Dr. Konstantin Ladutenko

Date of Birth	15^{th} January 1983	**Address**	St. Petersburg, Russia
Place of Birth	Leningrad, Russia	**Mobile Phone**	+7 (921) 312 9085
Nationality	Russian	**Email**	k.ladutenko@metalab.ifmo.ru
Skype	konstantin.ladutenko		

Married, have two children.

Personal Profile

I was involved in a scientific research at high school as an intern at Ioffe Institute, where I got a research position after graduation from the Saint-Petersburg State Polytechnical University. I have a good knowledge of semiconductor physics and a lot of experimental experience with atomic-force microscopy. In 2011, I moved to a position in ITMO University. My research interests are in the areas of numerical methods and simulation in physics, with a focus on Mie theory and stochastic optimization.

Education

2017 PhD

2000 - 2006 MSc Saint-Petersburg State Polytechnical University

Winner of grant for students from St. Petersburg goverment – 2006

1998-2000 Lyceum "Physical-Technical School"

Employment History

Sep 2001 - Present Ioffe Institue, 194021, Politehnicheskaya st., 26, St. Petersburg, Russia
Jr. research fellow

2008 - best postgraduate work in St. Petersburg Academic University
2008 - grant from Alferov's Foundation
2009 - best young scientist work in Ioffe Institue
2009 - 1^{st} place in young scientist contest, winter school of Ioffe Institute

Oct 2011 - Present ITMO University, 197101, Kronverkskiy pr., 49, Saint Petersburg, Russia
Research Engineer, Assistant Professor, Senior Lecturer

Publications

- **Papers (Selected)**

1. *Observation of Supercavity Modes in Subwavelength Dielectric Resonators*
   Mikhail Odit, Kirill Koshelev, Sergey Gladishev, Konstantin Ladutenko, Yuri Kivshar, Andrey Bogdanov
   Advanced Materials (2020)
2. *Reconfigurable multilevel control of hybrid all-dielectric phase-change metasurfaces*
   Carlota Ruiz de Galarreta, Ivan Sinev, Arseny M. Alexeev, Pavel Trofimov, Konstantin Ladutenko, Santiago Garcia-Cuevas Carrillo, Emanuele Gemo, Anna Baldycheva, Jacopo Bertolotti, C. David Wright
   Optica (2020)

3. *The High-Order Toroidal Moments and Anapole States in All-Dielectric Photonics*
   Egor A. Gurvitz, Konstantin S. Ladutenko, Pavel A. Dergachev, Andrey B. Evlyukhin, Andrey E. Miroshnichenko, Alexander S. Shalin
   Laser & Photonics Reviews (2019)
4. *Near-field observation of guided-mode resonances on a metasurface via dielectric nanosphere excitation*
   Frederik Walla, Florian Bürkle, Ivan S. Sinev, Matthias Wiecha, Nicolas Mecklenbeck, Konstantin Ladutenko, Radu Malureanu, Filipp Komissarenko, Andrei V. Lavrinenko, Andrey Bogdanov, Amin Soltani, and Hartmut Roskos
   ACS Photonics(2018)
5. *Photo-generated free carrier-induced symmetry breaking in spherical silicon nanoparticle*
   A. Rudenko, K. Ladutenko, S. Makarov, and T.E. Itina
   Advanced Optical Materials, vol. 6, pp. 1701153 (2018)
6. *Mie calculation of electromagnetic near-field for a multilayered sphere*
   Konstantin Ladutenko, Umapada Pal, Antonio Rivera, Ovidio Peña-Rodríguez
   Comp. Phys. Comm., vol. 214, pp. 225–230 (2017)
7. *Superabsorption of light by nanoparticles*
   Konstantin Ladutenko, Pavel Belov, Ovidio Peña Rodríguez, Ali Mirzaei, Andrey Miroshnichenko and Ilya Shadrivov
   Nanoscale, 7, 18897-18901 (2015)
8. *Reduction of scattering using thin all-dielectric shells designed by stochastic optimizer*
   Konstantin Ladutenko, Ovidio Peña-Rodríguez, Irina Melchakova, Ilya Yagupov, and Pavel Belov
   J. Appl. Phys., vol. 116, pp. 184508 (2014)
9. *Kelvin probe force and surface photovoltage microscopy observation of minority holes leaked from active region of working InGaAs/AlGaAs/GaAs laser diode* Ankudinov, A. V.; Evtikhiev, V. P.; Ladutenko, K. S.; et al.
   J. Appl. Phys., vol. 101(2) 024504 (2007)

- **Conferences**
  - Days on Diffraction, St. Petersburg, Russia (2016)
  - Microwave Electronics and Microelectronics, St. Petersburg, Russia (2014)
  - Science and Innovations in Technical Universities, St. Petersburg, Russia (2009)
  - Nanophysics and Nanoelectronics, Nizhny Novgorod, Russia (2009)
  - Semiconductor lasers: physics and technologies, St. Petersburg, Russia (2008)
  - Nanophysics and Nanoelectronics, Nizhny Novgorod, Russia (2006)
- **Patents**
  - Software state registration №2018663149 (2018)
  - Software state registration №2016663950 (2016)
  - Software state registration №2014611568 (2014)
  - Software state registration №2012618127 (2012)
  - Software state registration №2011617390 (2011)

Interests

- **Travelling, Hiking**
- **Swimming**
- **Photography**
- **Woodwork**