

Supplementary Materials

for

Measurement of the thermal diffusivity of a dispersion of silicon oxide nanoparticles using the method of two-beam thermal lens spectrometry

Vladislav R. Khabibullin,¹ Liliya O. Usoltseva,¹ Ivan V. Mikheev,¹ and Mikhail A. Proskurnin ^{1*}

¹ Analytical Chemistry Division, Chemistry Department, M.V. Lomonosov Moscow State University, d. 1, str. 3, Lenin Hills, Moscow, GSP-1 V-234, 119991, Russia; vladhab1995@gmail.com (V.R.K.); usoltsevaliliya@gmail.com (L.O.U.); mikheev.ivan@gmail.com (I.V.M.); proskurnin@gmail.com (M.A.P.).

* Correspondence: mikheev.ivan@gmail.com (I.V.M.); proskurnin@gmail.com (M.A.P.); Tel.: +7-495-939-15-68 (I.V.M.).

Figure

Figure S1. UV-visible spectra for Ludox with different concentrations of the solid phase: (a) SM with $d_{av} = 7$ nm, (b) HS with $d_{av} = 12$ nm, (c) TM with $d_{av} = 22$ nm;

Figure S2. Thermal diffusivity of various Ludox with different concentrations of the solid phase measured by the TLS (Equations 10 and 2; lines,) and heat-flow method (Equations 14; crosses): (a) SM with $d_{av} = 7$ nm, (b) HS with $d_{av} = 12$ nm, (c) TM with $d_{av} = 22$ nm.

Citation: To be added by editorial staff during production.

Academic Editor: Firstname Lastname

Received: date

Accepted: date

Published: date

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

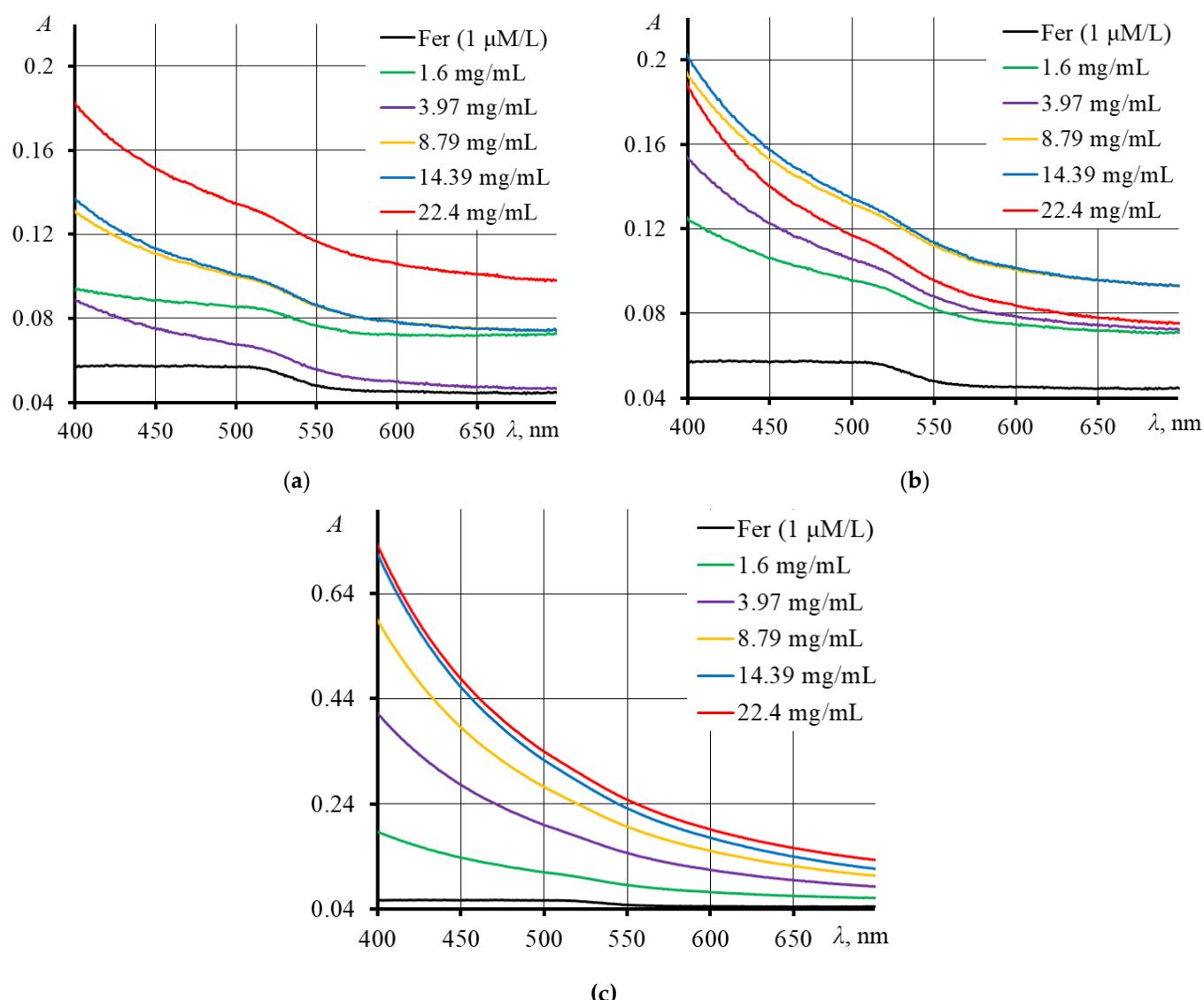


Figure S1. UV-visible spectra for Ludox with different concentrations of the solid phase: (a) SM with $d_{av} = 7$ nm, (b) HS with $d_{av} = 12$ nm, (c) TM with $d_{av} = 22$ nm;

32
33

34

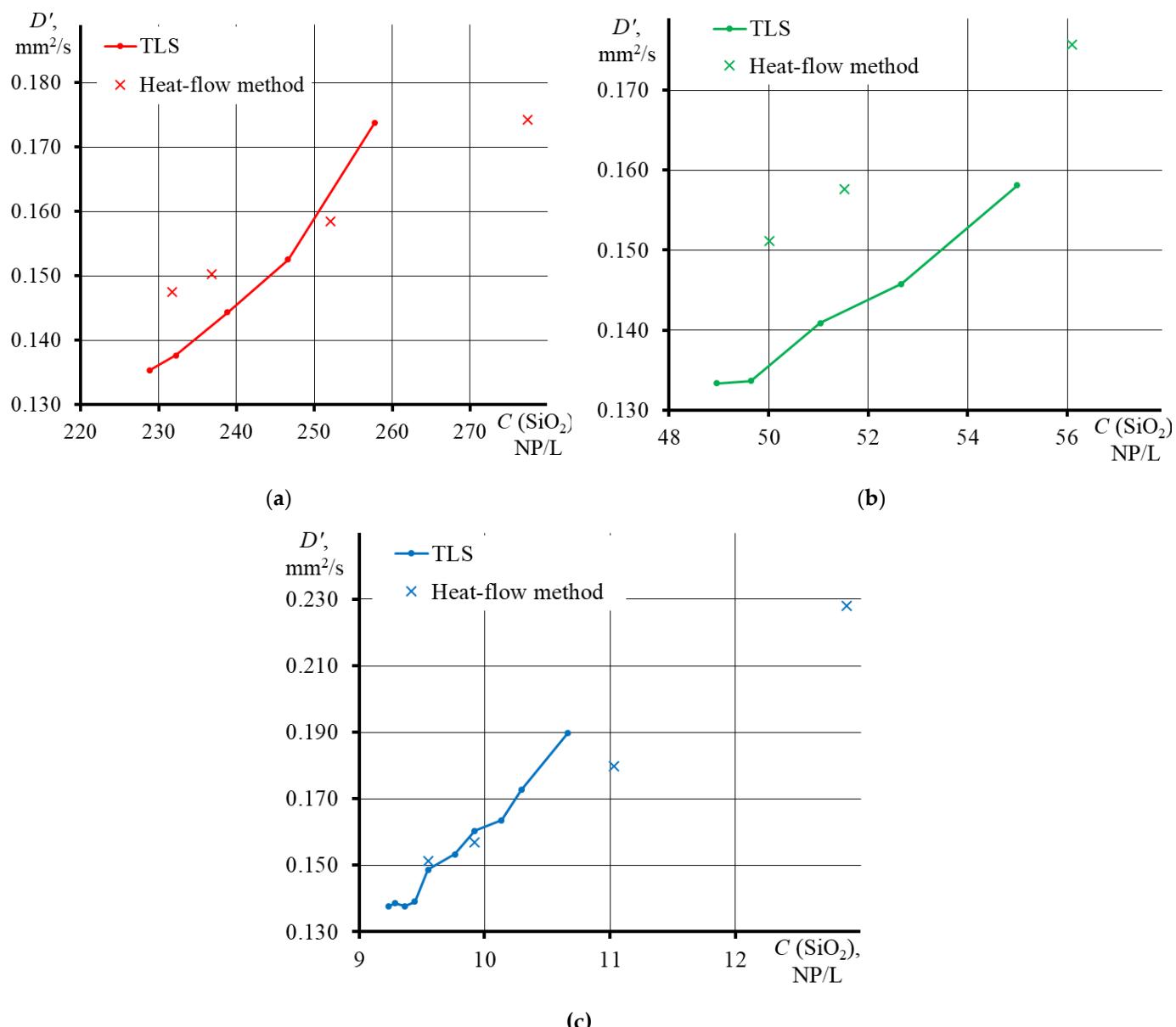


Figure S2. Thermal diffusivity of various Ludox with different concentrations of the solid phase measured by the TLS (Equations 10 and 2; lines,) and heat-flow method (Equations 14; crosses): (a) SM with $d_{\text{av}} = 7 \text{ nm}$, (b) HS with $d_{\text{av}} = 12 \text{ nm}$, (c) TM with $d_{\text{av}} = 22 \text{ nm}$.

35
36
37

38
39