

CURRICULUM VITAE



Dolzhenkova Elena

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: dol@isc.kharkov.ua, complex.borate@gmail.com

Education (degrees, dates, universities)

1983 – M. S.	Donetsk National Technical University (Faculty of Metallurgy), USSR
1987 – Cand.Sc. (Ph.D)	Donetsk National Technical University, USSR
2010 – Dr. Sc.	Institute for Single Crystals NASU, Kharkiv, Ukraine (Solid State Physics)
2018 -	Diploma of Senior Research Scientist (Materials Science), Institute for Single Crystals NASU, Kharkiv, Ukraine

Career/Employment (employers, positions and dates)

1983 - 1986	Postgraduate	Donetsk National Technical University, USSR
1987 - 1988	Junior research Scientist	Donetsk National Technical University, Department of Metal Technology, USSR
1988 - 1989	Research Scientist	Donetsk National Technical University, Department of Metal Technology, USSR
1989 - 2005	Research Scientist	Institute for Single Crystals NASU, Kharkiv, Ukraine
2005 - date	Senior Research Scientist	Institute for Single Crystals NASU, Kharkiv, Ukraine

Main field of activity and current research interest

Defects in crystals, Mechanical properties of crystals; Development and investigation of composite materials for laser and optoelectronic technique

Publications and patents

1- Books, 2 - Chapters in books, 82 original articles, 7 patents;
Scopus *h*-index: 11
<https://www.scopus.com/authid/detail.uri?authorId=6603014451>.

Selected recent publications:

- (1) G.N. Babenko, **E.F. Dolzhenkova**, A.N. Voronov et al, *Solution growth and characterization of high quality organic 4N,N'- dymethylamino-N-methyl-4-stilbazolium tosylate crystals*, *Functional Materials*, 2020, V.27, No.4, P.681-686, DOI:10.15407/fm27.04.681.
- (2) E.A. Vovk, **E.F. Dolzhenkova**, V.N. Baumer et al, *Ca₄YO(BO₃)₃:Er,Yb single crystals: structure peculiarities and anisotropy of physical and mechanical properties*, *Functional Materials*, 2020, V.27, No.2, P. 238-244, DOI:10.15407/fm27.02.238.
- (3) S.N. Dub, R.P. Yavetskiy, V.A. Belous, **E.F. Dolzhenkova**, G.N. Tolmacheva, O.Ts. Sidletskiy. *Nucleation of the plasticity at nanodeformation of the Y₃Al₅O₁₂ yttrium-aluminum garnet*, *Journal of Superhard Materials*, 2018, V.40, No.2, P. 75-81, DOI:10.3103/S1063457618020016, **Q3**.

- (4) **E.F. Dolzhenkova**, A.V. Voloshin, L.A. Lytvynov, R.I. Safronov. *Mechanical characteristics of sapphire ribbons grown simultaneously by EFG method*, *Crystal Research and Technology*, 2018, V.53, No.2, P.1-5, DOI:10.1002/crat.201700258, **Q2**.
- (5) E.I. Kostenyukova, O.N. Bezkrovnyaya, **E.F. Dolzhenkova** et al. *Optical, thermal, strength properties and SHG efficiency of KDP single crystals doped with N, N'-dimethyl urea*, *Functional Materials*, 2018, V.25, No.1, P.34-42, DOI:10.15407/fm25.01.034.
- (6) J.Borc, K.Sangwal, I.Pritula, **E.Dolzhenkova**, *Investigation of pop-in events and indentation size effect on the (001) and (100) faces of KDP crystals by nanoindentation deformation*, *Materials Science and Engineering: A*, 2017, V.708. P. 1-10, DOI:10.1016/j.msea.2017.09.069, **Q1**.
- (7) **E.F. Dolzhenkova**, E.I. Kostenyukova, O.N. Bezkrovnyaya, 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, V.478, P.111-116, DOI:10.1016/j.jcrysgro.2017.08.010, **Q2**.