

Elena Drobnyh (Svinkina)

CONTACT INFORMATION +1 323 772 69 73
elena.drobnyh@asu.edu

RESEARCH INTERESTS Nonlinear Optics, Terahertz Radiation, Optics and Photonics, Numerical Analysis

EDUCATION **Arizona State University**, AZ, USA

Postgraduate student, PhD program in Physics, Aug 2017 – present, cumulative GPA 4.15

Lobachevsky State University, Nizhny Novgorod, Russia

M.S., Physics, Aug 2016, Diploma with honors, GPA 3.92

- Thesis: *Generation of terahertz narrow-band radiation using femtosecond laser pulse in lithium niobate crystal*

B.S., Physics, Aug 2014, Diploma with honors, GPA 3.9

- Thesis: *Asymmetric Cherenkov radiation for improved terahertz generation in the Si-prism-coupled LiNbO₃ layer*

RESEARCH EXPERIENCE **Research assistant** December 2018 – present
Arizona State University, AZ, Physics department

The school on Photonics and Optoinformatics October 2015
Saint Petersburg, Russia

TEACHING EXPERIENCE **Teaching assistant** August 2018 – December 2018
Arizona State University, AZ, Physics department, PHY 114

Teaching assistant July 2018 – August 2018
Arizona State University, AZ, Physics department, PHY 132

Teaching assistant January 2018 – May 2018
Arizona State University, AZ, Physics department, PHY 122

Teaching assistant August 2017 – December 2017
Arizona State University, AZ, Physics department, PHY 114

Teaching assistant February 2017 – May 2017
Lobachevsky State University, Nizhny Novgorod, Russia, General Physics department, Introduction to C++ for physicists

Teaching assistant February 2017 – May 2017
Lobachevsky State University, Nizhny Novgorod, Russia, General Physics department, Molecular and Statistical Physics

Teaching assistant September 2016 – December 2016
Lobachevsky State University, Nizhny Novgorod, Russia, General Physics department, Classical and Continuum Mechanics

Teaching assistant

February 2016 – May 2016

Lobachevsky State University, Nizhny Novgorod, Russia, General Physics department,
Introduction to C++ for physicistsREFEREED
JOURNAL
PUBLICATIONS

1. **Elena Drobnyh**, Maxim Sukharev - "Plasmon Enhanced Second Harmonic Generation by Periodic Arrays of Triangular Nanoholes Coupled to Quantum Emitters." - The Journal of Chemical Physics, vol. 152 (9), 2020 - 094706.
2. **Elena Drobnyh**, Ruth Pachter, Maxim Sukharev - "Harmonic Generation by Metal Nanostructures Optically Coupled to Two-Dimensional Transition-Metal Dichalcogenide" - The Journal of Physical Chemistry C, vol. 123 (11), 2019 - P. 6898–6904.
3. **E.V. Drobnyh**, M.I. Bakunov, E.A. Mashkovich - "Generation of ultrashort THz pulses using femtosecond laser pulses in $LiNbO_3$ " - XX radiophysics conference / Nizhny Novgorod, May, 2016. – P. 167-168 - in Russian.
4. M.I. Bakunov, E.A. Mashkovich, **E.V. Svinkina** - "Asymmetric terahertz Cherenkov radiation in $LiNbO_3$ " - OPTICS-2015. In proceedings of IX international conference of young scientists and specialists (Saint-Petersburg, 12-16 of October, 2015) / ITMO University, 2015. – P. 649-651.
5. M.I. Bakunov, E.A. Mashkovich, **E.V. Svinkina** - "Asymmetric Cherenkov radiation for improved terahertz generation in the Si-prism-coupled $LiNbO_3$ layer" - Optics letters, vol. 39(24), 2014 - P. 6779-6782.
6. M.I. Bakunov, E.A. Mashkovich, **E.V. Svinkina** - "Asymmetric terahertz Cherenkov radiation in $LiNbO_3$ " - In book of abstracts of 11th International Young Scientist conference Developments in Optics and Communications 2015 (Riga, 8-10 of April, 2014) University of Latvia, 2014. – P. 3-3.
7. M.I. Bakunov, E.A. Mashkovich, **E.V. Svinkina** - "Ultrashort laser pulses asymmetric Cherenkov radiation of THz waves in $LiNbO_3$ " - XVIII radiophysics conference / Nizhny Novgorod, May, 2014 – P. 171-172 - in Russian.