Tatevik Makich Sarukhanyan

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Research Institute of Physics
Laboratory of Optoelectronics and Photonics
Group Leader

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Group Leader

Institute of Physics
Chair of Optics and Photonics
Lecturer on an hourly basis

Education

Institution	Yerevan State University
Faculty	Faculty of physics
Date	2016 - 2020
Degree name	PhD student

Institution	Yerevan State University
Faculty	Faculty of physics
Date	2014 - 2016
Degree name	Masters

Institution	Yerevan State University
Faculty	Faculty of physics
Date	2010 - 2014
Degree name	Bachelor

Scientific Rank/degree

Institution	Yerevan State University
Date	2023
Degree name	Candidate
Scientific Supervisor	Prof. R.B. Alaverdyan
Research Topic	The experimental investigation of fluorescence in liquid crystalline photonic structures and polymers

Work experience

Institution	Research Institute of Physics

Period of time	2024 till now
Rank/degree	Head of group

Publications

Article

Bacterial identification in SERS-integrated microfluidics using CNN-driven 2D classification of 1D spectra
Lilit Melikyan, Tatevik Sarukhanyan, Mehdi Feizpour, Halewijn Van den Bosche, Thomas Demuyser,

Piet Cools, Hugo Thienpont, Heidi Ottevaere

Talanta 2025 128325

Article

Low-Loss Multimode Waveguide Bends with Direct Laser Writing in Polymer
Tigran Baghdasaryan, Neshteh Kourian, Mushegh Rafayelyan, Tatevik Sarukhanyan

Micromachines 2025 1361

Article

Strong light absorption and absorption absence in photonic crystals with helical structure in an external static magnetic field
A. H. Gevorgyan, N. A. Vanyushkin, I. M. Efimov, A. O. Kamenev, S. S. Golik, H. Gharagulyan,

T. M. Sarukhanyan, Malek G. Daher, K. B. Oganesyan

Journal of the Optical Society of America B 2023 1986-1993

Article

Magnetically Induced Transparency in Media with Helical Dichroic Structure
Mushegh S. Rafayelyan, Gvidon K. Matinyan, Hermine Gharagulyan, Tatevik M. Sarukhanyan,

Meruzhan Z. Hautyunyan, Ilya M. Efimov, Nikolay A. Vanyushkin, Sergey S. Golik, Ashot H. Gevorgyan

MATERIALS 2021 2172

Article

Observation of Electroconvection in Nematic Liquid Crystals by X-Ray Interferometric Method
V. P. Mkrtchyan, L. G. Gasparyan, R. A. Alaverdyan, T. M. Sarukhanyana

Journal of Contemporary Physics (Armenian Academy of Sciences) 2021 379-383

Article

Multimode Robust Lasing in a Dye-Doped Polymer Layer Embedded in a Wedge-Shaped Cholesteric
Tatevik M. Sarukhanyan, Hermine Gharagulyan, Mushegh S. Rafayelyan, Sergey S. Golik,

Ashot H. Gevorgyan, Roman B. Alaverdyan

Molecules 2021 6089

Article

The Polarization of Laser Generation from the Cholesteric Liquid Crystal–Dye-Doped Polymer Layer–Cholesteric Liquid Crystal System
T.M. Sarukhanyan
Journal of Contemporary Physics (Armenian Academy of Sciences) 2021 103-108

Conference

Lasing polarization peculiarities in cholesterics separated by dye-doped polymeric layer
T.M. Sarukhanyan, H. Gharagulyan, A.H. Gevorgyan, R.B. Alaverdyan

2021 30-31

https://www.magnuswebinars.com/optics-virtual/speakers/september-2020

Conference

The role of the geometric phase in cholesteric with a defect layer toward multimodal robust lasing
T.M. Sarukhanyan, M.S. Rafayelyan, H. Gharagulyan, R.B. Alaverdyan, S.S. Golik, A.H. Gevorgyan

2021 46 - 46

https://ipr.sci.am/pl/conferences/archive.html

Article

Lasing peculiarities in cholesteric multilayer structure with dye-doped polymer film depending on the concentration of laser dye and pumping energy
T. M. Sarukhanyan, H. S. Gharagulyan, M. L. Sargsyan, H. Grigoryan, R. S. Hakobyan, A. H. Gevorgyan, R. B. Alaverdyan

Molecular Crystals and Liquid Crystals 2020 15-25

Article

Spectral Peculiarities of Multilayer Cholesteric Wedge-Cell System with Dye-Doped Polymer Layer
H. Gharagulyan, T. M. Sarukhanyan, A.V. Ninoyan, A. H. Gevorgyan, R. B. Alaverdyan

Optics and Spectroscopy 2020 1644-1648

Conference

Lasing in three-layer cholesteric-dye-doped polymer-cholesteric sandwich cell
T.M. Sarukhanyan, H. Gharagulyan, R.B. Alaverdyan, A.H. Gevorgyan

2019 32 - 32

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