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Dual effect of L-Cysteine on the reorientation and relaxation of Fe₃O₄-decorated graphene oxide liquid crystals

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Heliyon 2025 e43010

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L-cysteine polymorph coatings for THz sensing metasurfaces

M. Zhezhu, A. Vasil'ev, H. Parsamyan, T. Abrahamyan, G. Baghdasaryan, S. Gyoalyan, D. Ghazaryan,

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Results in Physics 2025 108351

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M. Zhezhu, A. Vasil'ev, M. Yapyrintsev, E. Ghalumyan, D.A. Ghazaryan, H. Gharagulyan

Materials Science in Semiconductor Processing 2025 109863

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Revisiting THz absorption in GO and rGO liquid crystalline films

A. Vasil'ev, M. Zhezhu, H. Parsamyan, G. Baghdasaryan, M. Sargsyan, D.A. Ghazaryan, H. Gharagulyan

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Y. Melikyan, H. Gharagulyan, A. Vasil'ev, V. Hayrapetyan, M. Zhezhu, A. Simonyan, D.A. Ghazaryan,

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Colloids and Interface Science Communications 2024 100766-7

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Improving the electro-optical properties of MoS₂/rGO hybrid nanocomposites using liquid crystals

A. Vasil'ev, Y. Melikyan, M. Zhezhu, V. Hayrapetyan, M.S. Torosyan, D.A. Ghazaryan, M. Yeranosyan,

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Materials Research Bulletin 2024 113036

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Karen Simonyan, Hermine Gharagulyan, Henrik Parsamyan, Ashot Khachatryan, Mkrtich Yeranosyan

Semiconductor Science and Technology 2024 095012

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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

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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

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Magnetically Induced Transparency in Media with Helical Dichroic Structure

Mushegh S. Rafayelyan, Gvidon K. Matinyan, Hermine Gharagulyan, Tatevik M. Sarukhanyan,

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Multimode Robust Lasing in a Dye-Doped Polymer Layer Embedded in a Wedge-Shaped Cholesteric

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Ashot H. Gevorgyan, Roman B. Alaverdyan

Molecules 2021 6089

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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,

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Molecular Crystals and Liquid Crystals 2020 15-25

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

Optics and Spectroscopy 2020 1644-1648

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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)

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