Curriculum vitae

Name: Petr

Surname: Ershov

Place of birth: Vologda city, Russia

Date of birth: 24 August 1989

Marital status: Single

Home address: prof. Sevastyanova str. 6, apt. 9, Kaliningrad, Russia, 236000

MAIN INFORMATION

Education:

2012-2015	phd student of physics and technology dept. of Immanuel Kant Baltic Federal University
2006-2011	Student of physics and technology dept. of Immanuel Kant Baltic Federal University(IKBFU). Specialization: “Radiophysics and electronics”

Experience in science: 7 years.

Work experience:

from 2023 until	Scientist of the Research Centre "Smart materials and biomedical applications" of IKBFU
2019-2023	Deputy Director for Scientific and Methodological Work of the Centre for the Development of Gifted Children
2016-2019	Junior scientist of X-ray coherent optics laboratory of IKBFU
2012-2016	Junior scientist of Research and Educational Center (REC) “Functional Nanomaterials” of IKBFU
2012	Traineeship at the European Synchrotron Radiation Facility, Grenoble, France
2011-2012	Engineer of REC “Functional Nanomaterials” of IKBFU
2010-2011	Research assistant of REC “Functional Nanomaterials” of IKBFU

Qualifications:

Gdańsk University of Technology, Gdansk
PhD degree in Physics on 23 March 2018

Immanuel Kant Baltic Federal University, Kaliningrad
Specialist degree of “Radiophysics and electronics”, 2011

Main skills:

- X-ray imaging & microscopy
- X-ray optics
- X-ray diffractometry
- X-ray reflectometry

Other skills:

- X-ray absorption and fluorescent spectroscopy
- Optical confocal microscopy
- Micro-Raman spectroscopy

ADDITIONAL INFORMATION

Extra education

X-ray powder diffractometry	prof. Baidakova Marina (Ioffe physical technical institute of RAS, Saint-Petersburg, Russia)
High resolution x-ray diffractometry and reflectometry	prof . Shcherbachev Kirill (National University of Science and Technology "MISIS", Moscow, Russia)
Full-profile analysis of the diffraction patterns	prof. Putilin Sergey (Lomonosov Moscow State University, Moscow, Russia)

Main publications

1. Lyatun, S., Zverev, D., Ershov and et al, (2019). X-ray reflecto-interferometer based on compound refractive lenses. Journal of Synchrotron Radiation, 26(5), 1572-1581. doi:10.1107/s1600577519007896
2. T. Fedotenko, L. Dubrovinsky and et al, Laser heating setup for diamond anvil cells for in situ synchrotron and in house high and ultra-high pressure studies. Review of Scientific Instruments 90, 104501 (2019).
3. Barannikov, A., Polikarpov and et al. (2019). Optical performance and radiation stability of polymer X-ray refractive nano-lenses. Journal of Synchrotron Radiation, 26(3), 714-719. doi:10.1107/s1600577519001656
4. A.K. Petrov, V.O. Bessonov and et al, Polymer X-ray refractive nano-lenses fabricated by additive technology, Optics express, 25 (2017) 14173-14181.
5. Dubrovinskaia, L. Dubrovinsky, N. A. Solopova et al., “Terapascal static pressure generation with ultrahigh yield strength nanodiamond,” Science Advances, vol. 2, no. 7, 2016-07-01, 2016.
6. Goikhman, I. Lyatun, P. Ershov et al., “Highly porous nanoberyllium for X-ray beam speckle suppression,” J Synchrotron Radiat, vol. 22, no. Pt 3, pp. 796-800, May 1, 2015.
7. P. Ershov, S. Kuznetsov, I. Snigireva et al., “Fourier crystal diffractometry based on refractive optics,” Journal of Applied Crystallography, vol. 46, no. 5, pp. 1475-1480, 2013.

Russian patents:

1. № 155377 at 09. 09.2015г.: “Device for determining optical characteristics by interference pattern”
2. № 162939 at 09.06.2016: “Device for determining the optical characteristics of materials based on anomalous refraction in refractive optical elements”
3. № 163227 at 22.07.2016: “Test bench for refractive x-ray optics”
4. № 171207 at 24.05.2017.: “X-ray optics element based on Beryllium with protection cover”
5. № 173077 at 08.08.2017.: “Chamber for studying X-ray optics elements”

Scientific status:

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