

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).

Publications and patents:

25 Original Articles, 3 Patents; Scopus *h*-index: 9

Web of Science Researcher ID [AAJ-4290-2021](https://publons.com/researcher/4336185/nadiia-safronova/publications/);

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

<https://www.scopus.com/authid/detail.uri?authorId=6602832466>;

<https://orcid.org/0000-0002-6980-1717>

Selected recent publications:

- (1) **N.A. Dulina**, Y.V. Yermolayeva, A.V. Tolmachev, Z.P. Sergienko, O.M. Vovk, E.A. Vovk, N.A. Matveevskaya, P.V. Mateychenko, Synthesis and characterization of the crystalline powders on the basis of $\text{Lu}_2\text{O}_3:\text{Eu}^{3+}$ spherical submicron-sized particles // Journal of the European Ceramic Society 30 (2010) 1717–1724
<https://doi.org/10.1016/j.jeurceramsoc.2010.01.019>. **Q1**.
- (2) **N.A. Dulina**, T.G. Deineka, R.P. Yavetskiy, Z.P. Sergienko, A.G. Doroshenko, P.V. Mateychenko, O.M. Vovk, N.A. Matveevskaya, Comparison of dispersants performance on the suspension $\text{Lu}_2\text{O}_3:\text{Eu}^{3+}$ stability and high-density compacts on their basis // Ceramics International 37 (2011) 1645–1651. <https://doi.org/10.1016/j.ceramint.2011.01.042>. **Q1**.
- (3) **N.A. Dulina**, V.N. Baumer, M.I. Danylenko, P.V. Mateychenko, A.V. Tolmachev, O.M. Vovk, R.P. Yavetskiy, Effects of phase and chemical composition of precursor on structural and morphological properties of $(\text{Lu}_{0.95}\text{Eu}_{0.05})_2\text{O}_3$ nanopowders // Ceramics International 39 (2013) 2397–2404. <http://dx.doi.org/10.1016/j.ceramint.2012.08.092>. **Q1**.
- (4) Yu.L. Kopylov, V.B. Kravchenko, **N.A. Dulina**, A.V. Lopin, S.V. Parkhomenko, A.V. Tolmachev, R.P. Yavetskiy, O.V. Zelenskaya. Fabrication and characterization of Eu^{3+} -doped Lu_2O_3 scintillation ceramics // Optical Materials 35 (2013) 812–816. <http://dx.doi.org/10.1016/j.optmat.2012.04.020>. **Q2**.
- (5) M.A. Chaika, **N.A. Dulina**, A.G. Doroshenko, S.V. Parkhomenko, O.V. Gayduk, R. Tomala, W. Strek, D. Hreniak, G. Mancardi, O.M. Vovk, Influence of calcium concentration on formation of tetravalent chromium doped $\text{Y}_3\text{Al}_5\text{O}_{12}$ ceramics // Ceramics International 44 (2018) 13513–13519. <https://doi.org/10.1016/j.ceramint.2018.04.182>. **Q1**.
- (7) M.A. Chaika, P. Dłuzewski, K. Morawiec, A. Szczepanska, K. Jablonska, G. Mancardi, R. Tomala, D. Hreniak, W. Strek, **N.A. Safronova**, A.G. Doroshenko, S.V. Parkhomenko, O.M. Vovk, The role of Ca^{2+} ions in the formation of high optical quality Cr^{4+} , $\text{Ca}:\text{YAG}$ ceramics // Journal of the European Ceramic Society 39 (2019) 3344–3352. <https://doi.org/10.1016/j.jeurceramsoc.2019.04.037>. **Q1**.
- (8) M. Chaika, W. Paszkowicz, W. Strek, D. Hreniak, R. Tomala, **N. Safronova**, A. Doroshenko, S. Parkhomenko, P. Dłuzewski, M. Kozłowski, O. Vovk, Influence of Cr doping on the phase composition of $\text{Cr,Ca}:\text{YAG}$ ceramics by solid state reaction sintering // Journal of the American Ceramic Society 102 (2019) 2104–2115. <https://doi.org/10.1111/jace.16024>. **Q1**.
- (9) **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 $\text{Lu}_2\text{O}_3:\text{Eu}^{3+}$ (5 at.%) nanopowders and transparent ceramics // Optical Materials 101 (2020) 109730. <https://doi.org/10.1016/j.optmat.2020.109730>. **Q2**.
- (10) **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 $\text{Y}_2\text{O}_3\text{--MgO}$ composite SPS ceramics // Ceramics International 46 (2020) 6537–6543. <https://doi.org/10.1016/j.ceramint.2019.11.137>. **Q1**.
- (11) **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. Matolínova, D.Yu. Kosyanov, O.O. Shichalin, E.K. Papynov, S. Hau, C. Gheorghe, A novel IR-transparent $\text{Ho}^{3+}:\text{Y}_2\text{O}_3\text{--MgO}$ nanocomposite ceramics for potential laser applications // Ceramics International 47 (2021) 1399–1406. <https://doi.org/10.1016/j.ceramint.2020.08.263>. **Q1**.