

# Gulnaz Rakhmanova

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## EDUCATION

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- 2014 – 2018 **Bachelor of Technical Physics**  
*Peter the Great St. Petersburg Polytechnic University, St. Petersburg. Major area of study: Physical Electronics. Thesis topic: Electron-beam modification of optical properties of phosphate glasses with high concentration of silver*
- 2018 – 2020 **Master of Technical Physics**  
*ITMO (Information Technologies, Mechanics and Optics) University, St. Petersburg. Major area of study: Nanophotonics and metamaterials. Thesis topic: Topological plasmon-polariton on a Dirac magnet helical state*

## WORK EXPERIENCE

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- 2016 – 2018 **Researcher**  
*Scientific Laboratory of Physics of the Interaction of Radiation with Matter, Department of Physical Electronics, Peter the Great St. Petersburg Polytechnic University*
- 2015 – NOW **Tutor in Physics and Maths**  
*Freelance*
- 2019 – NOW **Researcher**  
*International Scientific Laboratory of Photoprocesses in Mesoscopic Systems, Department of Physics and Engineering, ITMO University*

## PUBLICATIONS

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- Iorsh I. V., Rahmanova G. R., Titov M. Plasmon-polariton from a helical state in a Dirac magnet // ACS Photonics - 2019, Vol. 6, No. 10, pp. 2450-2454
- Rakhmanova G.R., Iorsh I.V., Titov M. Topological plasmon-polariton on a Dirac magnet helical state // Journal of Physics: Conference Series - 2019, Vol. 1410, No. 1, pp. 012158
- Sidorov A.I., Yurina U.V., Rakhmanova G.R., Shinkarenko M.N., Podsvirov O.A., Fedorov Y.K., Nashchekin A.V. Electron-beam modification of optical properties of phosphate glasses with high concentration of silver // Journal of Non-Crystalline Solids - 2018, Vol. 499, pp. 278-282

## SKILLS

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COMPUTER SKILLS Python, OriginPro, Mathematica, Matlab, Latex, Microsoft Office, CST, GitHub

LANGUAGES Russian (native speaker), English (upper-intermediate)

## ACHIEVEMENTS

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- Master degree with honours
- Assistance with the course “Electrodynamics of Metamaterials”

- Posters on 3 international conferences on physics
- 3rd place in the case championship "Metal Cup-2017"
- 3rd place in the case championship "Unilever Chain Reaction - 2017"

### **EXTRA-CIRRICULAR ACTIVITIES**

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- I have been in the USA under Work And Travel program for 3 months and have worked as ride-operator in the amusement park
- I like alpine skiing and I was professionally involved in skiing for 12 years. Also I like jogging, playing basketball and doing yoga
- I am interested in teaching, psychology, travelling and reading books