CURRICULUM VITAE

Vorona Ihor

Affiliation and official address:
Researcher of the Department of Crystalline Materials of Complex Compounds, Institute for Single Crystals of NAS of Ukraine,
61072, Ukraine, Kharkiv, 60 Nauky Ave.
E-mail: vorona@isc.kharkov.ua, vorona.ihor@gmail.com

Education:

2014 – M. Sc.	V. N. Karazin Kharkiv National University (Physical Optics);
2019 – Ph. D	Institute for Single Crystals NASU (Physics of Semiconductors and Dielectrics), Kharkiv, Ukraine

Career/Employment:

2014-2017	PhD student	Institute for Single Crystals NAS of Ukraine, Kharkiv
2017-2019	Junior researcher	Institute for Single Crystals NAS of Ukraine, Kharkiv
2019 - data	Researcher	Institute for Single Crystals NAS of Ukraine, Kharkiv

Main field of activity and current research interest:
Materials Science; Solid-State Physics;
Laser Ceramics; Rare-earth doped YAG; Solid-State Sintering of Nanopowders; Structural-Phase State of Optical Ceramics; Rare-earth Laser Ions.

Honors, Awards, Fellowships, Membership of Professional Societies:
Scholarship of 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 (2018), Scholarship of the National Academy of Sciences of Ukraine for young scientists (2019), President award for young scientists (2020).

Publications and patents:
14 original articles. Scopus *h*-index: **6**
https://www.scopus.com/authid/detail.uri?authorId=56610078300
https://orcid.org/0000-0001-9034-3055
https://www.researchgate.net/profile/Ihor-Vorona

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 Ho^{3+}:Y_2O_3–MgO nanocomposite ceramics for potential laser applications // Ceramics International, 47 (2021) 1399-1406. **2019IF: 3.882**. https://doi.org/10.1016/j.ceramint.2020.08.263. **Q1**.
2. **I.O. Vorona**, A.E. Balabanov, M.V. Dobrotvorska, R.P. Yavetskiy, O.S. Kryzhanovska, L.Y. Kravchenko, S.V. Parkhomenko, P.V. Mateychenko, V.N. 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) pp. 861-866. **2019IF: 4.495**. – https://doi.org/10.1016/j.jeurceramsoc.2019.10.048. **Q1**.

3. 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 $Y_3Al_5O_{12}:Nd^{3+}$ 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**.
4. **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% $Yb^{3+}:Y_3Al_5O_{12}$ 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**.
5. **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 77C (2018) 221-225. **2019IF: 2.776**. https://doi.org/10.1016/j.optmat.2018.01.038. **Q2**.
6. 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.% $Nd^{3+}:Y_3Al_5O_{12}$ 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**.