

CURRICULUM VITAE

Yavetskiy Roman



Affiliation and official address:

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Education:

- 2000 – M. Sc. National Technical University “Kharkiv Polytechnic Institute” (Physics of Metals)
2006 – Ph. D. Institute for Single Crystals NASU (Solid-State Physics), Kharkiv
2017 – Dr. Sc. Institute for Single Crystals NASU (Materials Science), Kharkiv
2017 Diploma of Senior Researcher, Institute for Single Crystals NASU (Applied Physics and Nanomaterials), Kharkiv
2019 – Prof. Institute for Single Crystals NASU (Materials Science), Kharkiv

Career/Employment:

2000-2005	Engineer	Institute for Single Crystals NASU, Kharkiv, Ukraine
2005-2006	Junior Researcher	Institute for Single Crystals NASU, Kharkiv, Ukraine
2006-2007	Research Assistant	Institute for Single Crystals NASU, Kharkiv, Ukraine
2007-2010	Senior Researcher	Institute for Single Crystals NASU, Kharkiv, Ukraine
2010-2015	Head of Laboratory	Institute for Single Crystals NASU, Kharkiv, Ukraine
2016-2018	Senior Researcher	Institute for Single Crystals NASU, Kharkiv, Ukraine
2018 till now	Head of Department	Institute for Single Crystals NASU, Kharkiv, Ukraine

Main field of activity and current research interest:

Materials Sciences, Crystal Formation, Functional Materials, Optical Ceramics;
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 , $\text{Y}_3\text{Al}_5\text{O}_{12}$, etc.); Transformation-Assisted Consolidation of Nanopowders.

Honors, Awards, Fellowships, Membership of Professional Societies:

The President's of Ukraine Prize for Young Scientists (2006); Fellowship for Young International Scientists of Chinese Academy of Sciences (2013-2014); Award of the National Academy of Sciences of Ukraine for the Training of Scientific Brainpower (2018); Editorial Board Member of the Journal “Functional Materials” (2019); Scholarship of the Kharkiv Regional State Administration for Outstanding Scientists in the Field of Technical Sciences named after G.F. Proskura (2019); Member of the Ukrainian Materials Science Society named after I.M. Frantsevich (2021).

Publications and patents: Scopus *h*-index: 17

<http://www.scopus.com/authid/detail.url?authorId=8287747500>

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https://www.researchgate.net/profile/Roman_Yavetskiy

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. R.P. Yavetskiy, A.E. Balabanov, S.V. Parkhomenko, O.S. Kryzhanovska, A.G. Doroshenko, P.V. Mateychenko, A.V. Tolmachev, Jiang Li, Nan Jiang, L. Gheorghe, M. Enculescu. Effect of starting materials and sintering temperature on microstructure and optical properties of $\text{Y}_2\text{O}_3:\text{Yb}^{3+}$ 5 at.% transparent ceramics // *Journal of Advanced Ceramics* 10 (2020) 49-61. **2019IF: 2.889**. <https://doi.org/10.1007/s40145-020-0416-3>. **Q2**.
3. 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**.
4. 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. **2019IF: 3.830**. <https://doi.org/10.1016/j.ceramint.2019.11.137>. **Q1**.
5. **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**.
6. 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**.
7. D.Yu. Kosyanov, **R.P. Yavetskiy**, V.N. Baumer, Yu.L. Kopylov, V.B. Kravchenko, I.O. Vorona, A.I. Cherednichenko, V.I. Vovna, A.V. Tolmachev. Effect of Nd^{3+} ions on phase transformations and microstructure of 0-4 at.% $\text{Nd}^{3+}:\text{Y}_3\text{Al}_5\text{O}_{12}$ transparent ceramics // *Journal of Alloys and Compounds* 686 (2016) 526-532. **2019IF: 4.650**. <http://dx.doi.org/10.1016/j.jallcom.2016.06.046>. **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 SiO_2 , 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. Binglong Liu, Jiang Li, **Roman Yavetskiy**, Maxim Ivanov, Yanping Zeng, Tengfei Xie, Huamin Kou, Shangjun Zhuo, Yubai Pan, Jingkun Guo. Fabrication of YAG transparent ceramics using carbonate precipitated yttria powder // *Journal of the European Ceramic Society* 35 (2015) 2379-2390. **2019IF: 4.495**. <http://dx.doi.org/10.1016/j.jeurceramsoc.2015.02.014>. **Q1**.
10. R.P. Yavetskiy, V.N. Baumer, N.A. Dulina, Yu.I. Pazura, I.A. Petrusha, V.N. Tkach, A.V. Tolmachev, V.Z. Turkevich. An approach to $\text{Y}_2\text{O}_3:\text{Eu}^{3+}$ optical nanostructured ceramics // *Journal of the European Ceramic Society* 32 (2012) 257-260. **2019IF: 4.495**. <http://dx.doi.org/10.1016/j.jeurceramsoc.2011.08.037>. **Q1**.