

CURRICULUM VITAE



Nadiia Safronova (nee Dulina)

Affiliation and official address:

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Education:

2007 – B. Sc. V.N. Karazin Kharkiv National University, Kharkiv, Ukraine (Chemistry)
2008 – M. Sc. V.N. Karazin Kharkiv National University, Kharkiv, Ukraine (Chemistry)
2014 – Ph. D. Institute for Single Crystals NASU, Kharkiv, Ukraine (Materials Science)

Career/Employment:

2008-2010	Engineer	Institute for Single Crystals NASU, Kharkiv, Ukraine
2008-2011	PhD Student	Institute for Single Crystals NASU, Kharkiv, Ukraine
2010-2013	Engineer	Institute for Single Crystals NASU, Kharkiv, Ukraine
2013-2020	Junior Researcher	Institute for Single Crystals NASU, Kharkiv, Ukraine
2020 till now	Researcher	Institute for Single Crystals NASU, Kharkiv, Ukraine

Main field of activity and current research interest:

Fabrication and Characterization of Nanocrystalline and Nanostructured Materials;
Development of Nanocomposites for Phosphors with Controlled Spectral Characteristics;

Development of Functional Optical Ceramics on the Basis of Refractory Oxides for Laser and Scintillation Technique; IR-transparent Nanocomposite Ceramics for Laser Applications.

Honors, Awards, Fellowships, Membership of Professional Societies:

Grant of the National Academy of Sciences of Ukraine for Young Scientists (2011-2012); Scholarship of the President of Ukraine for Young Scientists (2011-2013); The President's of Ukraine Prize for Young Scientists (2012); Grant of the President of Ukraine for Young Scientists (2016); Scholarship of the Kharkiv Regional State Administration for Young Scientists in the Field of Technical Sciences named after G.F. Proskura (2021-2022). Member of the Ukrainian Materials Science Society named after I.M. Frantsevich.

Publications and patents:

24 Original Articles (Scopus), 3 Patents; **h-index: 10**

Web of Science Researcher ID [AAJ-4290-2021](https://orcid.org/0000-0002-6980-1717);

<https://publons.com/researcher/4336185/nadiia-safronova/publications/>;

<https://www.scopus.com/authid/detail.uri?authorId=35744470300>;

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Selected recent publications:

1. A.D. Timoshenko, A.G. Doroshenko, S.V. Parkhomenko, I.O. Vorona, O.S. Kryzhanovska, **N.A. Safronova**, O.O. Vovk, A.V. Tolmachev, V.N. Baumer, I. Matolínová, R.P. Yavetskiy. Effect of the sintering temperature on microstructure and optical properties of reactive sintered YAG:Sm³⁺ ceramics // *Optical Materials: X.* 13 (2022) 100131 (7 pp.). **Invited Paper.** <https://doi.org/10.1016/j.omx.2021.100131>. **Q2.**
2. I.O. Vorona, R.P. Yavetskiy, S.V. Parkhomenko, A.G. Doroshenko, O.S. Kryzhanovska, **N.A. Safronova**, A.D. Timoshenko, A.E. Balabanov, A.V. Tolmachev, V.N. Baumer. Effect of complex Si⁴⁺+Mg²⁺ additive on sintering and properties of undoped YAG ceramics // *Journal of the European Ceramic Society* 42 (2022) 6104–6109. <https://doi.org/10.1016/j.jeurceramsoc.2022.05.017>. **Q1.**
3. **N.A. Safronova**, O.S. Kryzhanovska, A.G. Doroshenko, S.V. Parkhomenko, I.O. Vorona, M.V. Dobrotvorska, A.T. Budnikov, A.V. Tolmachev, R.P. Yavetskiy. Effect of solid loading on properties of Y₂O₃-Al₂O₃-Nd₂O₃ powder mixtures obtained by planetary ball milling and ceramics based on them // *Ceramics International* 48 (2022) 33003–33010. <https://doi.org/10.1016/j.ceramint.2022.07.232>. **Q1.**
4. **N.A. Safronova**, R.P. Yavetskiy, O.S. Kryzhanovska, M.V. Dobrotvorska, A.E. Balabanov, I.O. Vorona, A.V. Tolmachev, V.N. Baumer, I. Matolínová, D.Yu. Kosyanov, O.O. Shichalin, E.K. Papynov, S. Hau, C. Gheorghe. A novel IR-transparent Ho³⁺:Y₂O₃-MgO nanocomposite ceramics for potential laser applications // *Ceramics International* 47 (2021) 1399-1406. <https://doi.org/10.1016/j.ceramint.2020.08.263>. **Q1.**
5. **N.A. Safronova**, O.S. Kryzhanovska, M.V. Dobrotvorska, A.E. Balabanov, A.V. Tolmachev, R.P. Yavetskiy, S.V. Parkhomenko, R. Brodskii, V.N. Baumer, D.Yu. Kosyanov, O.O. Shichalin, E.K. Papynov, Jiang Li, Influence of sintering temperature on structural and optical properties of Y₂O₃-MgO composite SPS ceramics // *Ceramics International* 46 (2020) 6537–6543. <https://doi.org/10.1016/j.ceramint.2019.11.137>. **Q1.**
6. **N.A. Safronova**, R.P. Yavetskiy, O.S. Kryzhanovska, S.V. Parkhomenko, A.G. Doroshenko, M.V. Dobrotvorska, A.V. Tolmachev, R. Boulesteix, A. Maître, T. Zorenko, Yu. Zorenko, Fabrication and VUV luminescence of Lu₂O₃:Eu³⁺ (5 at.%) nanopowders and transparent ceramics // *Optical Materials* 101 (2020) 109730. <https://doi.org/10.1016/j.optmat.2020.109730>. **Q2.**
7. **N.A. Safronova**, O.S. Kryzhanovska, M.V. Dobrotvorska, A.E. Balabanov, A.V. Tolmachev, R.P. Yavetskiy, S.V. Parkhomenko, R. Brodskii, V.N. Baumer, D.Yu. Kosyanov, O.O. Shichalin, E.K. Papynov, Jiang Li. Influence of sintering temperature on structural and optical properties of Y₂O₃-MgO composite SPS ceramics // *Ceramics International* 46(5) (2020) 6537–6543. <https://doi.org/10.1016/j.ceramint.2019.11.137>. **Q1.**
8. T. Zorenko, V. Gorbenko, **N. Safronova**, N. Matveevskaya, R. Yavetskiy, N. Babayevskaya, Yu. Zorenko. Comparative study of the luminescent properties of oxide compounds under synchrotron radiation excitation: Lu₂O₃:Eu nanopowders, ceramics and films // *Journal of Luminescence* 199 (2018) 461-464. <https://doi.org/10.1016/j.jlumin.2018.03.044>. **Q2.**