Nikolay Solodovchenko

DATE OF BIRTH: April 19, 1997
PLACE OF BIRTH: Novosibirsk, Russia
FAMILY STATUS: Single
CITIZENSHIP: Russia
HOME ADDRESS: 13 Kosmonavtov street 11
196211 Saint Petersburg, Russia
PHONE: +7-911-179-48-75
LANGUAGES: Russian, English (B2)
E-MAIL : n.solodovchenko@metalab.ifmo.ru
WEB PAGE: metalab.ifmo.ru/~nikolay_solodovchenko
ORCID: 0000-0002-0650-9145

RESEARCH: Bound States in the Continuum, Metasurfaces, Optics, Microcavities

EDUCATION:

2021 - present	**ITMO University**, St Petersburg, Russia Ph.D. in Optics Supervisor: **Prof. Mikhail Limonov**
2019 - 2021	**ITMO University**, St Petersburg, Russia M.Sc. in Technical Physics with Honors Thesis: Investigation of electromagnetic states in topological structures Direction: Photonics of dielectrics and semiconductors Supervisor: **Prof. Mikhail Limonov**
2015 - 2019	**Saint-Petersburg State Polytechnical University**, St Petersburg, Russia B.Sc. in Technical Physics Thesis: Dielectric metamaterials with quadrupole response Direction: Physics and technology of nanostructures Supervisor: **Prof. Mikhail Limonov**

EMPLOYMENT

2020-2021	Engineer ITMO University, St Petersburg, Russia
2021-present	PhD student in Optics ITMO University, St Petersburg, Russia

PUBLICATIONS

1. **Cascades of Fano resonances in light scattering by dielectric particles**
   Nikolay Solodovchenko, M. Sidorenko, T. Seidov, I. Popov,E Nenasheva, K. Samusev, M. Limonov, Materials Today, 2022 [IF: 26.943]
   https://doi.org/10.1016/j.mattod.2022.09.007;
2. **Bound states in the continuum in strong-coupling and weak-coupling regimes under the cylinder – ring transition**
   N. Solodovchenko, K. Samusev, D. Bochek and M. Limonov,
   Nanophotonics, 2021 [IF: 8.449]
   https://doi.org/10.1515/nanoph-2021-0351;
3. **Bound states in the continuum versus material losses: $Ge_2Sb_2Te_5$ as an example**
   D. Bochek, N. Solodovchenko, D. Yavsin, A. Pevtsov, K. Samusev, M. Limonov
   Physical Review B, 2022 [IF: 3.908]
   https://doi.org/10.1103/PhysRevB.105.165425;
4. **Silver particles embedded in silicon: The fabrication process and their application in surface enhanced Raman scattering (SERS)**
   A. Ermina, N. Solodovchenko, K. Prigoda, V. Levitskii, V. Bolshakov, M. Maximov, Y.Koshtyal, S. Pavlov, V.Tolmachev, Y. Zharova
   Applied Surface Science, 2022 [IF:7.392]
   https://doi.org/10.1016/j.apsusc.2022.155146;
5. **Book chapter in "All-Dielectric Nanophotonics": Fano resonances in all-dielectric nanostructures**
   N. Solodovchenko, K. Samusev, M. Limonov.
   Elsevier, 2023

CONFERENCES

1. **Photonic Galleries of dielectric resonators** (poster)
   Nikolay Solodovchenko
   Youth conference on semiconductor physics "Winter School 2023", 2023
   Poster session winner
2. **Scattering spectra of dielectric ring: microwave experiments** (poster)
   Nikolay Solodovchenko, Mikhail Sidorenko
   VI International Conference on Metamaterials and Nanophotonics MetaNano 2020
3. **Resonant light scattering from dielectric ring of rectangular cross section** (poster)
   N. S. Solodovchenko, T.Z. Seidov, K. B. Samusev and M.F. Limonov,
   VI International Conference on Metamaterials and Nanophotonics MetaNano 2020
4. **Quadrupole-driven metamaterials** (poster)
   Nikolay Solodovchenko, Kirill Samusev, Mikhail Rybin, Mikhail Limonov,
   V International Conference on Metamaterials and Nanophotonics MetaNano 2020