

Alenka Mertelj

List of Publications by Year in descending order

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76
papers

2,675
citations

172457

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189892

50
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79
docs citations

79
times ranked

2584
citing authors

#	ARTICLE	IF	CITATIONS
1	Isotropic to nematic transition in alcohol ferrofluids of barium hexaferrite nanoplatelets. <i>Journal of Molecular Liquids</i> , 2022, 348, 118038.	4.9	6
2	Blue Phase III: Topological Fluid of Skyrmions. <i>Physical Review X</i> , 2022, 12, .	8.9	3
3	Magnetic dynamics in suspensions of ferrimagnetic platelets. <i>Journal of Molecular Liquids</i> , 2022, 360, 119484.	4.9	3
4	New Insights into Amino-Functionalization of Magnetic Nanoplatelets with Silanes and Phosphonates. <i>Nanomaterials</i> , 2022, 12, 2123.	4.1	1
5	Experimental analysis of the stability of ferrofluids based on Iron Oxide powder. <i>Inżynieria Bezpieczeństwa Obiektów Antropogenicznych</i> , 2021, , 1-6.	0.2	0
6	Electrooptics of mm-scale polar domains in the ferroelectric nematic phase. <i>Liquid Crystals</i> , 2021, 48, 2055-2071.	2.2	47
7	On the molecular origins of the ferroelectric splay nematic phase. <i>Nature Communications</i> , 2021, 12, 4962.	12.8	61
8	Preparation of Barium-Hexaferrite/Gold Janus Nanoplatelets Using the Pickering Emulsion Method. <i>Nanomaterials</i> , 2021, 11, 2797.	4.1	0
9	Formation of Fe(III)-phosphonate Coatings on Barium Hexaferrite Nanoplatelets for Porous Nanomagnets. <i>ACS Omega</i> , 2020, 5, 14086-14095.	3.5	9
10	Q-tensor model of twist-bend and splay nematic phases. <i>Physical Review E</i> , 2020, 101, 022704.	2.1	24
11	Ferroelectric-Ferroelastic Phase Transition in a Nematic Liquid Crystal. <i>Physical Review Letters</i> , 2020, 124, 037801.	7.8	123
12	Acrylate-Based Hybrid Sol-Gel Coating for Corrosion Protection of AA7075-T6 in Aircraft Applications: The Effect of Copolymerization Time. <i>Polymers</i> , 2020, 12, 948.	4.5	22
13	The influence of polydispersity on the structural properties of the isotropic phase of magnetic nanoplatelets. <i>Journal of Molecular Liquids</i> , 2020, 312, 113293.	4.9	5
14	Orientational order in the splay nematic ground state. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 18769-18772.	2.8	34
15	Magnetic Nanoplatelets for High Contrast Cardiovascular Imaging by Magnetically Modulated Optical Coherence Tomography. <i>ChemPhotoChem</i> , 2019, 3, 503-503.	3.0	0
16	Optical second harmonic generation in a ferromagnetic liquid crystal. <i>Soft Matter</i> , 2019, 15, 8758-8765.	2.7	2
17	Electrostatic Interactions between Barium Hexaferrite Nanoplatelets in Alcohol Suspensions. <i>Journal of Physical Chemistry C</i> , 2019, 123, 23272-23279.	3.1	13
18	Evolution of nematic and ferromagnetic ordering in suspensions of magnetic nanoplatelets. <i>Soft Matter</i> , 2019, 15, 5412-5420.	2.7	16

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19	Magnetic Nanoplatelets for High Contrast Cardiovascular Imaging by Magnetically Modulated Optical Coherence Tomography. <i>ChemPhotoChem</i> , 2019, 3, 529-539.	3.0	16
20	Conference report FLC 2019: frontiers of chirality and polarity in soft matter. <i>Liquid Crystals Today</i> , 2019, 28, 74-75.	2.3	0
21	Magnetically tunable optical diffraction gratings based on a ferromagnetic liquid crystal. <i>Optics Express</i> , 2019, 27, 8900.	3.4	12
22	Magnetically controllable random laser in ferromagnetic nematic liquid crystals. <i>Optics Express</i> , 2019, 27, 24426.	3.4	19
23	Magneto-optic dynamics in a ferromagnetic nematic liquid crystal. <i>Physical Review E</i> , 2018, 97, 012701.	2.1	30
24	Anisotropic magnetic nanoparticles: A review of their properties, syntheses and potential applications. <i>Progress in Materials Science</i> , 2018, 95, 286-328.	32.8	229
25	Comparison of dynamic behavior of ferroelectric and ferromagnetic nematic suspensions. <i>Journal of Molecular Liquids</i> , 2018, 267, 377-383.	4.9	9
26	Splay Nematic Phase. <i>Physical Review X</i> , 2018, 8, .	8.9	61
27	Functionalization of iron oxide nanoparticles with methacrylate-based monomers for preparation of nanocomposites. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	0
28	Nanocomposites comprised of homogeneously dispersed magnetic iron-oxide nanoparticles and poly(methyl methacrylate). <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 1613-1622.	2.8	11
29	Director reorientation dynamics of ferromagnetic nematic liquid crystals. <i>Soft Matter</i> , 2018, 14, 7180-7189.	2.7	17
30	Ferromagnetic nematic liquid crystals. <i>Liquid Crystals Reviews</i> , 2017, 5, 1-33.	4.1	86
31	Field-controlled structures in ferromagnetic cholesteric liquid crystals. <i>Science Advances</i> , 2017, 3, e1701336.	10.3	31
32	Dynamic Magneto-optic Coupling in a Ferromagnetic Nematic Liquid Crystal. <i>Physical Review Letters</i> , 2017, 119, 097802.	7.8	29
33	Magnetic-field tuning of whispering gallery mode lasing from ferromagnetic nematic liquid crystal microdroplets. <i>Optics Express</i> , 2017, 25, 1073.	3.4	34
34	Spontaneous liquid crystal and ferromagnetic ordering of colloidal magnetic nanoplates. <i>Nature Communications</i> , 2016, 7, 10394.	12.8	94
35	Adsorption of Amino Acids, Aspartic Acid, and Lysine onto Iron-Oxide Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2016, 120, 14372-14381.	3.1	37
36	Composition, structure and morphology of hybrid acrylate-based sol-gel coatings containing Si and Zr composed for protective applications. <i>Surface and Coatings Technology</i> , 2016, 286, 388-396.	4.8	30

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37	Magnetodielectric and magnetoviscosity response of a ferromagnetic liquid crystal at low magnetic fields. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	37
38	Monolithic Magneto-Optical Nanocomposites of Barium Hexaferrite Platelets in PMMA. <i>Scientific Reports</i> , 2015, 5, 11395.	3.3	33
39	Ferromagnetic liquid crystals for magnetic field visualisation. <i>Liquid Crystals</i> , 2015, 42, 1684-1688.	2.2	20
40	Phase transitions, optical, dielectric and viscoelastic properties of colloidal suspensions of BaTiO ₃ nanoparticles and cyanobiphenyl liquid crystals. <i>Liquid Crystals</i> , 2015, 42, 1059-1067.	2.2	31
41	Controlled heteroaggregation of two types of nanoparticles in an aqueous suspension. <i>Journal of Colloid and Interface Science</i> , 2015, 438, 235-243.	9.4	35
42	Magneto-optic and converse magnetoelectric effects in a ferromagnetic liquid crystal. <i>Soft Matter</i> , 2014, 10, 9065-9072.	2.7	92
43	Influence of the Morphology of Ferrite Nanoparticles on the Directed Assembly into Magnetically Anisotropic Hierarchical Structures. <i>Langmuir</i> , 2014, 30, 6588-6595.	3.5	14
44	Chemically induced twist-bend nematic liquid crystals, liquid crystal dimers, and negative elastic constants. <i>Physical Review E</i> , 2013, 88, 022503.	2.1	180
45	Ferromagnetism in suspensions of magnetic platelets in liquid crystal. <i>Nature</i> , 2013, 504, 237-241.	27.8	254
46	Design of a single-chain polypeptide tetrahedron assembled from coiled-coil segments. <i>Nature Chemical Biology</i> , 2013, 9, 362-366.	8.0	272
47	Flow and anchoring effects on nematic fluctuations in confined geometry. <i>Liquid Crystals</i> , 2013, 40, 1646-1654.	2.2	6
48	Effect of inorganic 1D nanoparticles on electrooptic properties of 5CB liquid crystal. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 2328-2334.	1.8	14
49	Critical behavior of director fluctuations in suspensions of ferroelectric nanoparticles in liquid crystals at the nematic to smectic- A phase transition. <i>Physical Review E</i> , 2012, 85, 021705.	2.1	15
50	Anisotropic microrheological properties of chain-forming magnetic fluids. <i>Soft Matter</i> , 2011, 7, 125-131.	2.7	19
51	Superparamagnetic nanocomposite particles synthesized using the mini-emulsion technique. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2010, 366, 113-119.	4.7	20
52	Enhanced Magneto-Optical Properties of Suspensions of Spindle Type Mono-Dispersed Hematite Nano-Particles in Liquid Crystal. <i>Molecular Crystals and Liquid Crystals</i> , 2010, 525, 104-111.	0.9	28
53	Anomalous diffusion in ferrofluids. <i>Physical Review E</i> , 2009, 79, 041402.	2.1	34
54	Anisotropic diffusion of light in polymer dispersed liquid crystals. <i>Physical Review E</i> , 2007, 75, 011705.	2.1	11

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55	Band Structure of Orientational Modes in Quasiperiodic Mesoscale Liquid-Crystal-Polymer Dispersions. <i>Physical Review Letters</i> , 2007, 98, .	7.8	0
56	Coupled director and polarization fluctuations in suspensions of ferroelectric nanoparticles in nematic liquid crystals. <i>Physical Review E</i> , 2007, 76, 011702.	2.1	37
57	Visco-Elastic Properties of Nematic-MoS ₂ -Nanotubes Mixtures. <i>Molecular Crystals and Liquid Crystals</i> , 2005, 435, 163/[823]-172/[832].	0.9	5
58	Observation of thermal fluctuations of disclination lines in a nematic liquid crystal. <i>Physical Review E</i> , 2004, 69, 021711.	2.1	12
59	Thermal Fluctuations of Disclination Lines in a Thin Nematic Film. <i>Molecular Crystals and Liquid Crystals</i> , 2003, 395, 311-316.	0.9	0
60	Dynamic Light Scattering in Confined Liquid Crystals. , 2003, , 498-517.		0
61	Rotational diffusion in a bistable potential. <i>Europhysics Letters</i> , 2002, 59, 337-343.	2.0	16
62	Dynamic light scattering measurements of azimuthal and zenithal anchoring of nematic liquid crystals. <i>Physical Review E</i> , 2002, 65, 041712.	2.1	33
63	Aging of surface anchoring and surface viscosity of a nematic liquid crystal on photoaligning poly-(vinyl-cinnamate). <i>Physical Review E</i> , 2001, 63, 061709.	2.1	45
64	Dynamic light scattering as a probe of orientational dynamics in confined liquid crystals. <i>Physical Review E</i> , 2000, 61, 1622-1628.	2.1	34
65	Dynamical Behavior of Liquid Crystals Containing Dispersed Silica Particles Near Sm A - N and N - I Phase Transitions. <i>Molecular Crystals and Liquid Crystals</i> , 1999, 331, 81-87.	0.3	8
66	Investigation of Encapsulation and Solvatochromism of Fullerenes in Binary Solvent Mixtures. <i>Journal of Physical Chemistry B</i> , 1999, 103, 11256-11260.	2.6	62
67	Surface-Dominated Orientational Dynamics and Surface Viscosity in Confined Liquid Crystals. <i>Physical Review Letters</i> , 1998, 81, 5844-5847.	7.8	52
68	Dynamic response of a nematic liquid crystal in silica aerogel in an external electric field. <i>Physical Review E</i> , 1998, 57, 6732-6736.	2.1	4
69	Reorientation in Random Potential: A Model for Glasslike Dynamics in Confined Liquid Crystals. <i>Physical Review Letters</i> , 1998, 80, 1449-1452.	7.8	25
70	Dynamic Light Scattering in Nematic Liquid Crystals in Confined Geometries. <i>Molecular Crystals and Liquid Crystals</i> , 1998, 320, 287-299.	0.3	5
71	Rotational diffusion and orientational fluctuations in polymer-dispersed liquid crystals. , 1998, , .		0
72	Evidence of dynamic long-range correlations in a nematic-liquid-crystal-aerogel system. <i>Physical Review E</i> , 1997, 55, 504-507.	2.1	35

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73	Dynamic light scattering in polymer-dispersed liquid crystals. Physical Review E, 1997, 56, 549-553.	2.1	44
74	Light Scattering Intensity Correlation Function in Disordered Nematic Systems. Molecular Crystals and Liquid Crystals, 1996, 282, 35-41.	0.3	6
75	Characterization of the pyroelectric effect in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$. Physical Review B, 1993, 48, 16634-16640.	3.2	23
76	Liquid Crystals: The Beautiful State of Matter. Alternator, 0, 4, .	0.0	0