

Hari Krishna Bisoyi

List of Publications by Year in descending order

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papers

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41344

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times ranked

5194
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#	ARTICLE	IF	CITATIONS
1	Light-Driven Liquid Crystalline Materials: From Photo-Induced Phase Transitions and Property Modulations to Applications. <i>Chemical Reviews</i> , 2016, 116, 15089-15166.	47.7	671
2	Liquid-crystal nanoscience: an emerging avenue of soft self-assembly. <i>Chemical Society Reviews</i> , 2011, 40, 306-319.	38.1	457
3	Three-dimensional control of the helical axis of a chiral nematic liquid crystal by light. <i>Nature</i> , 2016, 531, 352-356.	27.8	435
4	Light-Directing Chiral Liquid Crystal Nanostructures: From 1D to 3D. <i>Accounts of Chemical Research</i> , 2014, 47, 3184-3195.	15.6	357
5	Liquid Crystals: Versatile Self-Organized Smart Soft Materials. <i>Chemical Reviews</i> , 2022, 122, 4887-4926.	47.7	288
6	Discotic nematic liquid crystals: science and technology. <i>Chemical Society Reviews</i> , 2010, 39, 264-285.	38.1	270
7	Light-Directed Dynamic Chirality Inversion in Functional Self-Organized Helical Superstructures. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2994-3010.	13.8	237
8	Luminescence-Driven Reversible Handedness Inversion of Self-Organized Helical Superstructures Enabled by a Novel Near-Infrared Light Nanotransducer. <i>Advanced Materials</i> , 2015, 27, 2065-2069.	21.0	225
9	Near-Infrared Light-Driven Shape-Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 3390-3396.	13.8	213
10	Stimuli-Driven Control of the Helical Axis of Self-Organized Soft Helical Superstructures. <i>Advanced Materials</i> , 2018, 30, e1706512.	21.0	205
11	Stimuli-directed self-organized chiral superstructures for adaptive windows enabled by mesogen-functionalized graphene. <i>Materials Today</i> , 2017, 20, 230-237.	14.2	194
12	Dynamic Control of Light Direction Enabled by Stimuli-Responsive Liquid Crystal Gratings. <i>Advanced Materials</i> , 2019, 31, e1806172.	21.0	170
13	Red, Green and Blue Reflections Enabled in an Optically Tunable Self-Organized 3D Cubic Nanostructured Thin Film. <i>Advanced Materials</i> , 2013, 25, 5050-5054.	21.0	158
14	Optically Rewritable Transparent Liquid Crystal Displays Enabled by Light-Driven Chiral Fluorescent Molecular Switches. <i>Advanced Materials</i> , 2019, 31, e1807751.	21.0	153
15	Light-Directing Omnidirectional Circularly Polarized Reflection from Liquid-Crystal Droplets. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 2160-2164.	13.8	150
16	Stimulus-driven liquid metal and liquid crystal network actuators for programmable soft robotics. <i>Materials Horizons</i> , 2021, 8, 2475-2484.	12.2	142
17	Room temperature heliconical twist-bend nematic liquid crystal. <i>CrystEngComm</i> , 2015, 17, 2778-2782.	2.6	135
18	Photochemically and Thermally Driven Full-Color Reflection in a Self-Organized Helical Superstructure Enabled by a Halogen-Bonded Chiral Molecular Switch. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 1627-1631.	13.8	131

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19	Photoresponsive Monodisperse Cholesteric Liquid Crystalline Microshells for Tunable Omnidirectional Lasing Enabled by a Visible Light-Driven Chiral Molecular Switch. <i>Advanced Optical Materials</i> , 2014, 2, 845-848.	7.3	128
20	Bioinspired Phototropic MXene-Reinforced Soft Tubular Actuators for Omnidirectional Light-Tracking and Adaptive Photovoltaics. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	127
21	Bioinspired Synergistic Photochromic Luminescence and Programmable Liquid Crystal Actuators. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11247-11251.	13.8	125
22	Light-Patterned Crystallographic Direction of a Self-Organized 3D Soft Photonic Crystal. <i>Advanced Materials</i> , 2017, 29, 1703165.	21.0	120
23	Soft Materials Driven by Photothermal Effect and Their Applications. <i>Advanced Optical Materials</i> , 2018, 6, 1800458.	7.3	120
24	An Efficient Near-Infrared Emissive Artificial Supramolecular Light-Harvesting System for Imaging in the Golgi Apparatus. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10493-10497.	13.8	116
25	1,2-Dithienyldicyanoethene-Based, Visible-Light-Driven, Chiral Fluorescent Molecular Switch: Rewritable Multimodal Photonic Devices. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16052-16056.	13.8	112
26	Chirality invertible superstructure mediated active planar optics. <i>Nature Communications</i> , 2019, 10, 2518.	12.8	106
27	Covalent Adaptable Liquid Crystal Networks Enabled by Reversible Ring-Opening Cascades of Cyclic Disulfides. <i>Journal of the American Chemical Society</i> , 2021, 143, 12543-12551.	13.7	101
28	NIR light-directing self-organized 3D photonic superstructures loaded with anisotropic plasmonic hybrid nanorods. <i>Chemical Communications</i> , 2015, 51, 15039-15042.	4.1	92
29	Healable and Rearrangeable Networks of Liquid Crystal Elastomers Enabled by Diselenide Bonds. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16394-16398.	13.8	92
30	Thermo- and Mechanochromic Camouflage and Self-Healing in Biomimetic Soft Actuators Based on Liquid Crystal Elastomers. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202115755.	13.8	90
31	Carbon nanotubes in triphenylene and rufigallol-based room temperature monomeric and polymeric discotic liquid crystals. <i>Journal of Materials Chemistry</i> , 2008, 18, 3032.	6.7	87
32	Frequency-Driven Self-Organized Helical Superstructures Loaded with Mesogen-Grafted Silica Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13090-13094.	13.8	85
33	Optically reconfigurable chiral microspheres of self-organized helical superstructures with handedness inversion. <i>Materials Horizons</i> , 2017, 4, 1190-1195.	12.2	83
34	Solvent polarity driven helicity inversion and circularly polarized luminescence in chiral aggregation induced emission fluorophores. <i>Chemical Science</i> , 2020, 11, 9989-9993.	7.4	81
35	Thermally reversible full color selective reflection in a self-organized helical superstructure enabled by a bent-core oligomesogen exhibiting a twist-bend nematic phase. <i>Materials Horizons</i> , 2016, 3, 442-446.	12.2	80
36	Reversible Circularly Polarized Reflection in a Self-Organized Helical Superstructure Enabled by a Visible-Light-Driven Axially Chiral Molecular Switch. <i>Journal of the American Chemical Society</i> , 2019, 141, 8078-8082.	13.7	74

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37	The Halogen Bond: An Emerging Supramolecular Tool in the Design of Functional Mesomorphic Materials. <i>Chemistry - A European Journal</i> , 2019, 25, 1369-1378.	3.3	73
38	Visible-Light-Driven Halogen Bond Donor Based Molecular Switches: From Reversible Unwinding to Handedness Inversion in Self-Organized Soft Helical Superstructures. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 2684-2687.	13.8	69
39	Stimulated transformation of soft helix among helicoidal, heliconical, and their inverse helices. <i>Science Advances</i> , 2019, 5, eaax9501.	10.3	68
40	Carbon-based liquid crystals: art and science. <i>Liquid Crystals</i> , 2011, 38, 1427-1449.	2.2	67
41	Controllable Dynamic Zigzag Pattern Formation in a Soft Helical Superstructure. <i>Advanced Materials</i> , 2017, 29, 1701903.	21.0	67
42	Irradiation-Wavelength Directing Circularly Polarized Luminescence in Self-Organized Helical Superstructures Enabled by Hydrogen-Bonded Chiral Fluorescent Molecular Switches. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 27158-27163.	13.8	66
43	Dynamic Orthogonal Switching of a Thermoresponsive Self-Organized Helical Superstructure. <i>Advanced Materials</i> , 2017, 29, 1700676.	21.0	62
44	Light-Driven Wide-Range Nonmechanical Beam Steering and Spectrum Scanning Based on a Self-Organized Liquid Crystal Grating Enabled by a Chiral Molecular Switch. <i>Advanced Optical Materials</i> , 2015, 3, 166-170.	7.3	61
45	Stimuli directed alignment of self-organized one-dimensional semiconducting columnar liquid crystal nanostructures for organic electronics. <i>Progress in Materials Science</i> , 2019, 104, 1-52.	32.8	61
46	Light-Driven Reversible Transformation between Self-Organized Simple Cubic Lattice and Helical Superstructure Enabled by a Molecular Switch Functionalized Nanocage. <i>Advanced Materials</i> , 2018, 30, e1800237.	21.0	57
47	Air stable electron-transporting and ambipolar bay substituted perylene bisimides. <i>Journal of Materials Chemistry</i> , 2011, 21, 7811.	6.7	56
48	Light-fueled transient supramolecular assemblies in water as fluorescence modulators. <i>Nature Communications</i> , 2021, 12, 4993.	12.8	56
49	Liquid Crystals in Curved Confined Geometries: Microfluidics Bring New Capabilities for Photonic Applications and Beyond. <i>Langmuir</i> , 2021, 37, 3789-3807.	3.5	55
50	Lichtgesteuerte dynamische Chiralitätsumkehr in funktionalen selbstorganisierten helikalen Äßerstrukturen. <i>Angewandte Chemie</i> , 2016, 128, 3046-3063.	2.0	49
51	Visible Light-Driven Molecular Switches and Motors: Recent Developments and Applications. <i>Chemistry - A European Journal</i> , 2022, 28, .	3.3	48
52	Light-Driven Reversible Alignment Switching of Liquid Crystals Enabled by Azo Thiol Grafted Gold Nanoparticles. <i>ChemPhysChem</i> , 2015, 16, 1852-1856.	2.1	47
53	Stimuli-Driven Insulator-Conductor Transition in a Flexible Polymer Composite Enabled by Biphasic Liquid Metal. <i>Advanced Materials</i> , 2021, 33, e2104634.	21.0	43
54	Light-activated photodeformable supramolecular dissipative self-assemblies. <i>Nature Communications</i> , 2022, 13, .	12.8	43

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55	Hybrid rod-like and bent-core liquid crystal dimers exhibiting biaxial smectic A and nematic phases. <i>Journal of Materials Chemistry</i> , 2012, 22, 20363.	6.7	42
56	1,2- <i>Di</i> thienyldicyanoethene-Based, Visible-Light-Driven, Chiral Fluorescent Molecular Switch: Rewritable Multimodal Photonic Devices. <i>Angewandte Chemie</i> , 2019, 131, 16198-16202.	2.0	34
57	Microwave-assisted synthesis of rufigallol and its novel room-temperature liquid crystalline derivatives. <i>Tetrahedron Letters</i> , 2007, 48, 4399-4402.	1.4	33
58	Visible-Light-Induced Self-Organized Helical Superstructure in Orientationally Ordered Fluids. <i>Advanced Materials</i> , 2019, 31, e1902958.	21.0	30
59	Photochemically and Thermally Driven Full-Color Reflection in a Self-Organized Helical Superstructure Enabled by a Halogen-Bonded Chiral Molecular Switch. <i>Angewandte Chemie</i> , 2018, 130, 1643-1647.	2.0	28
60	Bioinspired Synergistic Photochromic Luminescence and Programmable Liquid Crystal Actuators. <i>Angewandte Chemie</i> , 2021, 133, 11347-11351.	2.0	28
61	A Liquid Crystal Elastomer-Based Unprecedented Two-Way Shape-Memory Aerogel. <i>Advanced Science</i> , 2021, 8, e2102674.	11.2	27
62	An Artificial Light-Harvesting System with Controllable Efficiency Enabled by an Annulene-Based Anisotropic Fluid. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	27
63	First examples of monodisperse discotic liquid crystal pentamers: synthesis and mesomorphism. <i>Tetrahedron Letters</i> , 2008, 49, 3628-3631.	1.4	26
64	Annular Structural Colors from Bowl-Like Shriveled Photonic Microshells of Cholesteric Liquid Crystals. <i>Advanced Optical Materials</i> , 2020, 8, 2000692.	7.3	26
65	Visible-Light-Driven Halogen Bond Donor Based Molecular Switches: From Reversible Unwinding to Handedness Inversion in Self-Organized Soft Helical Superstructures. <i>Angewandte Chemie</i> , 2020, 132, 2706-2709.	2.0	25
66	Frequency-Driven Self-Organized Helical Superstructures Loaded with Mesogen-Grafted Silica Nanoparticles. <i>Angewandte Chemie</i> , 2016, 128, 13284-13288.	2.0	24
67	Room-temperature electron-deficient discotic liquid crystals: facile synthesis and mesophase characterization. <i>New Journal of Chemistry</i> , 2008, 32, 1974.	2.8	21
68	Near-Infrared Light-Driven Shape-Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. <i>Angewandte Chemie</i> , 2021, 133, 3432-3438.	2.0	20
69	Synchronous Imaging in Golgi Apparatus and Lysosome Enabled by Amphiphilic Calixarene-Based Artificial Light-Harvesting Systems. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 22443-22453.	8.0	20
70	Synthesis of monohydroxy-functionalized triphenylene discotics: green chemistry approach. <i>Tetrahedron</i> , 2007, 63, 6874-6878.	1.9	18
71	Dicyanodistyrylthiophene-Based Emissive Chiral Photoswitches: Effect of the Position of the Cyano Group on Reversible Photoisomerization and Fatigue Resistance. <i>ChemPhotoChem</i> , 2019, 3, 480-486.	3.0	18
72	An Efficient Near-Infrared Emissive Artificial Supramolecular Light-Harvesting System for Imaging in the Golgi Apparatus. <i>Angewandte Chemie</i> , 2020, 132, 10579-10583.	2.0	18

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73	Microwave-assisted facile synthesis of liquid crystalline non-symmetrical hexaalkoxytriphenylenes containing a branched chain and their characterization. <i>Journal of Physical Organic Chemistry</i> , 2008, 21, 47-52.	1.9	16
74	Reversible On-Off of Chirality and Anisotropy in Patterned Coexistence of Achiral-Anisotropic and Chiral-Isotropic Soft Materials. <i>Advanced Optical Materials</i> , 2020, 8, 2000155.	7.3	16
75	Healable and Rearrangeable Networks of Liquid Crystal Elastomers Enabled by Diselenide Bonds. <i>Angewandte Chemie</i> , 2021, 133, 16530-16534.	2.0	16
76	Charge transport in a liquid crystalline triphenylene polymer monolayer at air-solid interface. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 12101-12107.	2.8	15
77	Unexpected organic hydrate luminogens in the solid state. <i>Nature Communications</i> , 2021, 12, 2339.	12.8	15
78	Photo and redox dual-stimuli-directed reversible disassembly and reassembly of linear supramolecular polymer formed by orthogonal host-guest molecular recognition. <i>Dyes and Pigments</i> , 2016, 132, 336-341.	3.7	14
79	Electro- and Photo-Driven Orthogonal Switching of a Helical Superstructure Enabled by an Axially Chiral Molecular Switch. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 55215-55222.	8.0	14
80	Combined electric and photocontrol of selective light reflection at an oblique helicoidal cholesteric liquid crystal doped with azoxybenzene derivative. <i>Physical Review E</i> , 2021, 104, 044702.	2.1	13
81	Microwave-assisted facile synthesis of liquid-crystalline alkoxycyanobiphenyls and their dimers. <i>Phase Transitions</i> , 2006, 79, 285-292.	1.3	11
82	Chiral and orientationally ordered fluid mesophases formed by oxadiazole bisaniline based achiral bent mesogens. <i>Liquid Crystals</i> , 2019, 46, 1373-1382.	2.2	10
83	Novel banana-discotic hybrid architectures. <i>Beilstein Journal of Organic Chemistry</i> , 2009, 5, 52.	2.2	9
84	An Artificial Light-Harvesting System with Controllable Efficiency Enabled by an Annulene-Based Anisotropic Fluid. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	9
85	Organic-inorganic hybrid liquid crystals of azopyridine-enabled halogen-bonding towards sensing in aquatic environment. <i>RSC Advances</i> , 2020, 10, 35873-35877.	3.6	8
86	Irradiation-Wavelength Directing Circularly Polarized Luminescence in Self-Organized Helical Superstructures Enabled by Hydrogen Bonded Chiral Fluorescent Molecular Switches. <i>Angewandte Chemie</i> , 0, , .	2.0	6
87	An ultrahigh fatigue resistant liquid crystal elastomer-based material enabled by liquid metal. <i>Science China Materials</i> , 2022, 65, 1679-1686.	6.3	6
88	Frontispiece: An Artificial Light-Harvesting System with Controllable Efficiency Enabled by an Annulene-Based Anisotropic Fluid. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	5
89	Thermo- and Mechanochromic Camouflage and Self-Healing in Biomimetic Soft Actuators Based on Liquid Crystal Elastomers. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	5
90	Microshells: Photoresponsive Monodisperse Cholesteric Liquid Crystalline Microshells for Tunable Omnidirectional Lasing Enabled by a Visible Light-Driven Chiral Molecular Switch (Advanced Optical) <i>Tj ETQq0 0 0 rgt /Overlock 10 Tf 5</i>	2.1	5

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91	Liquid Crystalline 1D and 2D Carbon Materials. Nanoscience and Technology, 2014, , 69-99.	1.5	2
92	Photochromic Bulk Materials. , 0, , 281-360.		2
93	A Liquid Crystal Elastomerâ€Based Unprecedented Twoâ€Way Shapeâ€Memory Aerogel (Adv. Sci. 22/2021). Advanced Science, 2021, 8, 2170151.	11.2	2
94	Frontispiece: Thermoâ€and Mechanochromic Camouflage and Selfâ€Healing in Biomimetic Soft Actuators Based on Liquid Crystal Elastomers. Angewandte Chemie - International Edition, 2022, 61, .	13.8	1
95	Frontispiece: Visible Lightâ€Driven Molecular Switches and Motors: Recent Developments and Applications. Chemistry - A European Journal, 2022, 28, .	3.3	1
96	Frontispiz: An Artificial Lightâ€Harvesting System with Controllable Efficiency Enabled by an Annuleneâ€Based Anisotropic Fluid. Angewandte Chemie, 2022, 134, .	2.0	1
97	Gratings: Light-Driven Wide-Range Nonmechanical Beam Steering and Spectrum Scanning Based on a Self-Organized Liquid Crystal Grating Enabled by a Chiral Molecular Switch (Advanced Optical) Tj ETQq1 1 0.7843143gBT /Overlock 10 Tf 50		
98	Adaptive Materials: Light-Driven Reversible Transformation between Self-Organized Simple Cubic Lattice and Helical Superstructure Enabled by a Molecular Switch Functionalized Nanocage (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50		
99	Frontispiece: Nearâ€Infrared Lightâ€Driven Shapeâ€Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. Angewandte Chemie - International Edition, 2021, 60, .	13.8	0
100	Frontispiz: Nearâ€Infrared Lightâ€Driven Shapeâ€Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. Angewandte Chemie, 2021, 133, .	2.0	0
101	InnenrÃ¼cktitelbild: Irradiationâ€Wavelength Directing Circularly Polarized Luminescence in Selfâ€Organized Helical Superstructures Enabled by Hydrogenâ€Bonded Chiral Fluorescent Molecular Switches (Angew. Chem. 52/2021). Angewandte Chemie, 2021, 133, 27539-27539.	2.0	0
102	Frontispiz: Thermoâ€and Mechanochromic Camouflage and Selfâ€Healing in Biomimetic Soft Actuators Based on Liquid Crystal Elastomers. Angewandte Chemie, 2022, 134, .	2.0	0