

CURRICULUM VITAE



Bezkrivna Olha

Affiliation and official address:

Senior Research Scientist, Department of Nonlinear Crystals, Institute for Single Crystals NAS of Ukraine,
61072, Ukraine, Kharkiv, Nauky Ave. 60.

E-mail: bezkrivnaya@isc.kharkov.ua, onbezkrivnaya@gmail.com

Education (degrees, dates, universities)

1988 – M. S. Kharkov State University, USSR, (Chemistry)
2008 – Cand. Sc. (Ph.D) Institute for Single Crystals NASU, Kharkiv, Ukraine (Kharkiv State University, Physical Chemistry)

Career/Employment (employers, positions and dates)

1994-2008	Engineer	Institute for Single Crystals NASU, Kharkov, Ukraine
2008-2010	Junior Research Scientist	Institute for Single Crystals NASU, Kharkiv, Ukraine
2010-2014	Research Scientist	Institute for Single Crystals NASU, Kharkiv, Ukraine
2015-date	Senior Research Scientist	Institute for Single Crystals NASU, Kharkiv, Ukraine

Main field of activity and current research interest

Crystal growth from solutions; Physical properties of the crystals; Development and investigation of composite materials with laser and nonlinear-optical properties; SiO₂ matrices

Publications and patents

2 Chapters in books; 47 original articles; 5 patents; 17 articles in conference proceedings; 62 theses on conferences;

h-index:10 (Scopus);

<https://www.scopus.com/authid/detail.uri?authorId=6508141994>;

<https://orcid.org/0000-0003-2257-0963>.

Selected recent publications:

- (1) **O.N. Bezkrivnaya**, I.M. Pritula, A.G. Plakysii, V.F. Tkachenko, O.M. Vovk, Yu.L. Slominskii, A.D. Kachkovskiy, Yu.A. Gurkalenko, S.N. Krivonogov, A.V. Lopin. Composite materials based on nanoporous SiO₂ matrices and squarylium dye. *Journal of Non-Crystalline Solids*. – 2014. – Vol. 389. – P. 11–16, DOI:10.1016/j.jnoncrysol.2014.01.052, **Q1**.
- (2) **O.N. Bezkrivnaya**, I.M. Pritula, A.G. Plakysii, V.M. Puzikov, Yu.A. Gurkalenko, A.D. Kachkovskiy, Y.L. Slominsky, A. Kanaev. Spectral Properties of Nanoporous SiO₂ Matrices with Polymethine Dyes Molecules. *Functional Materials*. – 2014. – Vol. 21, No. 1. – P. 36-41, DOI:10.15407/fm22.01.036.
- (3) I.M. Pritula, **O.N. Bezkrivnaya**, V.M. Puzikov, V.V. Maslov, A.G. Plakysii, A.V. Lopin, Yu.A. Gurkalenko. Spectral and Lasing Characteristics of Some Red and Nir Laser Dyes in Silica Matrices. Chap. 13 in the book «Advanced Lasers: Laser Physics and Technology for Applied and Fundamental Science», O. Shulika, I. Sukhoivanov, eds., Springer Series in Optical Science, Dordrecht. – 2015. – Vol. 193. P. 199–212.
- (4) **O.N. Bezkrivnaya**, V.V. Maslov, I.M. Pritula, V.M. Puzikov, A.G. Plakysii, Yu.A. Gurkalenko, A.V. Lopin, N.V. Pereverzev. Fluorescence properties of dyes for 570-800 nm lasing region in sol-gel silica. *Functional Materials*. – 2015. – Vol. 22, No. 4. – P.450-454, DOI:10.15407/fm22.04.450.
- (5) I.M. Pritula, E.I. Kostenyukova, **O.N. Bezkrivnaya**, 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. – 2016. – Vol. 57. – P. 217-224, DOI:10.1016/j.optmat.2016.04.044, **Q1**.

(6) Y. V. Taranets, **O. N. Bezkravnaya**, I. M. Pritula, P. V. Mateychenko. L-threonine amino acid as a promoter of the growth of pathogenic calcium oxalate monohydrate crystals. Journal of Nanomaterials and Molecular Nanotechnology. – 2017. – Vol. 6, No. 5. – P.1000229-5. DOI:10.4172/2324-8777.1000229.

(7) E.I. Kostenyukova, **O.N. Bezkravnaya**, E.F. Dolzhenkova, I.M. Pritula, A.G. Doroshenko, M.A. Chaika, A.G. Fedorov, S.V. Khimchenko. Optical, thermal, strength properties and SHG efficiency of KDP single crystals doped with N,N'-dimethyl Urea. Functional Materials. – 2018. – Vol. 25, No. 1. – P. 34-42, DOI:10.15407/fm25.01.034.

(8) E.I. Kostenyukova, A.V. Uklein, V.V. Multian, I.M. Pritula, **O.N. Bezkravnaya**, A.G. Doroshenko, S.V. Khimchenko, A.G. Fedorov, A.N. Levchenko, A.I. Starikov, V.Ya. Gayvoronsky. Effect of L-arginine additive on the growth and physical properties of Potassium Dihydrogen Phosphate single crystals. Functional Materials. – 2018. – Vol. 25, No. 2. – P. 246-257, DOI:10.15407/fm25.02.246.

(9) Y.V. Taranets, **O.N. Bezkravnaya**, I.M. Pritula, P.V. Mateychenko, D.S. Sofronov, A.N. Puzan. Effect of charge state of L-aspartic and L-arginine amino acids on morphology of calcium oxalate monohydrate crystals. Crystal Research & Technology. – 2018 – Vol. 53, No. 4 – P.1700133 (7). DOI:10.1002/crat.201700133, **Q2**.

(10) V.V. Maslov, **O.N. Bezkravnaya**, I.M. Pritula. Characteristics of Benzopyran Laser Dyes in Annealed Silica Xerogel. Journal of Fluorescence. – 2019. – Vol. 29. – P. 473-478, DOI:10.1007/s10895-019-02357-5, **Q3**.

(11) Y. V. Taranets, **O. N. Bezkravnaya**, I. M. Pritula. Effect of amino acids and B-group vitamins on nucleation of calcium oxalate monohydrate. Journal of Crystal Growth. – 2020. – Vol. 531, P. 125368 (8), DOI:10.1016/j.jcrysgro.2019.125368, **Q2**.

(12) **O.N. Bezkravnaya**, G.N. Babenko, I.M. Pritula, A.D. Roshal, Yu.A. Gurkalenko, A.A. Kozlovski, E.I. Kostenyukova. Composite materials based on SiO₂-matrices saturated with DAST. Journal of Non-Crystalline Solids. – 2020. – Vol. 535. – P. 119957 (5p.p), DOI:10.1016/j.jnoncrsol.2020.119957, **Q1**.