

Publications

Article

E-beam induced micropattern generation and amorphization of L-cysteine-functionalized graphene oxide nano-composites

Y. Melikyan, H. Gharagulyan, A. Vasil'ev, V. Hayrapetyan, M. Zhezhu, A. Simonyan, D.A. Ghazaryan, M.S. Torosyan, A. kharatyan, J. Michalicka, M. Yeranosyan

Colloids and Interface Science Communications 2024 100766-7

Article

Essential L-Amino Acid-Functionalized Graphene Oxide for Liquid Crystalline Phase Formation

H. Gharagulyan, Y. Melikyan, V. Hayrapetyan, Kh. Kirakosyan, D.A. Ghazaryan, M. Yeranosyan

Materials Science and Engineering: B 2023 116564

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

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

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

*Article***Diffusion in liquid crystals of two cholesterics with different pitches.**

Ashot H. Gevorgyan, Roman B. Alaverdyan, Hermine Gharagulyan, Mushegh S. Rafayelyan,

Hayarpi Grigoryan

Journal of Nanophotonics 2015 093591(1-12)

<https://spie.org/publications/journals/journal-of-nanophotonics>

*Conference***Experimental and Theoretical Investigation of Polarization Plane Rotation of Light in Nanoparticle-Enriched Chiral liquid-crystalline Photonic Structures with an Anisotropic Defect Layer**

A.H. Gevorgyan, H. Gharagulyan, M.S. Rafayelyan, R.B. Alaverdyan

*Conference***Asymmetric Transmission liquid-crystals of Two Cholesterics with Different Pitches and Chiralities**

A.H. Gevorgyan, M.S.Rafayelyan, Zh.V.Ninoyan, Hermine Gharaguiyan, R.B.Alaverdjan

*Conference***Nonreciprocal Transmission in Electro-Tunable Cholesterics**

H. Gharagulyan, M. S. Rafayelyan, A. H. Gevorgyan, R. B. Alaverdyan

*Conference***Optical Properties of Polymer-Dispersed Cholesteric Liquid- Crystalline Wedge-Cell**

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

*Conference***Lasing in Cholesteric-Polymer Wedge-Cell System**

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

*Conference***Light energy accumulation by cholesteric liquid crystal layer at oblique incidence**

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

*Conference***Lasing polarization peculiarities in cholesterics separated by dye-doped polymeric layer**

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

*Conference***Controlling Possibilities of Functionalized Graphene Oxide Liquid Crystalline Microdroplets**

Gharagulyan Hermine, Melikyan Yeghvard, Vasilev Alexey, Hayrapetyan Vardan, Khachatryan Ashot,

Apreyan Ruben, Yeranosyan Mkrtich

*Conference***Spatial evolution of light polarization in wedge-shaped cholesteric liquid crystal cell**

R. Alaverdyan, L. Aslanyan, G. Gevorgyan, H. Gharagulyan, H. Hovakimyan, Zh. Ninoyan

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

Conference

Filtering of terahertz radiation by a metasurface structure

Simonyan Karen, Parsamyan Henrik, Gharagalyan Hermine, Khachatryan Ashot, Yerosyan Mkrtich

Conference

Manipulating Optical Features of MoS₂-decorated rGO Nanosystems

Hermine Gharagulyan, A. Vasil'ev, M. Zhezhu, Y. Melikyan

Conference

Studying Graphene Oxide Stability Depending on Particle Sizes

Yeghvard Melikyan, A. Vasil'ev, M. Zhezhu, H. Gharagulyan

Conference

Comparison of the Electro-Optical Properties of MoS₂/rGO Heterostructures Fabricated via CVD and Soft Chemistry Methods

Marina Zhezhu, A. Vasil'ev, Y. Melikyan, H. Gharagulyan
