

Tatevik Makich Sarukhanyan

Research Institute of Physics
Group Leader

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🎓 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
Specialty	Physico-mathematical sciences
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. Oganesyanyan
Journal of the Optical Society of America B: Optical Physics 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. Sarukhanyan
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

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 polarization peculiarities in cholesterics separated by dye-doped polymeric layer

T.M. Sarukhanyan, H. Gharagulyan, A.H. Gevorgyan, R.B. Alaverdyan

Conference

Lasing in three-layer cholesteric-dye-doped polymer-cholesteric sandwich cell

T.M. Sarukhanyan, H. Gharagulyan, R.B. Alaverdyan, A.H. Gevorgyan

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
