Artem Shalev

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GitHub: github.com/ArtyomShalev



EDUCATION

ITMO University

PhD student in Optics

St.Petersburg, Russian Federation 2022–Current

- Preliminary thesis name: "Bound states in the continuum in the multipolar lattices"

ITMO University

St.Petersburg, Russian Federation

M.S. in Technical Physics, cum laude

2020 - 2022

- Thesis: "Angular pinning of accidental bound states in the continuum in 2D periodic structures"

Tomsk State University of Control Systems and Radioelectronics

Tomsk, Russian Federation

B.S. in Electronics and Nanoelectronics, cum laude
Thesis: "Study of temperature stability of Schottky barrier contacts"

2016-2020

EXPERIENCE

ITMO University | School of Physics and Engineering Engineer

St. Petersburg, Russian Federation Summer 2021 - Current

- Carrying out research on several topics: bound states in the continuum, light propagation through liquid crystal media

Scientific Research Institute of Semiconductor Devices

Trainee laboratory assistant

Tomsk, Russian Federation Summer 2019 - Summer 2020

 Schottky barrier contants investigations: Carrying out measurements and calculations on Schottky barrier contacts.

PUBLICATIONS

- [1] A. Shalev, I. Lobanov, and A. Bogdanov, Two approaches in defining topological charge of bound states in the continuum in multipolar lattices, 2023.
- [2] S. Gladyshev, A. Shalev, K. Frizyuk, K. Ladutenko, and A. Bogdanov, "Bound states in the continuum in multipolar lattices", *Phys. Rev. B*, vol. 105, p. L241301, 24 Jun. 2022.
- [3] S. Gladyshev, A. Shalev, K. Frizyuk, K. Ladutenko, and A. Bogdanov, "Bound states in the continuum in the multipole approximation", in *Metamaterials XIII*, K. F. MacDonald, I. Staude, and A. V. Zayats, Eds., International Society for Optics and Photonics, vol. 12130, SPIE, 2022, 121300G.
- [4] S. A. Gladyshev, A. N. Shalev, K. S. Ladutenko, and A. A. Bogdanov, "Angular pinning of accidental bound state in the continuum", in 2021 Photonics Electromagnetics Research Symposium (PIERS), 2021, pp. 2579–2582.

TEACHING

• Teaching Assistant at ITMO University

Matrix methods

Spring 2023 - Current

SKILLS

- **Simulations:** CST Microwave Studio, Comsol Multiphysics
- Programming: Python, Fortran, MATLAB, Lua
- Visualisation: POV-Ray, Figma

LANGUAGES

- Russian Native
- English Advanced
- Chinese Beginner

Extracurricular Activities

• Engineering forum based on Ural Federal University
Attending lectures regarding to radioengineering and programming

Spring 2021

- SLALOM
 Attending lectures regarding to modern light sources technologies
- Winter School on Photonics

Winter 2022

Attending lectures regarding to photonics. Taking participation in Poster session

Winter 2022