

# CURRICULUM VITAE



**Dolzhenkova Elena**

## **Affiliation and official address:**

Senior research scientist, Department of Nonlinear Crystals,  
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## **Education (*degrees, dates, universities*)**

1983 – M. S. Donetsk National Technical University (Faculty of Metallurgy), Ukraine  
1987 – Ph. D Donetsk National Technical University, Ukraine  
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	PhD Student	Donetsk National Technical University, Ukraine
1987 - 1988	Junior research Scientist	Donetsk National Technical University, Department of Metal Technology, Ukraine
1988 - 1989	Research Scientist	Donetsk National Technical University, Department of Metal Technology, Ukraine
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**

Complex studies of crystals of complex oxide compounds for nonlinear optical and laser materials. Obtaining and studying the quality of oxide single crystals, studying their mechanical properties. Investigation of the connection between the properties of complex oxides and their internal structure.

## **Publications and patents**

1 Book, 2 Chapters in Books, 41 Original Articles (Scopus), 7 Patents;

**h-index: 11**

<https://www.scopus.com/authid/detail.uri?authorId=6603014451>

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

Member of the Ukrainian Materials Science Society named after I.M. Frantsevich.

## **Selected recent publications:**

1. **E. Dolzhenkova**, G. Babenko, A. Voronov et al. Growth, Quality Characterization and Mechanical Hardness of DAST Crystals, Acta Physica Polonica A, 2022, V.141, No.1, P. 41-46.

2. 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.
3. E.A.Vovk, **E.F. Dolzhenkova**, V.N. Baumer et al. Ca<sub>4</sub>YO(BO<sub>3</sub>)<sub>3</sub>:Er,Yb single crystals: structure peculiarities and anisotropy of physical and mechanical properties, *Functional Materials*, 2020, V.27, No.2, P.1-7.
4. 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 Y<sub>3</sub>Al<sub>5</sub>O<sub>12</sub> yttrium-aluminum garnet, *Journal of Superhard Materials*, 2018, V.40, No.2, P. 75-81. **Q2**.
5. **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. **Q2**.
6. E.I. Kostenyukova, O.N. Bezkrovnaya, **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.
7. 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. **Q1**.
8. **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, V.478, P.111-116. **Q2**.