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A Dynamic Analysis of Toron Formation in Chiral Nematic Liquid Crystals Using a Polarization Holographic Microscope

Tikhon V. Reztsov, Aleksey V. Chernykh, Tetiana Orlova, Nikolay V. Petrov

Polymers MDPI 2025 1849

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Polarization-controlled orbital angular momentum of light passing through a cholesteric spherulite

A. N. Shalev, A. A. Misura, A. O. Georgieva, A. V. Chernykh, N. V. Petrov, T. Orlova, I. S. Lobanov,

E. V. Aksenova, V. M. Uzdin, A. D. Kiselev

Optics Letters 2025 4866-4869

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Rewritable Binary Recording of the Photon Spin State in Chiral Liquid Crystals

Nicolas Bruni, Charles Loussert, Mushegh Rafayelyan, Tetiana Orlova, Delphine Coursault,

Etienne Brasselet

Physical Review Letters 2025 223804

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Fine Tuning of the Rotational Speed of Light-Driven, Second-Generation Molecular Motors by Fluorine Substitution

Ivan Tambovtsev, Yorick L. A. Schmerwitz, Gianluca Levi, Darina D. Darmoroz, Pavel V. Nesterov,

Tetiana Orlova, Hannes Jónsson

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N. Kasapenko, T. Orlova, N. Kondratyuk

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Dmitrii Shcherbinin, Denis A. Glukharev, Semyon Rudyi, Anastasiia Piven, Tetiana Orlova, Izabela Sliwa,

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Sergey A. Shvetsov, Darina D. Darmoroz, Alexey Vasil'ev, Tetiana Orlova, Igor S. Lobanov,
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On-Demand Photopatterned Twisted Nematics for Generation of Polychromatic Vector Fields

Edvard Grigoryan, Hayk H. Harutyunyan, Hrayr Hakobyan, Sergey A. Shvetsov, Tetiana Orlova,

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Nikita A. Krotkov, Dmitrii A. Sbytov, Anna A. Chakhoyan, Polina I. Kornienko, Anna A. Starikova,

Maxim G. Stepanov, Anastasiia O. Piven, Timur A. Aliev, Tetiana Orlova, Mushegh S. Rafayelyan,

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Machine learning methods for liquid crystal research: phases, textures, defects and physical properties

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Topological Learning for the Classification of Disorder: An Application to the Design of Metasurfaces

Tristan Madeleine, Nina Podoliak, Oleksandr Buchnev, Ingrid Membrillo Solis, Tetiana Orlova,

Maria van Rossem, Malgosia Kaczmarek, Giampaolo D'Alessandro, Jacek Brodzki

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Reactions of 5-(Trialkyl)silylpent-1-en-4-yn-3-ones with Hydrazines: Original Synthetic Routes to Luminescent Substances Containing Azole Motifs

Ivan S. Odin, Kareem V. Gordon, Radik N. Itakhunov, Dmitry M. Gusev, Sergey A. Sokov,

Anna V. Vologzhanina, Stanislav A. Grabovskiy, Ilya M. Sosnin, Anton I. Ukolov, Olga I. Orlova,

Vladimir A. Lazarenko, Pavel V. Dorovatovskii, Darina D. Darmoroz, Anastasiia O. Piven, Tetiana Orlova,

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Д. Д. ДАРМОРОЗ, А. О. ПИВЕНЬ, Т. ОРЛОВА

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Tetiana Orlova, Anastasiia Piven, Darina Darmoroz, Timur Aliev, Tamer Mahmoud Tamer Abdel Razik,

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Optical nonlinearity of a dual-frequency nematic liquid crystal via temperature-mediated mapping of dielectric anisotropy

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Optical Imaging and Analytical Design of Localized Topological Structures in Chiral Liquid Crystals

Igor Lobanov, Elena Aksenova, Tetiana Orlova, Darina Darmoroz, Valery Uzdin, Alexei D. Kiselev

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Sergey A. Shvetsov, Tetiana Orlova, Alexander V. Emelyanenko

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Nanoparticle-Induced Property Changes in Nematic Liquid Crystals

Nicolas Brouckaert, Nina Podoliak, Tetiana Orlova, Denitsa Bankova, Angela F. De Fazio,

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Tracking the time evolution of soft matter systems via topological structural heterogeneity

Ingrid Membrillo Solis, Tetiana Orlova, Karolina Bednarska, Piotr Lesiak, Tomasz R. Woliński,

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