

## CURRICULUM VITAE



**Balabanov Anton**

### **Affiliation and official address:**

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### **Education:**

- 2017 – B. Sc. V.N. Karazin Kharkiv National University, Kharkiv, Ukraine (Physics and Astronomy).
- 2019 – M. Sc. V.N. Karazin Kharkiv National University, Kharkiv, Ukraine (Physics and Astronomy).

### **Career/Employment:**

- |                   |              |  |
|-------------------|--------------|--|
| 2019              | Engineer     | Institute for Single Crystals NASU, Kharkiv, Ukraine |
| 2019 - at present | Postgraduate | Institute for Single Crystals NASU, Kharkiv, Ukraine |

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

Materials Science, Crystal Formation, Optical Ceramics, Nanotechnologies

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

Grant of the National Academy of Sciences of Ukraine for Young Scientists (2020); Graduate Student Member of the IEEE (2021); Member of the Ukrainian Materials Science Society named after I.M. Frantsevich (2021).

### **Publications and patents:**

6 Original Articles; Scopus *h*-index: 3

Web of Science Researcher ID [AAJ-4269-2021](https://publons.com/researcher/4336148/anton-balabanov/publications/);

<https://publons.com/researcher/4336148/anton-balabanov/publications/>

<https://www.scopus.com/authid/detail.uri?authorId=57208723059>

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[https://www.researchgate.net/profile/Anton\\_Balabanov](https://www.researchgate.net/profile/Anton_Balabanov)

### **Selected Publications:**

1. 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  $(Y_{0.86}La_{0.09}Yb_{0.05})_2O_3$  transparent ceramics // *Ceramics International* 45 (2019) 16005-16010. <https://doi.org/10.1016/j.ceramint.2019.05.111>. **Q1**.
2. O.S. Kryzhanovska, N.A. Safronova, **A.E. Balabanov**, R.P. Yavetskiy, M.V. Dobrotvorskaya, Jiang Li, S. Petrushenko, A.V. Tolmachev, N.A. Matveevskaya, E.N. Shulichenko, V.Yu. Mayorov, D. Sofronov,  $Y_2O_3$ -MgO highly-sinterable nanopowders for transparent

3. 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. <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 Y<sub>2</sub>O<sub>3</sub>-MgO composite SPS ceramics // Ceramics International 46 (2020) 6537-6543. <https://doi.org/10.1016/j.ceramint.2019.11.137>. **Q1**.
5. 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 Y<sub>2</sub>O<sub>3</sub>:Yb<sup>3+</sup> 5 at.% transparent ceramics // Journal of Advanced Ceramics 10 (2020) 49-61. <https://doi.org/10.1007/s40145-020-0416-3>. **Q2**.
6. 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<sup>3+</sup>:Y<sub>2</sub>O<sub>3</sub>-MgO nanocomposite ceramics for potential laser applications // Ceramics International 47 (2021) 1399-1406. <https://doi.org/10.1016/j.ceramint.2020.08.263>. **Q1**.