## **CURRICULUM VITAE**



# **Sofronov Dmitry**

## Affiliation and official address:

Researcher, Department of Nonlinear Crystals, Institute for Single Crystals NAS of Ukraine,

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## Education (degrees, dates, universities)

1996 – M. S. Kharkiv Polytechnic Institute, Ukraine (Technical electrochemistry)
2008 – Ph. D A.V. Bogatsky Physical and cCemical Snstitute NASU (Inorganic Chemistry)

# Career/Employment (employers, positions and dates)

1996 - 1997	Engineer	Kharkov Polytechnic Institute, Kharkov, Ukraine
1999 - 2001	Leading Specialist	State Department of Environmental Safety in the
		Kharkov Region, Kharkov, Ukraine
2001 - 2012	Junior researcher	SSI «Institute for Single Crystals» NASU, Kharkiv,
		Ukraine
2012 - date	Researcher	SSI «Institute for Single Crystals» NASU, Kharkiv,
		Ukraine
2018 - date	Researcher	Institute for Single Crystals NASU, Kharkiv,
		Ukraine

#### Main field of activity and current research interest

Synthesis of inorganic materials; The effect of synthesis conditions on the functional properties of materials; Sorption materials; Films, Infrared spectroscopy

#### **Publications and patents**

1- Books, 93 original articles, 23 patents;

Scopus *h*-index: 8;

https://www.scopus.com/authid/detail.uri?authorId=6506386951;

https://orcid.org/0000-0003-4835-7001.

# Selected recent publications:

(1) **D.S. Sofronov**, K.N. Belikov, M. Rucki, S. N. Lavrynenko, Z. Siemiątkowski, E. Bryleva, O.M. Odnovolova. *Synthetic Sorbent Materials Based on Metal Sulphides and Oxides* - Taylor & Francis, 2020, ISBN: 9781003102335, <u>DOI:10.1201/9781003102335</u>.

(2) **D. Sofronov**, M. Rucki, O. Demidov, A. Doroshenko, E. Sofronova, A. Shaposhnyk, O. Kapustnik, P. Mateychenko, W. Kucharczy, *Formation of TiO*<sub>2</sub> *particles during thermal decomposition of Ti(NO*<sub>3</sub>)<sub>4</sub>, *TiOF*<sub>2</sub> *and TiOSO*<sub>4</sub>, J. Mater. Res. Technol., 2020, Vol. 9(6), P. 12201–12212, <u>DOI:10.1016/j.jmrt.2020.08.115</u>, **Q1**.

- (3) A.K. Kapustnik, N.O. Kovalenko, I.S. Terzin, **D.S. Sofronov**, V.S. Zadorozhnii, *Mechanical properties of GaSe:Cr*<sup>2+</sup> *crystals*, Functional Materials, 2020, Vol. 27 (3), P. 454-457, DOI:10.15407/fm27.03.454.
- (4) M. Almakaiev, O. Vashchenko, **D. Sofronov**, L. Budianska, L. Lisetski, *Investigation of thioctic acid, magnesium stearate and pyridoxine hydrochloride compatibility*, Čes. slov. Farm., 2020, V. 69 (1), P.43-47, **Q3.**
- (5) G.V. Grygorova, S.L. Yefimova, V.K. Klochkov, L.V. Budyanska, **D.S. Sofronov**, O.V. Kolesnikova, Yu.V. Malyukin., *Inclusion complexes of melatonin and randomly methylated*  $\beta$ -cyclodextrin: spectroscopic study, Functional Materials, 2019, Vol. 26 (4), P. 664-672, DOI:10.15407/fm26.04.664.
- (6) N.P. Klochko, K.S. Klepikova, V.R. Kopach, D.O. Zhadan, V.V. Starikov, **D.S. Sofronov**, I.V. Khrypunova, S.I. Petrushenko, S.V. Dukarov, V.M. Lyubov, M.V. Kirichenko, S.P. Bigas, A.L. Khrypunova, *Solution-produced copper iodide thin films for photosensor and for vertical thermoelectric nanogenerator, which uses a spontaneous temperature gradient*, Journal of Materials Science: Materials in Electronics, 2019, V. 30 (18), P17514-17524, https://doi.org/10.1007/s10854-019-02103-4, **Q2.**
- (7) N.P. Klochko, K.S. Klepikova, V.R. Kopach, I.I. Tyukhov, V.V. Starikov, **D.S. Sofronov**, I.V. Khrypunova, D.O. Zhadan, S.I. Petrushenko, S.V. Dukarov, V.M. Lyubov, M.V. Kirichenko, A.L. Khrypunova, *Development of semi-transparent ZnO/FTO solar thermoelectric nanogenerator for energy efficient glazing*, Solar Energy, 2019, Vol. 184, P. 230–239, DOI:10.1016/j.solener.2019.04.002, **Q1**.
- (8) **D. Sofronov**, A. Krasnopyorova, N. Efimova, A. Oreshina, E. Bryleva, G. Yuhno, S. Lavrynenko, M. Rucki, *Extraction of radionuclides of cerium, europium, cobalt and strontium with Mn*<sub>3</sub>O<sub>4</sub>, *Mn*O<sub>2</sub>, *and Mn*OO*H sorbents*, Process Safety and Environmental Protection, 2019, Vol.125, P. 157-163, <u>DOI:10.1016/j.psep.2019.03.013</u>, **Q1**.
- (9) S. Lavrynenko, A.G. Mamalis, **D. Sofronov**, A. Odnovolova, V. Starikov, *Synthesis Features of Iron Oxide Nanopowders with High Magnetic and Sorption Properties*, Materials Science Forum, 2018, Vol. 915, P. 116-120, DOI:10.4028/www.scientific.net/MSF.915.116, *Q3.*
- (10) Y.V. Taranets, I.M. Pritula, O.N. Bezkrovnaya, P.V. Mateychenko, **D.S. Sofronov**, A.N. Puzan, *Effect of Charge State of L-Aspartic and L-Arginine Amino Acids on Morphology of Calcium Oxalate Monohydrate*, Crystal Research & Technology, 2018, V. 53, Issue 4, P.1700133, <u>DOI:10.1002/crat.201700133</u>, **Q2**.