

# CURRICULUM VITAE



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## **Education:**

- 2002 – B. Sc. National Technical University “Kharkiv Polytechnic Institute” (Physical Materials Science)  
2004 – M. Sc. National Technical University “Kharkiv Polytechnic Institute” (Physical Materials Science)  
2013 – Ph. D. Institute for Single Crystals, NAS of Ukraine (Materials Science)

## **Career/Employment:**

2004-2007	PhD Student	Institute for Single Crystals, NASU, Kharkiv, Ukraine
2007-2013	Engineer	Institute for Single Crystals, NASU, Kharkiv, Ukraine
2013-2014	Junior Researcher	Institute for Single Crystals, NASU, Kharkiv, Ukraine
2014-2015	Researcher	Institute for Single Crystals, NASU, Kharkiv, Ukraine
2015-2019	Senior Researcher	Institute for Single Crystals, NASU, Kharkiv, Ukraine
2019-at present	Postdoctoral Researcher	Institute for Single Crystals, NASU, Kharkiv, Ukraine

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

Materials Sciences, Crystal Formation, Functional Materials, Optical Ceramics, Thermal Analysis, Fabrication of Oxide Nanopowders;  
Solid-State Sintering of Nanopowders; Structural-Phase State of Optical Ceramics, as well as Nanostructured Ceramics (Rare-earth Doped  $Y_2O_3$ ,  $Lu_2O_3$ ,  $Y_3Al_5O_{12}$ , etc.); Transformation-Assisted Consolidation of Nanopowders.

## **Honors, Awards, Fellowships, Membership of Professional Societies:**

The President's of Ukraine Prize for Young Scientists (2013); The Verkhovna Rada of Ukraine Prize for Young Scientists (2014).

## **Publications and patents:**

48 original articles, 3 patents; Scopus *h*-index: 12

<http://www.scopus.com/authid/detail.uri?authorId=35069173600>

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<https://www.researchgate.net/profile/Andrii-Doroshenko>

<https://publons.com/researcher/AAE-3005-2020/>

## **Selected recent publications:**

1. 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. **2019IF: 2.779.** – <https://doi.org/10.1016/j.optmat.2020.109730>. **Q2.**
2. D. Sofronov, M. Rucki, O. Demidov, **A. Doroshenko**, E. Sofronova, A. Shaposhnyk, O. Kapustnik, P. Mateychenko, W. Kucharczyk. Formation of  $\text{TiO}_2$  particles during thermal decomposition of  $\text{Ti}(\text{NO}_3)_4$ ,  $\text{TiOF}_2$  and  $\text{TiOSO}_4$ . *Journal of Materials Research and Technology* 9 (2020) 12201–12212. **2019IF: 5.289.** – <https://doi.org/10.1016/j.jmrt.2020.08.115>. **Q1.**
3. **A.G. Doroshenko**, R.P. Yavetskiy, S.V. Parkhomenko, I.O. Vorona, O.S. Kryzhanovska, P.V. Mateychenko, A.V. Tolmachev, E.A. Vovk, V.A. Bovda, G. Croitoru, L. Gheorghe. Effect of the sintering temperature on the microstructure and optical properties of YAG:Cr,Mg ceramics // *Optical Materials* 98 (2019) 109505. **2019IF: 2.779.** <https://doi.org/10.1016/j.optmat.2019.109505>. **Q2.**
4. R.P. Yavetskiy, **A.G. Doroshenko**, S.V. Parkhomenko, I.O. Vorona, A.V. Tolmachev, D.Yu. Kosyanov, A.A. Vornovskikh, A.M. Zakharenko, V.Yu. Mayorov, L. Gheorghe, G. Croitoru, N. Pavel, V.V. Multian, V.Ya. Gayvoronsky. Microstructure evolution during reactive sintering of  $\text{Y}_3\text{Al}_5\text{O}_{12}:\text{Nd}^{3+}$  transparent ceramics: Influence of green body annealing // *Journal of the European Ceramic Society* 39 (2019) 3867-3875. **2019IF: 4.495.** <https://doi.org/10.1016/j.jeurceramsoc.2019.05.013>. **Q1.**
5. R.P. Yavetskiy, M.V. Dobrotvorskaya, **A.G. Doroshenko**, A.V. Tolmachev, I.A. Petrusha, V.Z. Turkevich, R. Tomala, D. Hreniak, W. Strek, V.N. Baumer. Fabrication and luminescent properties of  $(\text{Y}_{0.99}\text{Eu}_{0.01})_2\text{O}_3$  transparent nanostructured ceramics // *Optical Materials* 78 (2018) 285-291. – **2019IF: 2.779.** <https://doi.org/10.1016/j.optmat.2018.02.034>. **Q2.**
6. I.O. Vorona, R.P. Yavetskiy, M.V. Dobrotvorskaya, **A.G. Doroshenko**, S.V. Parkhomenko, A.V. Tolmachev, D.Yu. Kosyanov, L. Gheorghe, C. Gheorghe, S. Hau, M. Enculescu. 1532 nm sensitized luminescence and up-conversion in Yb,Er:YAG transparent ceramics // *Optical Materials* 77 (2018) 221-225. **2019IF: 2.779.** <https://doi.org/10.1016/j.optmat.2018.01.038>. **Q2.**
7. I.O. Vorona, R.P. Yavetskiy, **A.G. Doroshenko**, S.V. Parkhomenko, V.N. Baumer, A.V. Tolmachev, D.Yu. Kosyanov, V.I. Vovna, V.G. Kuryavyi, M. Greculeasa, L. Gheorghe, S. Hau, C. Gheorghe, G. Croitoru. Structural-phase state and lasing of 5–15 at%  $\text{Yb}^{3+}:\text{Y}_3\text{Al}_5\text{O}_{12}$  optical ceramics // *Journal of the European Ceramic Society* 37 (2017) 4115-4122. **2019IF: 4.495.** <http://doi.org/10.1016/j.jeurceramsoc.2017.05.023>. **Q1.**
8. R.P. Yavetskiy, D.Yu. Kosyanov, **A.G. Doroshenko**, S.V. Parkhomenko, P.V. Mateychenko, I.O. Vorona, A.V. Tolmachev, A.V. Lopin, V.N. Baumer, V.L. Voznyy. Microstructure evolution of  $\text{SiO}_2$ ,  $\text{ZrO}_2$ -doped  $\text{Y}_3\text{Al}_5\text{O}_{12}:\text{Nd}^{3+}$  ceramics obtained by reactive sintering // *Ceramics International* 41 (2015) 11966-11974. **2019IF: 3.830.** <http://dx.doi.org/10.1016/j.ceramint.2015.06.009>. **Q1.**
9. R.P. Yavetskiy, V.N. Baumer, M.I. Danylenko, **A.G. Doroshenko**, I.N. Ogorodnikov, I.A. Petrusha, A.V. Tolmachev, V.Z. Turkevich. Transformation-assisted consolidation of  $\text{Y}_2\text{O}_3:\text{Eu}^{3+}$  nanospheres as a concept to optical nanograined ceramics // *Ceramics International* 40 (2014) 3561-3569. **2019IF: 3.830.** <http://dx.doi.org/10.1016/j.ceramint.2013.09.072>. **Q1.**
10. R.P. Yavetskiy, E.A. Vovk, **A.G. Doroshenko**, M.I. Danylenko, A.V. Lopin, I.A. Petrusha, V.F. Tkachenko, A.V. Tolmachev, V.Z. Turkevich.  $\text{Y}_3\text{Al}_5\text{O}_{12}$  translucent nanostructured ceramics – Obtaining and optical properties // *Ceramics International* 37 (2011) 2477-2484. **2019IF: 3.830.** <http://dx.doi.org/10.1016/j.ceramint.2011.03.041>. **Q1.**