	[c] 148.8	[c] 173.8	[c] 198.8	[c] 248.8	[c] 298.8	[c] 348.8	[c] 398.8	[c] 498.8	[c] 598.8	[c] 698.8
GdYYLuAlGaOOCe	[NCH2011, see also EMH2012, MKC2014, MKC2016]												
64-Gd	7.9	[a] 57.4	[a] 82.4	[a] 107.4	[b] 132.4	[b] 157.4	[b] 207.4	[b] 257.4	[c] 307.4	[c] 357.4	[c] 457.4	[c] 557.4	[c] 657.4
39-Y	2.2	[b] 85.1	[b] 110.1	[b] 135.1	[c] 160.1	[c] 185.1	[c] 235.1	[c] 285.1	[c] 335.1	[c] 385.1	[c] 485.1	[c] 585.1	[c] 685.1
71-Lu	10.3	[a] 46.9	[a] 71.9	[a] 96.9	[b] 121.9	[b] 146.9	[b] 196.9	[b] 246.9	[b] 296.9	[c] 346.9	[c] 446.9	[c] 546.9	[c] 646.9
13-Al	0.1	[c] 98.5	[c] 123.5	[c] 148.5	[c] 173.5	[c] 198.5	[c] 248.5	[c] 298.5	[c] 348.5	[c] 398.5	[c] 498.5	[c] 598.5	[c] 698.5
31-Ga	1.2	[b] 90.8	[c] 115.8	[c] 140.8	[c] 165.8	[c] 190.8	[c] 240.8	[c] 290.8	[c] 340.8	[c] 390.8	[c] 490.8	[c] 590.8	[c] 690.8
08-O	0.0	[c] 99.5	[c] 124.5	[c] 149.5	[c] 174.5	[c] 199.5	[c] 249.5	[c] 299.5	[c] 349.5	[c] 399.5	[c] 499.5	[c] 599.5	[c] 699.5
58-Ce	6.1	[a] 65.4	[a] 90.4	[b] 115.4	[b] 140.4	[b] 165.4	[b] 215.4	[c] 265.4	[c] 315.4	[c] 365.4	[c] 465.4	[c] 565.4	[c] 665.4

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

Table 7. part (8/8) – Predicted values of XRF-escape energy $E\gamma$-$E_{K\alpha 2}$ for six and more-component detectors

Compd. / Z-Sy	[Ref] / E_{edge}-$E_{K\alpha 2}$ (keV)	100.0	125.0	150.0	175.0	200.0	250.0	300.0	350.0	400.0	500.0	600.0	700.0
LuGdAlGaOOCeMg	[PSC2017]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
LuYYGdAlGaOOCe	[MKC2014], see also [NCH2011, [EMH2012, [MKC2016]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuYYGdGaAlOOCe	[EMH2012], see also [NCH2011, [MKC2014], [MKC2016]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
64-Gd	7.9	[a]57.4	[a]82.4	[a]107.4	[b]132.4	[b]157.4	[b]207.4	[b]257.4	[c]307.4	[c]357.4	[c]457.4	[c]557.4	[c]657.4
31-Ga	1.2	[b]90.8	[c]115.8	[c]140.8	[c]165.8	[c]190.8	[c]240.8	[c]290.8	[c]340.8	[c]390.8	[c]490.8	[c]590.8	[c]690.8
13-Al	0.1	[c]98.5	[c]123.5	[c]148.5	[c]173.5	[c]198.5	[c]248.5	[c]298.5	[c]348.5	[c]398.5	[c]498.5	[c]598.5	[c]698.5
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
LuYYSiOOCeCaMg	[PDR2019p]												
71-Lu	10.3	[a]46.9	[a]71.9	[a]96.9	[b]121.9	[b]146.9	[b]196.9	[b]246.9	[b]296.9	[c]346.9	[c]446.9	[c]546.9	[c]646.9
39-Y	2.2	[b]85.1	[b]110.1	[b]135.1	[c]160.1	[c]185.1	[c]235.1	[c]285.1	[c]335.1	[c]385.1	[c]485.1	[c]585.1	[c]685.1
14-Si	0.1	[c]98.3	[c]123.3	[c]148.3	[c]173.3	[c]198.3	[c]248.3	[c]298.3	[c]348.3	[c]398.3	[c]498.3	[c]598.3	[c]698.3
08-O	0.0	[c]99.5	[c]124.5	[c]149.5	[c]174.5	[c]199.5	[c]249.5	[c]299.5	[c]349.5	[c]399.5	[c]499.5	[c]599.5	[c]699.5
58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
12-Mg	0.1	[c]98.8	[c]123.8	[c]148.8	[c]173.8	[c]198.8	[c]248.8	[c]298.8	[c]348.8	[c]398.8	[c]498.8	[c]598.8	[c]698.8
LaBrCeLiNaCaSrBa	[MAL2013] **eight-component detectors**												
57-La	5.9	[a]66.6	[a]91.6	[b]116.6	[b]141.6	[b]166.6	[b]216.6	[c]266.6	[c]316.6	[c]366.6	[c]466.6	[c]566.6	[c]666.6
35-Br	1.6	[b]88.1	[b]113.1	[c]138.1	[c]163.1	[c]188.1	[c]238.1	[c]288.1	[c]338.1	[c]388.1	[c]488.1	[c]588.1	[c]688.1

58-Ce	6.1	[a]65.4	[a]90.4	[b]115.4	[b]140.4	[b]165.4	[b]215.4	[c]265.4	[c]315.4	[c]365.4	[c]465.4	[c]565.4	[c]665.4
03-Li	0.0	[c]100.0	[c]125.0	[c]150.0	[c]175.0	[c]200.0	[c]250.0	[c]300.0	[c]350.0	[c]400.0	[c]500.0	[c]600.0	[c]700.0
11-Na	0.0	[c]99.0	[c]124.0	[c]149.0	[c]174.0	[c]199.0	[c]249.0	[c]299.0	[c]349.0	[c]399.0	[c]499.0	[c]599.0	[c]699.0
20-Ca	0.3	[c]96.4	[c]121.4	[c]146.4	[c]171.4	[c]196.4	[c]246.4	[c]296.4	[c]346.4	[c]396.4	[c]496.4	[c]596.4	[c]696.4
38-Sr	2.0	[b]85.9	[b]110.9	[c]135.9	[c]160.9	[c]185.9	[c]235.9	[c]285.9	[c]335.9	[c]385.9	[c]485.9	[c]585.9	[c]685.9
56-Ba	5.6	[a]67.9	[a]92.9	[b]117.9	[b]142.9	[b]167.9	[b]217.9	[c]267.9	[c]317.9	[c]367.9	[c]467.9	[c]567.9	[c]667.9

Notes for estimated escape peak position in the detector response function: [a] overlapped to the Compton continuum; [b] in the region between Compton edge and photo-electric peak; [c] overlapped to the photo-peak left-tail.

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