

Ivan I Smalyukh

List of Publications by Year in descending order

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227
papers

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23567

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#	ARTICLE	IF	CITATIONS
1	Self-Alignment of Plasmonic Gold Nanorods in Reconfigurable Anisotropic Fluids for Tunable Bulk Metamaterial Applications. <i>Nano Letters</i> , 2010, 10, 1347-1353.	9.1	322
2	Shape-Controlled Colloidal Interactions in Nematic Liquid Crystals. <i>Science</i> , 2009, 326, 1083-1086.	12.6	289
3	Topological colloids. <i>Nature</i> , 2013, 493, 200-205.	27.8	276
4	Three-dimensional structure and multistable optical switching of triple-twisted particle-like excitations in anisotropic fluids. <i>Nature Materials</i> , 2010, 9, 139-145.	27.5	270
5	Elasticity-Mediated Self-Organization and Colloidal Interactions of Solid Spheres with Tangential Anchoring in a Nematic Liquid Crystal. <i>Physical Review Letters</i> , 2005, 95, 157801.	7.8	231
6	Three-dimensional imaging of orientational order by fluorescence confocal polarizing microscopy. <i>Chemical Physics Letters</i> , 2001, 336, 88-96.	2.6	224
7	Preparation and in vitro characterization of a eutectic based semisolid self-nanoemulsified drug delivery system (SNEDDS) of ubiquinone: mechanism and progress of emulsion formation. <i>International Journal of Pharmaceutics</i> , 2002, 235, 247-265.	5.2	223
8	Structure and Dynamics of Liquid Crystalline Pattern Formation in Drying Droplets of DNA. <i>Physical Review Letters</i> , 2006, 96, 177801.	7.8	201
9	Topography from Topology: Photoinduced Surface Features Generated in Liquid Crystal Polymer Networks. <i>Advanced Materials</i> , 2013, 25, 5880-5885.	21.0	194
10	Plasmon-Enhanced Energy Transfer for Improved Upconversion of Infrared Radiation in Doped-Lanthanide Nanocrystals. <i>Nano Letters</i> , 2014, 14, 101-106.	9.1	194
11	Liquid crystals of aqueous, giant graphene oxide flakes. <i>Soft Matter</i> , 2011, 7, 11154.	2.7	175
12	Electrically and Optically Tunable Plasmonic Guest-Host Liquid Crystals with Long-Range Ordered Nanoparticles. <i>Nano Letters</i> , 2014, 14, 4071-4077.	9.1	163
13	Ordered Droplet Structures at the Liquid Crystal Surface and Elastic-Capillary Colloidal Interactions. <i>Physical Review Letters</i> , 2004, 93, 117801.	7.8	161
14	Mutually tangled colloidal knots and induced defect loops in nematic fields. <i>Nature Materials</i> , 2014, 13, 258-263.	27.5	158
15	Two-dimensional skyrmion bags in liquid crystals and ferromagnets. <i>Nature Physics</i> , 2019, 15, 655-659.	16.7	140
16	Metal Nanoparticle Dispersion, Alignment, and Assembly in Nematic Liquid Crystals for Applications in Switchable Plasmonic Color Filters and E-Polarizers. <i>ACS Nano</i> , 2015, 9, 3097-3108.	14.6	137
17	Real-time microbe detection based on director distortions around growing immune complexes in lyotropic chromonic liquid crystals. <i>Physical Review E</i> , 2005, 71, 020702.	2.1	135
18	Static three-dimensional topological solitons in fluid chiral ferromagnets and colloids. <i>Nature Materials</i> , 2017, 16, 426-432.	27.5	131

#	ARTICLE	IF	CITATIONS
19	Shape-Dependent Oriented Trapping and Scaffolding of Plasmonic Nanoparticles by Topological Defects for Self-Assembly of Colloidal Dimers in Liquid Crystals. <i>Nano Letters</i> , 2012, 12, 955-963.	9.1	130
20	Orientationally Ordered Colloidal Co-Dispersions of Gold Nanorods and Cellulose Nanocrystals. <i>Advanced Materials</i> , 2014, 26, 7178-7184.	21.0	127
21	Liquid Crystal Colloids. <i>Annual Review of Condensed Matter Physics</i> , 2018, 9, 207-226.	14.5	118
22	Cellulose Nanocrystal/Poly(ethylene glycol) Composite as an Iridescent Coating on Polymer Substrates: Structure-Color and Interface Adhesion. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 32565-32573.	8.0	116
23	Tunable optical metamaterial based on liquid crystal-gold nanosphere composite. <i>Optics Express</i> , 2009, 17, 19459.	3.4	111
24	Two-dimensional skyrmions and other solitonic structures in confinement-frustrated chiral nematics. <i>Physical Review E</i> , 2014, 90, 012505.	2.1	109
25	Three-dimensional director structures of defects in Grandjean-Cano wedges of cholesteric liquid crystals studied by fluorescence confocal polarizing microscopy. <i>Physical Review E</i> , 2002, 66, 051703.	2.1	108
26	Optical trapping of colloidal particles and measurement of the defect line tension and colloidal forces in a thermotropic nematic liquid crystal. <i>Applied Physics Letters</i> , 2005, 86, 021913.	3.3	106
27	Generating the Hopf Fibration Experimentally in Nematic Liquid Crystals. <i>Physical Review Letters</i> , 2013, 110, 237801.	7.8	97
28	Lyotropic Chromonic Liquid Crystals for Biological Sensing Applications. <i>Molecular Crystals and Liquid Crystals</i> , 2005, 434, 259/[587]-270/[598].	0.9	94
29	Multimodal nonlinear optical polarizing microscopy of long-range molecular order in liquid crystals. <i>Optics Letters</i> , 2010, 35, 3447.	3.3	92
30	Electric-field-induced nematic-cholesteric transition and three-dimensional director structures in homeotropic cells. <i>Physical Review E</i> , 2005, 72, 061707.	2.1	91
31	Triclinic nematic colloidal crystals from competing elastic and electrostatic interactions. <i>Science</i> , 2016, 352, 69-73.	12.6	87
32	Self-assembly and electrostriction of arrays and chains of hopfion particles in chiral liquid crystals. <i>Nature Communications</i> , 2015, 6, 6012.	12.8	83
33	Diversity of Knot Solitons in Liquid Crystals Manifested by Linking of Preimages in Torons and Hopfions. <i>Physical Review X</i> , 2017, 7, .	8.9	81
34	Switchable two-dimensional gratings based on field-induced layer undulations in cholesteric liquid crystals. <i>Optics Letters</i> , 2005, 30, 349.	3.3	80
35	Laser trapping in anisotropic fluids and polarization-controlled particle dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 18048-18053.	7.1	80
36	Colloidal gold nanosphere dispersions in smectic liquid crystals and thin nanoparticle-decorated smectic films. <i>Journal of Applied Physics</i> , 2010, 107, .	2.5	80

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37	Large-area optoelastic manipulation of colloidal particles in liquid crystals using photoresponsive molecular surface monolayers. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20891-20896.	7.1	79
38	Static Hopf Solitons and Knotted Emergent Fields in Solid-State Noncentrosymmetric Magnetic Nanostructures. Physical Review Letters, 2018, 121, 187201.	7.8	78
39	Optical generation of crystalline, quasicrystalline, and arbitrary arrays of torons in confined cholesteric liquid crystals for patterning of optical vortices in laser beams. Physical Review E, 2012, 86, 021703.	2.1	77
40	Optical manipulation of shape-morphing elastomeric liquid crystal microparticles doped with gold nanocrystals. Applied Physics Letters, 2012, 100, .	3.3	76
41	Review: knots and other new topological effects in liquid crystals and colloids. Reports on Progress in Physics, 2020, 83, 106601.	20.1	75
42	Three dimensional optical manipulation and structural imaging of soft materials by use of laser tweezers and multimodal nonlinear microscopy. Optics Express, 2010, 18, 27658.	3.4	74
43	Biaxial ferromagnetic liquid crystal colloids. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10479-10484.	7.1	71
44	Organization of the polarization splay modulated smectic liquid crystal phase by topographic confinement. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21311-21315.	7.1	70
45	Elasticity-mediated nematiclike bacterial organization in model extracellular DNA matrix. Physical Review E, 2008, 78, 030701.	2.1	69
46	Nematic liquid crystal boojums with handles on colloidal handlebodies. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9231-9236.	7.1	67
47	Squirring motion of baby skyrmions in nematic fluids. Nature Communications, 2017, 8, 673.	12.8	67
48	Optical manipulation of colloids and defect structures in anisotropic liquid crystal fluids. Journal of Optics (United Kingdom), 2011, 13, 044001.	2.2	65
49	Plasmonic Complex Fluids of Nematiclike and Helicoidal Self-Assemblies of Gold Nanorods with a Negative Order Parameter. Physical Review Letters, 2012, 109, 088301.	7.8	65
50	Hybrid molecular-colloidal liquid crystals. Science, 2018, 360, 768-771.	12.6	65
51	Undulations of lamellar liquid crystals in cells with finite surface anchoring near and well above the threshold. Physical Review E, 2006, 74, 011712.	2.1	63
52	Four-ring achiral unsymmetrical bent core molecules forming strongly fluorescent smectic liquid crystals with spontaneous polar and chiral ordered B7 and B1 phases. Journal of Materials Chemistry, 2010, 20, 7332.	6.7	63
53	Towards Reconfigurable Optical Metamaterials: Colloidal Nanoparticle Self-Assembly and Self-Alignment in Liquid Crystals. Molecular Crystals and Liquid Crystals, 2011, 545, 3/[1227]-21/[1245].	0.9	63
54	Cellulose-Based Reflective Liquid Crystal Films as Optical Filters and Solar Gain Regulators. ACS Photonics, 2018, 5, 2468-2477.	6.6	63

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55	Flexible transparent aerogels as window retrofitting films and optical elements with tunable birefringence. <i>Nano Energy</i> , 2018, 48, 266-274.	16.0	63
56	Reconfigurable interactions and three-dimensional patterning of colloidal particles and defects in lamellar soft media. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 4744-4749.	7.1	62
57	Chiral liquid crystal colloids. <i>Nature Materials</i> , 2018, 17, 71-79.	27.5	62
58	Chiral Carbon Dots Synthesized on Cellulose Nanocrystals. <i>Advanced Optical Materials</i> , 2020, 8, 1901911.	7.3	61
59	Self-organized nonlinear gratings for ultrafast nanophotonics. <i>Nature Photonics</i> , 2019, 13, 494-499.	31.4	60
60	Three-dimensional crystals of adaptive knots. <i>Science</i> , 2019, 365, 1449-1453.	12.6	59
61	Optical generation, templating, and polymerization of three-dimensional arrays of liquid-crystal defects decorated by plasmonic nanoparticles. <i>Physical Review E</i> , 2013, 87, .	2.1	58
62	Coherent anti-Stokes Raman scattering polarized microscopy of three-dimensional director structures in liquid crystals. <i>Applied Physics Letters</i> , 2007, 91, 151905.	3.3	57
63	Anchoring-Mediated Interaction of Edge Dislocations with Bounding Surfaces in Confined Cholesteric Liquid Crystals. <i>Physical Review Letters</i> , 2003, 90, 085503.	7.8	56
64	Electrically Driven Multiaxis Rotational Dynamics of Colloidal Platelets in Nematic Liquid Crystals. <i>Physical Review Letters</i> , 2010, 105, 178301.	7.8	56
65	Three-dimensional patterning of solid microstructures through laser reduction of colloidal graphene oxide in liquid-crystalline dispersions. <i>Nature Communications</i> , 2015, 6, 7157.	12.8	56
66	Experimental realization of crossover in shape and director field of nematic tactoids. <i>Physical Review E</i> , 2015, 91, 042507.	2.1	56
67	Three-dimensional parallel particle manipulation and tracking by integrating holographic optical tweezers and engineered point spread functions. <i>Optics Express</i> , 2011, 19, 3835.	3.4	52
68	Dispersion and orientation of single-walled carbon nanotubes in a chromonic liquid crystal. <i>Liquid Crystals</i> , 2013, 40, 1628-1635.	2.2	52
69	Laser-directed hierarchical assembly of liquid crystal defects and control of optical phase singularities. <i>Scientific Reports</i> , 2012, 2, 414.	3.3	49
70	Optical trapping of director structures and defects in liquid crystals using laser tweezers. <i>Optics Express</i> , 2007, 15, 4359.	3.4	48
71	Rotational and translational diffusion of anisotropic gold nanoparticles in liquid crystals controlled by varying surface anchoring. <i>Physical Review E</i> , 2013, 88, 062507.	2.1	48
72	Ferromagnetic Switching of Knotted Vector Fields in Liquid Crystal Colloids. <i>Physical Review Letters</i> , 2015, 115, 097802.	7.8	48

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73	Electrorotation of colloidal particles in liquid crystals. <i>Physical Review E</i> , 2005, 72, 031704.	2.1	47
74	Three-dimensional imaging of liquid crystal structures and defects by means of holographic manipulation of colloidal nanowires with faceted sidewalls. <i>Soft Matter</i> , 2011, 7, 6304.	2.7	46
75	Towards Template-Assisted Assembly of Nematic Colloids. <i>Physical Review Letters</i> , 2014, 112, 225501.	7.8	46
76	Alignment of high-aspect ratio colloidal gold nanoplatelets in nematic liquid crystals. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	45
77	Large range electrically-induced reflection notch tuning in polymer stabilized cholesteric liquid crystals. <i>Journal of Materials Chemistry C</i> , 2015, 3, 8788-8793.	5.5	45
78	Symmetry control of nanorod superlattice driven by a governing force. <i>Nature Communications</i> , 2017, 8, 1410.	12.8	45
79	Thermal conductivity model for nanofiber networks. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	45
80	Hexadecapolar colloids. <i>Nature Communications</i> , 2016, 7, 10659.	12.8	43
81	Topological transformations of Hopf solitons in chiral ferromagnets and liquid crystals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 921-926.	7.1	43
82	Thermal Management by Engineering the Alignment of Nanocellulose. <i>Advanced Materials</i> , 2021, 33, e2001228.	21.0	43
83	Orientation of a Helical Nanofilament (B4) Liquidâ€™Crystal Phase: Topographic Control of Confinement, Shear Flow, and Temperature Gradients. <i>Advanced Materials</i> , 2011, 23, 1962-1967.	21.0	42
84	Active Shape-Morphing Elastomeric Colloids in Short-Pitch Cholesteric Liquid Crystals. <i>Physical Review Letters</i> , 2013, 110, 187802.	7.8	42
85	Selective imaging of 3D director fields and study of defects in biaxial smectic A liquid crystals. <i>European Physical Journal E</i> , 2005, 16, 179-191.	1.6	40
86	Geometry-guided colloidal interactions and self-tiling of elastic dipoles formed by truncated pyramid particles in liquid crystals. <i>Physical Review E</i> , 2015, 91, 040501.	2.1	40
87	Optical manipulation of self-aligned graphene flakes in liquid crystals. <i>Optics Express</i> , 2013, 21, 1324.	3.4	39
88	Preparation of Nanocomposite Plasmonic Films Made from Cellulose Nanocrystals or Mesoporous Silica Decorated with Unidirectionally Aligned Gold Nanorods. <i>Materials</i> , 2014, 7, 3021-3033.	2.9	39
89	Homeotropic Alignment and Director Structures in Thin Films of Triphenylamine-Based Discotic Liquid Crystals Controlled by Supporting Nanostructured Substrates and Surface Confinement. <i>Journal of Physical Chemistry B</i> , 2011, 115, 609-617.	2.6	38
90	Nonlinear Photoluminescence Imaging of Isotropic and Liquid Crystalline Dispersions of Graphene Oxide. <i>ACS Nano</i> , 2012, 6, 8060-8066.	14.6	38

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91	Self-assembled nematic colloidal motors powered by light. <i>Nature Communications</i> , 2018, 9, 5040.	12.8	38
92	Splitting, linking, knotting, and solitonic escape of topological defects in nematic drops with handles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 16268-16273.	7.1	37
93	Schools of skyrmions with electrically tunable elastic interactions. <i>Nature Communications</i> , 2019, 10, 4744.	12.8	37
94	Optical Trapping, Manipulation, and 3D Imaging of Disclinations in Liquid Crystals and Measurement of their Line Tension. <i>Molecular Crystals and Liquid Crystals</i> , 2006, 450, 79/[279]-95/[295].	0.9	36
95	Liquid crystalline cellulose-based nematogels. <i>Science Advances</i> , 2017, 3, e1700981.	10.3	36
96	Mesostructured Composite Materials with Electrically Tunable Upconverting Properties. <i>Small</i> , 2015, 11, 5572-5580.	10.0	35
97	Self-Assembly of Cellulose Nanocrystals into Semi-Spherical Photonic Cholesteric Films. <i>Advanced Functional Materials</i> , 2018, 28, 1803852.	14.9	35
98	Pristine Polysulfone Networks as a Class of Polysulfide-Derived High-Performance Functional Materials. <i>Chemistry of Materials</i> , 2016, 28, 5102-5109.	6.7	34
99	Dynamics of topological solitons, knotted streamlines, and transport of cargo in liquid crystals. <i>Physical Review E</i> , 2018, 97, 052701.	2.1	34
100	Elastic colloidal monopoles and reconfigurable self-assembly in liquid crystals. <i>Nature</i> , 2019, 570, 214-218.	27.8	34
101	Surface anchoring as a control parameter for stabilizing torons, skyrmions, twisted walls, fingers, and their hybrids in chiral nematics. <i>Physical Review E</i> , 2020, 101, 042702.	2.1	34
102	Topological Polymer Dispersed Liquid Crystals with Bulk Nematic Defect Lines Pinned to Handlebody Surfaces. <i>Physical Review Letters</i> , 2014, 112, 197801.	7.8	33
103	Shape-dependent dispersion and alignment of nonaggregating plasmonic gold nanoparticles in lyotropic and thermotropic liquid crystals. <i>Physical Review E</i> , 2014, 89, 052505.	2.1	33
104	Linked topological colloids in a nematic host. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 4546-4551.	7.1	32
105	Hopf Solitons in Helical and Conical Backgrounds of Chiral Magnetic Solids. <i>Physical Review Letters</i> , 2020, 125, 057201.	7.8	32
106	Realignment-enhanced coherent anti-Stokes Raman scattering and three-dimensional imaging in anisotropic fluids. <i>Optics Express</i> , 2008, 16, 10617.	3.4	30
107	Optically generated reconfigurable photonic structures of elastic quasiparticles in frustrated cholesteric liquid crystals. <i>Optics Express</i> , 2012, 20, 6870.	3.4	30
108	Aerogel from Sustainably Grown Bacterial Cellulose Pellicles as a Thermally Insulative Film for Building Envelopes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 34115-34121.	8.0	29

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109	Magnetically responsive gourd-shaped colloidal particles in cholesteric liquid crystals. <i>Soft Matter</i> , 2014, 10, 6014-6023.	2.7	28
110	Real-space observation of skyrmion clusters with mutually orthogonal skyrmion tubes. <i>Physical Review B</i> , 2019, 100, .	3.2	28
111	Three-dimensional textures and defects of soft material layering revealed by thermal sublimation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 19263-19267.	7.1	27
112	Optical patterning of magnetic domains and defects in ferromagnetic liquid crystal colloids. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	27
113	Directed vertical alignment liquid crystal display with fast switching. <i>Applied Physics Letters</i> , 2006, 88, 061110.	3.3	26
114	Elastic interactions between colloidal microspheres and elongated convex and concave nanoprisms in nematic liquid crystals. <i>Soft Matter</i> , 2012, 8, 8729.	2.7	26
115	Liquid Crystalline Nanocolloids for the Storage of Electro-Optic Responsive Images. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 8612-8624.	8.0	25
116	Thermally reconfigurable monoclinic nematic colloidal fluids. <i>Nature</i> , 2021, 590, 268-274.	27.8	25
117	Optically generated adaptive localized structures in confined chiral liquid crystals doped with fullerene. <i>Applied Physics Letters</i> , 2010, 97, 201906.	3.3	24
118	Self-assembly of skyrmion-dressed chiral nematic colloids with tangential anchoring. <i>Physical Review E</i> , 2014, 89, 060502.	2.1	24
119	Topological Switching and Orbiting Dynamics of Colloidal Spheres Dressed with Chiral Nematic Solitons. <i>Scientific Reports</i> , 2015, 4, 7337.	3.3	24
120	Tuning and Switching a Plasmonic Quantum Dot "Sandwich" in a Nematic Line Defect. <i>ACS Nano</i> , 2018, 12, 2580-2590.	14.6	24
121	Liquid crystal self-assembly of upconversion nanorods enriched by depletion forces for mesostructured material preparation. <i>Nanoscale</i> , 2018, 10, 4218-4227.	5.6	24
122	Programmable Ultralight Magnets via Orientational Arrangement of Ferromagnetic Nanoparticles within Aerogel Hosts. <i>ACS Nano</i> , 2019, 13, 13875-13883.	14.6	24
123	Light-controlled skyrmions and torons as reconfigurable particles. <i>Optics Express</i> , 2019, 27, 29055.	3.4	24
124	Reversal of helicoidal twist handedness near point defects of confined chiral liquid crystals. <i>Physical Review E</i> , 2016, 93, 052702.	2.1	23
125	Highly Luminescent Liquid Crystals in Aggregation Based on Platinum(II) Complexes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 53058-53066.	8.0	23
126	Computer Simulations and Fluorescence Confocal Polarizing Microscopy of Structures in Cholesteric Liquid Crystals. , 2001, , 229-270.		23

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127	Cellulose nanocrystal chiral photonic micro-flakes for multilevel anti-counterfeiting and identification. <i>Chemical Engineering Journal</i> , 2022, 446, 136630.	12.7	23
128	Templating of Self-Alignment Patterns of Anisotropic Gold Nanoparticles on Ordered SWNT Macrostructures. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 3718-3724.	8.0	22
129	Electric Switching of Fluorescence Decay in Gold-Silica-Dye Nematic Nanocolloids Mediated by Surface Plasmons. <i>ACS Nano</i> , 2016, 10, 7064-7072.	14.6	22
130	Liquid-crystal periodic zigzags from geometrical and surface-anchoring-induced confinement: Origin and internal structure from mesoscopic scale to molecular level. <i>Physical Review E</i> , 2010, 82, 041705.	2.1	21
131	Measurement of viscosity of lyotropic liquid crystals by means of rotating laser-trapped microparticles. <i>Optics Express</i> , 2011, 19, 25134.	3.4	21
132	Three-dimensional complex-shaped photopolymerized microparticles at liquid crystal interfaces. <i>Soft Matter</i> , 2012, 8, 2432.	2.7	21
133	Topology and self-assembly of defect-colloidal superstructure in confined chiral nematic liquid crystals. <i>Physical Review E</i> , 2015, 91, 012501.	2.1	21
134	Electrostatically controlled surface boundary conditions in nematic liquid crystals and colloids. <i>Science Advances</i> , 2019, 5, eaax4257.	10.3	21
135	Field-driven metamorphoses of isolated skyrmions within the conical state of cubic helimagnets. <i>Physical Review B</i> , 2021, 104, .	3.2	21
136	Self-assembly of pre-designed optical materials in nematic codispersions of plasmonic nanorods. <i>Optics Letters</i> , 2016, 41, 4899.	3.3	21
137	Electric-field-induced deformation dynamics of a single nematic disclination. <i>Physical Review E</i> , 2005, 71, 061705.	2.1	20
138	Fluorescent lanthanide complexes of Schiff base ligands possessing <i>N</i> -aryl moiety: influence of chain length on crossover (calamitic to discotic) phase behaviour. <i>Liquid Crystals</i> , 2010, 37, 1393-1410.	2.2	20
139	Alignment of the columnar liquid crystal phase of nano-DNA by confinement in channels. <i>Liquid Crystals</i> , 2012, 39, 571-577.	2.2	20
140	Topological solitons, cholesteric fingers and singular defect lines in Janus liquid crystal shells. <i>Soft Matter</i> , 2020, 16, 2669-2682.	2.7	20
141	Hopfions, heliknotons, skyrmions, torons and both abelian and nonabelian vortices in chiral liquid crystals. <i>Liquid Crystals Reviews</i> , 2022, 10, 34-68.	4.1	20
142	Self-Alignment of Dye Molecules in Micelles and Lamellae for Three-Dimensional Imaging of Lyotropic Liquid Crystals. <i>Langmuir</i> , 2011, 27, 7446-7452.	3.5	19
143	Light-driven dynamic Archimedes spirals and periodic oscillatory patterns of topological solitons in anisotropic soft matter. <i>Optics Express</i> , 2015, 23, 4591.	3.4	19
144	Hierarchy of Periodic Patterns in the Twist-bend Nematic Phase of Mesogenic Dimers. <i>Molecular Crystals and Liquid Crystals</i> , 2015, 611, 180-185.	0.9	19

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145	Holographic polymer nanocomposites with simultaneously boosted diffraction efficiency and upconversion photoluminescence. <i>Composites Science and Technology</i> , 2019, 181, 107705.	7.8	19
146	Control of Light by Topological Solitons in Soft Chiral Birefringent Media. <i>Physical Review X</i> , 2020, 10, .	8.9	19
147	High-order elastic multipoles as colloidal atoms. <i>Nature Communications</i> , 2019, 10, 1825.	12.8	18
148	Degenerate conic anchoring and colloidal elastic dipole-hexadecapole transformations. <i>Nature Communications</i> , 2019, 10, 1000.	12.8	18
149	Interaction and co-assembly of optical and topological solitons. <i>Nature Photonics</i> , 2022, 16, 454-461.	31.4	18
150	Confocal Microscopy of Director Structures in Strongly Confined and Composite Systems. <i>Molecular Crystals and Liquid Crystals</i> , 2007, 477, 23-41.	0.9	17
151	Self-Organized Gels in DNA/F-Actin Mixtures without Crosslinkers: Networks of Induced Nematic Domains with Tunable Density. <i>Physical Review Letters</i> , 2008, 101, 218303.	7.8	17
152	Plasmon-Exciton Interactions Probed Using Spatial Coentrapment of Nanoparticles by Topological Singularities. <i>ACS Nano</i> , 2015, 9, 12392-12400.	14.6	17
153	Colloidal Surfaces with Boundaries, Apex Boojums, and Nested Elastic Self-Assembly of Nematic Colloids. <i>Physical Review Letters</i> , 2016, 117, 277801.	7.8	17
154	Plasmonic Metamaterial Gels with Spatially Patterned Orientational Order via 3D Printing. <i>ACS Omega</i> , 2019, 4, 20558-20563.	3.5	17
155	Visible Light Rewritable and Long-Lived Colors in Cholesteric Liquid Crystals: A Facile Co-Doping Strategy. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1900037.	3.9	17
156	Colloidal plasmonic DNA-origami with photo-switchable chirality in liquid crystals. <i>Optics Letters</i> , 2019, 44, 2831.	3.3	17
157	Geometrically unrestricted, topologically constrained control of liquid crystal defects using simultaneous holonomic magnetic and holographic optical manipulation. <i>Physical Review E</i> , 2014, 89, 022505.	2.1	16
158	Edge pinning and transformation of defect lines induced by faceted colloidal rings in nematic liquid crystals. <i>Physical Review E</i> , 2016, 93, 062704.	2.1	16
159	Self-organization of nanoparticles and molecules in periodic Liesegang-type structures. <i>Science Advances</i> , 2021, 7, .	10.3	16
160	Healing of Defects at the Interface of Nematic Liquid Crystals and Structured Langmuir-Blodgett Monolayers. <i>Physical Review Letters</i> , 2011, 107, 177801.	7.8	15
161	Liquid Crystals under Confinement in Submicrometer Capsules. <i>Langmuir</i> , 2018, 34, 10955-10963.	3.5	15
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