

Supporting Information

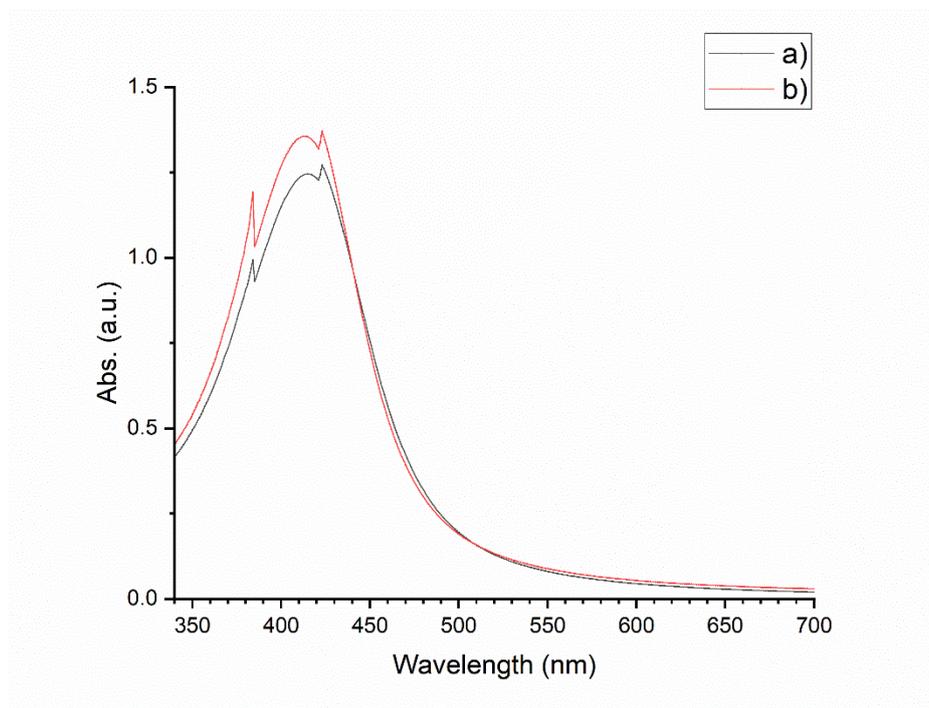


Figure S1. Effect of incubation temperature on UV – Vis spectra: a) 40 °C, b) 60 °C. AgNO₃ concentration 1 mM, OE concentration 2 % v/v, NaOH concentration 2mM, and incubation time 10 min.

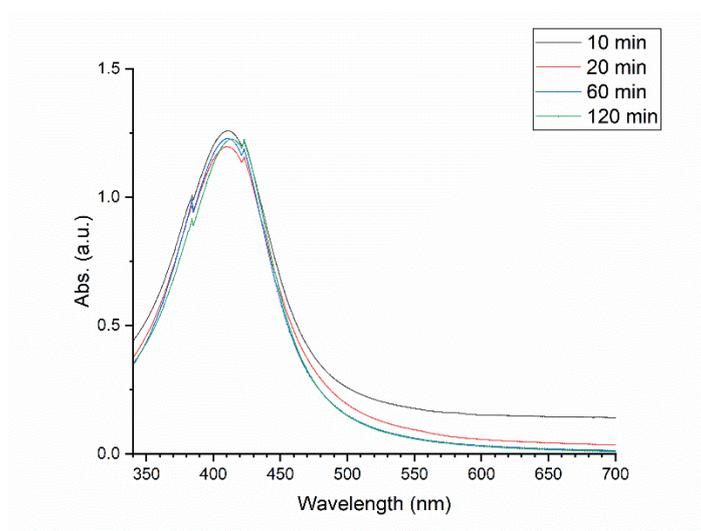


Figure S2. Effect of incubation time on UV – Vis spectra. AgNO₃ concentration 1 mM, OE concentration 2 % v/v, NaOH concentration 2 mM, and incubation temperature 60 °C

Table S1. Fitting parameters of a Voigt function (λ_0 , A and FWHM) discussed in text, for UV – Vis spectra at different incubation temperatures and times. AgNO₃ concentration 1 mM, OE concentration 2 % v/v, and NaOH concentration 2 mM

Temperature (°C)	Time (min)	λ_0 (nm)	A (a.u.)	FWHM (nm)
40	10	410.9	156.5	95.3
	20	408.1	161.5	90.8
60	10	408.0	128.6	86.0
	20	407.8	148.4	90.0
	60	407.5	142.8	86.3
	120	409.5	143.6	86.0

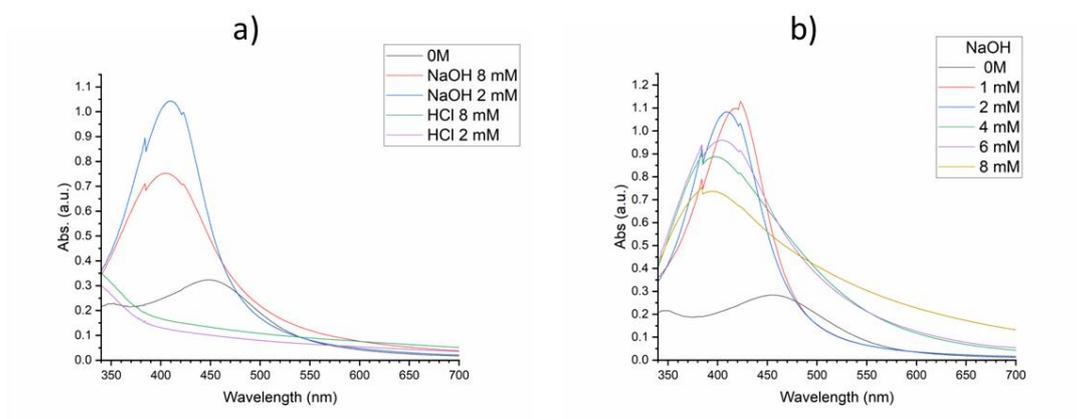


Figure S3. Effect of NaOH or HCl concentration on UV – Vis spectra. a) Coarse investigation, b) Fine tuning. AgNO₃ concentration 1 mM, OE concentration 2 % v/v, incubation temperature 60 °C, and incubation time 1 h.

Table S2. Fitting parameters of a Voigt function (λ_0 , A and FWHM) discussed in text, for UV – Vis spectra at different NaOH concentrations. AgNO₃ concentration 1 mM, OE concentration 2 % v/v, incubation temperature 60 °C, and incubation time.

NaOH concentration (mM)	λ_0 (nm)	A (a.u.)	FWHM (nm)
0	466.5	14.7	92.4
1	412.7	133.8	90.8
2	406.9	134.3	91.1
4	406.2	232.5	165.7
6	406.3	213.3	142.8
8	402.1	179.6	188.8

Table S3. Fitting parameters of a Voigt function (λ_0 , A and FWHM) discussed in text, for UV – Vis spectra at different OE and AgNO₃ concentrations. NaOH concentration 1 mM, incubation temperature 60 °C, and incubation time 1h.

OE concentration (% v/v)	AgNO ₃ concentration (mM)	λ_0 (nm)	A (a.u.)	FWHM (nm)
0.8		413.5	116.6	90.1
2	1	412.5	143.6	92.6
4		410.2	154.2	103.3
	0.5	407.2	78.7	103.9
	1	410.2	119.2	95.5
2	1.5	414.9	151.9	95.9
	2	417.9	176.6	101.5

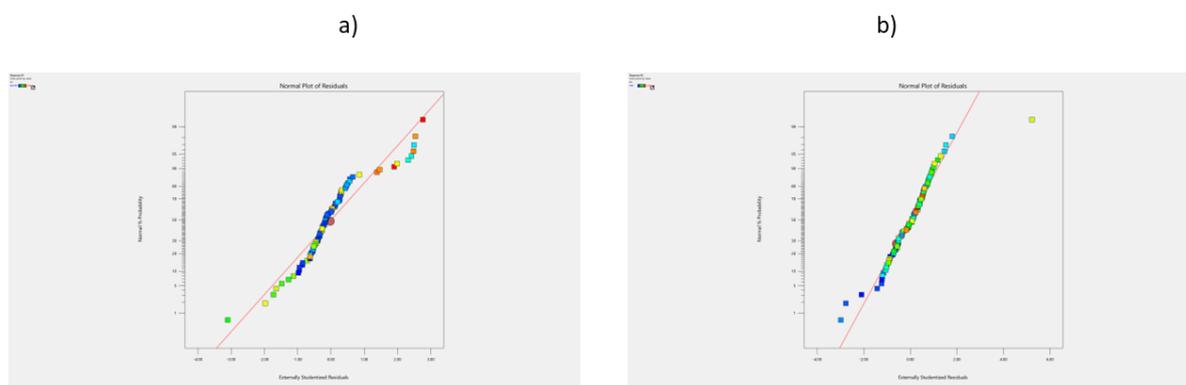


Figure S4. Normal probability plot of the residuals a) wavelength at peak maximum λ_0 , and b) peak area A