

## CURRICULUM VITAE



**Kostenyukova Elena**

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

Junior Research Scientist, Department of Nonlinear Crystals, Institute for Single Crystals NAS of Ukraine,  
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### **Education (*degrees, dates, universities*)**

2014 – M. S.	National Technical University «Kharkiv Polytechnic Institute» (Physical Materials Science)	Kharkiv, Ukraine
2021 – Ph. D	Institute for Single Crystals NASU, (Materials Science)	Kharkiv, Ukraine

### **Career/Employment (*employers, positions and dates*)**

2014-2017	Postgraduate	Institute for Single Crystals NASU, Kharkiv, Ukraine
2014-2017	Engineer	Institute for Single Crystals NASU, Kharkiv, Ukraine
2017-date	Junior Research Scientist	Institute for Single Crystals NASU, Kharkiv, Ukraine

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

Crystal growth from solutions; Physical properties of nonlinear-optical materials; Development and investigation of composite materials for laser and optoelectronic technique, Mechanical properties of composite systems

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

Fellowships of the president of Ukraine (2016), Prize of the President of Ukraine for young students (2020).

### **Publications and patents**

14 original articles, 1 patent;

Scopus **h**-index: **4**

<https://www.scopus.com/authid/detail.uri?authorId=56112674100>.

### **Selected recent publications:**

- (1) M.Shopa, Y.Shopa, M.Shribak, **E.Kostenyukova et. al**, *Polarimetric studies of L-arginine-doped potassium dihydrogen phosphate single crystals*, Crystallography, 2020, Vol. 53, Part 5, P.1257-1265, DOI:10.1107/S1600576720010870, **Q1**.
- (2) O.N.Bezkrovnaya, G.N.Babenko, I.M.Pritula, **E.I. Kostenyukova et. al**, *Composite materials based on SiO<sub>2</sub>-matrices saturated with DAST*, Journal of Non-Crystalline Solids, 2020, Vol. 535, 1 May 119957, DOI:10.1016/j.jnoncrysol.2020.119957, **Q1**.
- (3) M.Shopa, Y.Shopa, **E.Kostenyukova**, O.Bezkrovnaya, I.Pritula, *Optical activity and electro-optic effect of L -arginine doped KDP single crystals*, Optics and Laser Technology, 2019, Vol. 119, p.105655, DOI:10.1016/j.optlastec.2019.105655, **Q1**.
- (4) **E.I.Kostenyukova**, I.M.Pritula, O.N.Bezkrovnaya, N.O.Kovalenko *et. al*, *Effect of L-arginine phosphate doping on structural, optical and strength properties of KDP single crystal*, Journal Optics, 2019. V. 22, N 1. P. 60-66, DOI:10.15407/spqeo22.01.60.

- (5) E.F.Dolzhenkova, **E.I.Kostenyukova**, O.N.Bezkrovnaya, I.M.Pritula, *Effect of doping of KDP crystal with amino acid L -arginine on the strength properties and character of laser damage*, Journal of Crystal Growth, 2017, Vol. 478, P. 111–116, [DOI:10.1016/j.jcrysgro.2017.08.010](https://doi.org/10.1016/j.jcrysgro.2017.08.010), **Q2**.
- (6) **E.I.Kostenyukova**, O.N.Bezkrovnaya, E.F.Dolzhenkova, I.M.Pritula, *Optical, thermal, strength properties and SHG efficiency of KDP single crystals doped with N,N'-dimethyl urea*, Journal Functional Materials, 2017, Vol. 25, N 1. 34–42, [DOI:10.15407/fm25.01.034](https://doi.org/10.15407/fm25.01.034).
- (7) I.M.Pritula, E.I.Kostenyukova, O.N.Bezkrovnaya, M.I.Kolybaeva, D.S.Sofronov, E.F.Dolzhenkova, A.Kanaev, V. Tsurikov, *KDP crystal doped with L-arginine amino acid: growth, structure perfection, optical and strength characteristics*, Optical Materials, 57 (2016) 217-224, [DOI:10.1016/j.optmat.2016.04.044](https://doi.org/10.1016/j.optmat.2016.04.044), **Q1**.
- (8) A.S.Popov, A.V.Uklein, V.V.Multian, **E.I.Kostenyukova et. al**, *Nonlinear optical response of nanocomposites based on KDP single crystal with incorporated  $Al_2O_3 \cdot nH_2O$  nanofibriles under CW and pulsed laser irradiation at 532 nm*, Optics Communications, 2016, Vol. 379, P. 45–53. [DOI:10.1016/j.optcom.2016.05.060](https://doi.org/10.1016/j.optcom.2016.05.060), **Q1**.