

# CURRICULUM VITAE



**Kryzhanovska Oleksandra**

## **Affiliation and official address:**

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## **Education:**

2001 – M. Sc. V. N. Karazin Kharkiv National University (Chemistry)

2006 – Ph. D. Institute for Single Crystals NASU (Material Science)

## **Career/Employment:**

2001-2005	Engineer	Institute for Single Crystals NASU, Kharkiv, Ukraine
2002-2005	PhD Student	Institute for Single Crystals NASU, Kharkiv, Ukraine
2006-2007	Junior Researcher	Institute for Single Crystals NASU, Kharkiv, Ukraine
2008-2017	Researcher	Institute for Single Crystals NASU, Kharkiv, Ukraine
2018 – at present	Senior Researcher	Institute for Single Crystals NASU, Kharkiv, Ukraine

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

Materials Sciences, Optical Ceramics, Nanostructured Ceramics (Rare-earth doped  $\text{Y}_2\text{O}_3$ ,  $\text{Lu}_2\text{O}_3$ ,  $\text{Y}_3\text{Al}_5\text{O}_{12}$ , etc.), Synthesis and Fabrication of Oxide Nanopowders, Phase and Structural Transformations in Oxide Nanopowders, Sintering Aids.

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

The President's of Ukraine Prize for Young Scientists (2008).

## **Publications and patents:**

1 Chapter in Book, 24 Original Articles, 3 Patents. Scopus *h*-index: 4

<https://www.scopus.com/authid/detail.uri?authorId=57212526766>

<https://scholar.google.com/citations?hl=ru&pli=1&user=-WtUOEQAAAAJ>

<https://www.researchgate.net/profile/Oleksandra-Kryzhanovska>

## **Selected recent publications:**

1. 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  $\text{Ho}^{3+}:\text{Y}_2\text{O}_3\text{--MgO}$  nanocomposite ceramics for potential laser applications // *Ceramics International* 47 (2021) 1399-1406. **2019IF: 3.830**. <https://doi.org/10.1016/j.ceramint.2020.08.263>. **Q1**.
2. I. Vorona, A. Balabanov, M. Dobrotvorska, **R. Yavetskiy**, O. Kryzhanovska, L. Kravchenko, S. Parkhomenko, P. Mateychenko, V. Baumer, I. Matolínová. Effect of MgO doping on the structure and optical properties of YAG transparent ceramics // *Journal of the European Ceramic Society* 40 (2020) 861-866. **2019IF: 4.495**. <https://doi.org/10.1016/j.jeurceramsoc.2019.10.048>. **Q1**.
3. 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

Y<sub>2</sub>O<sub>3</sub>–MgO composite SPS ceramics // Ceramics International 46 (2020) 6537–6543. **2019IF: 3.830.** <https://doi.org/10.1016/j.ceramint.2019.11.137>. **Q1.**

4. O.S. Kryzhanovska, V.N. Baumer, S.V. Parkhomenko, A.G. Doroshenko, R.P. Yavetskiy, A.E. Balabanov, A.V. Tolmachev, S.N. Skorik, Jiang Li, A. Kuncser. Formation peculiarities and optical properties of highly-doped (Y<sub>0.86</sub>La<sub>0.09</sub>Yb<sub>0.05</sub>)<sub>2</sub>O<sub>3</sub> transparent ceramics // Ceramics International 45 (2019) 16005-16010. **2019IF: 3.830.** <https://doi.org/10.1016/j.ceramint.2019.05.111>. **Q1.**
5. 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 Lu<sub>2</sub>O<sub>3</sub>:Eu<sup>3+</sup> (5 at.%) nanopowders and transparent ceramics // Optical Materials 101 (2020) 109730–109736 **2019IF: 2.779.** <https://doi.org/10.1016/j.optmat.2020.109730>. **Q2.**
6. 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) 109505-109511. **2019IF: 2.779** <https://doi.org/10.1016/j.optmat.2019.109505>. **Q2.**