

# Chenhui Zhu

## List of Publications by Year in descending order

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53  
papers

2,434  
citations

201674

27  
h-index

206112

48  
g-index

54  
all docs

54  
docs citations

54  
times ranked

2336  
citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular engineering of organic-inorganic hybrid perovskites quantum wells. <i>Nature Chemistry</i> , 2019, 11, 1151-1157.	13.6	302
2	Reconfiguring the band-edge states of photovoltaic perovskites by conjugated organic cations. <i>Science</i> , 2021, 371, 636-640.	12.6	184
3	Heliconical smectic phases formed by achiral molecules. <i>Nature Communications</i> , 2018, 9, 228.	12.8	167
4	Resonant Carbon-K-Edge Soft X-Ray Scattering from Lattice-Free Heliconical Molecular Ordering: Soft Dilative Elasticity of the Twist-Bend Liquid Crystal Phase. <i>Physical Review Letters</i> , 2016, 116, 147803.	7.8	157
5	Multi-level chirality in liquid crystals formed by achiral molecules. <i>Nature Communications</i> , 2019, 10, 1922.	12.8	103
6	Sulfur-linked cyanobiphenyl-based liquid crystal dimers and the twist-bend nematic phase. <i>Liquid Crystals</i> , 2019, 46, 1595-1609.	2.2	85
7	Structure of nanoscale-pitch helical phases: blue phase and twist-bend nematic phase resolved by resonant soft X-ray scattering. <i>Soft Matter</i> , 2017, 13, 6694-6699.	2.7	70
8	Crystallization-Driven Two-Dimensional Nanosheet from Hierarchical Self-Assembly of Polypeptoid-Based Diblock Copolymers. <i>Macromolecules</i> , 2018, 51, 6344-6351.	4.8	70
9	Four-ring achiral unsymmetrical bent core molecules forming strongly fluorescent smectic liquid crystals with spontaneous polar and chiral ordered B7 and B1 phases. <i>Journal of Materials Chemistry</i> , 2010, 20, 7332.	6.7	63
10	Distinct differences in the nanoscale behaviors of the twist-bend liquid crystal phase of a flexible linear trimer and homologous dimer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 10698-10704.	7.1	62
11	Supramolecular Nanosheets Assembled from Poly(ethylene Terephthalate) Glycol Copolymer. <i>Macromolecules</i> , 2019, 52, 1546-1556.	4.8	59
12	Method for characterizing self-assembled monolayers as antireflection wall coatings for alkali vapor cells. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	57
13	Effect of the chlorine substitution position of the end-group on intermolecular interactions and photovoltaic performance of small molecule acceptors. <i>Energy and Environmental Science</i> , 2020, 13, 5028-5038.	30.8	56
14	Liquid crystal elastomer foams with elastic properties specifically engineered as biodegradable brain tissue scaffolds. <i>Soft Matter</i> , 2018, 14, 354-360.	2.7	55
15	Nanoconfinement of guest materials by helical nanofilament networks of bent-core mesogens. <i>Soft Matter</i> , 2013, 9, 462-471.	2.7	51
16	Effects of Short-Chain Alkoxy Substituents on Molecular Self-Assembly and Photovoltaic Performance of Indacenodithiophene-Based Acceptors. <i>Advanced Functional Materials</i> , 2020, 30, 1906855.	14.9	50
17	Effect of Side-Chain Engineering of Bithienylbenzodithiophene-fluorobenzotriazole-Based Copolymers on the Thermal Stability and Photovoltaic Performance of Polymer Solar Cells. <i>Macromolecules</i> , 2018, 51, 6028-6036.	4.8	47
18	Two-Dimensional Supramolecular Assemblies from pH-Responsive Poly(ethyl Methacrylate) Copolymer. <i>Biomacromolecules</i> , 2017, 18, 3367-3374.	5.4	45

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19	Probing and Controlling Liquid Crystal Helical Nanofilaments. <i>Nano Letters</i> , 2015, 15, 3420-3424.	9.1	42
20	Nanophase segregation in binary mixtures of a bent-core and a rodlike liquid-crystal molecule. <i>Physical Review E</i> , 2010, 81, 011704.	2.1	41
21	Interface structure of the dark conglomerate liquid crystal phase. <i>Soft Matter</i> , 2011, 7, 1879-1883.	2.7	39
22	Hierarchical supramolecular assembly of a single peptoid polymer into a planar nanobrush with two distinct molecular packing motifs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 31639-31647.	7.1	38
23	An unusual type of polymorphism in a liquid crystal. <i>Nature Communications</i> , 2018, 9, 714.	12.8	35
24	Amphiphilic Poly(ethylene oxide)- <i>block</i> -poly(butadiene- <i>graft</i> -liquid crystal) Copolymers: Synthesis and Self-Assembly in Water. <i>Macromolecules</i> , 2010, 43, 10442-10451.	4.8	33
25	Topological Ferroelectric Bistability in a Polarization-Modulated Orthogonal Smectic Liquid Crystal. <i>Journal of the American Chemical Society</i> , 2012, 134, 9681-9687.	13.7	33
26	Coupling morphological and magnetic anisotropy for assembling tetragonal colloidal crystals. <i>Science Advances</i> , 2021, 7, eabh1289.	10.3	31
27	Helicoidal-layered nanocylinders (HLNCs) – hierarchical self-assembly in a unique B4 phase liquid crystal morphology. <i>Materials Horizons</i> , 2019, 6, 959-968.	12.2	30
28	Molecular Packing in Double Gyroid Cubic Phases Revealed via Resonant Soft X-Ray Scattering. <i>Physical Review Letters</i> , 2020, 125, 027801.	7.8	29
29	Effects of Structural Variations on the Cellular Response and Mechanical Properties of Biocompatible, Biodegradable, and Porous Smectic Liquid Crystal Elastomers. <i>Macromolecular Bioscience</i> , 2017, 17, 1600278.	4.1	28
30	Multicolor Photonic Pigments for Rotation-Asymmetric Mechanochromic Devices. <i>Advanced Materials</i> , 2022, 34, e2107398.	21.0	27
31	Double helical structure of the twist-bend nematic phase investigated by resonant X-ray scattering at the carbon and sulfur K-edges. <i>Soft Matter</i> , 2018, 14, 9760-9763.	2.7	26
32	Effects of fused-ring regiochemistry on the properties and photovoltaic performance of n-type organic semiconductor acceptors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15933-15941.	10.3	25
33	Deciphering chiral structures in soft materials via resonant soft and tender X-ray scattering. <i>Giant</i> , 2020, 2, 100018.	5.1	24
34	Symmetric liquid crystal dimers containing hydrazide groups: parity-dependent smectic structure, hydrogen bonding and substitution effect. <i>Liquid Crystals</i> , 2008, 35, 967-974.	2.2	23
35	Generalized Langevin theory model of the field dependence of dielectric permittivity and polarization current near the de Vries smectic- $A$	2.1	23
36	Random copolymer of poly(polyethylene glycol methyl ether)methacrylate as tunable transition temperature solid-solid phase change material for thermal energy storage. <i>Solar Energy Materials and Solar Cells</i> , 2021, 225, 111030.	6.2	19

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37	Distinct twist-bend nematic phase behaviors associated with the ester-linkage direction of thioether-linked liquid crystal dimers. <i>Materials Advances</i> , 2021, 2, 261-272.	5.4	18
38	Missing Link between Helical Nano- and Microfilaments in B4 Phase Bent-Core Liquid Crystals, and Deciphering which Chiral Center Controls the Filament Handedness. <i>Small</i> , 2020, 16, e1905591.	10.0	17
39	Manipulation of the nanoscale heliconical structure of a twist-bend nematic material with polarized light. <i>Physical Review Research</i> , 2020, 2, .	3.6	16
40	Mechanically tunable elastomer and cellulose nanocrystal composites as scaffolds for <i>in vitro</i> cell studies. <i>Materials Advances</i> , 2021, 2, 464-476.	5.4	15
41	Supramolecular <i>meso</i> -Trick: Ambidextrous Mirror Symmetry Breaking in a Liquid Crystalline Network with Tetragonal Symmetry. <i>Journal of the American Chemical Society</i> , 2022, 144, 6936-6945.	13.7	15
42	Butterfly Mesogens Based on Carbazole, Fluorene or Fluorenone: Mesomorphous, Gelling, Photophysical, and Photoconductive Properties. <i>European Journal of Organic Chemistry</i> , 2021, 2021, 1989-2002.	2.4	14
43	Y-shaped tricatener azobenzenes functional liquid crystals with synclinic-anticlinic transitions and spontaneous helix formation. <i>Journal of Materials Chemistry C</i> , 2020, 8, 12902-12916.	5.5	13
44	Effect of Conformational Chirality on Optical Activity Observed in a Smectic of Achiral, Bent-Core Molecules. <i>Journal of Physical Chemistry B</i> , 2017, 121, 6944-6950.	2.6	12
45	Synthesis and physical properties of a main-chain chiral smectic thiol-ene oligomer. <i>Liquid Crystals</i> , 2010, 37, 325-334.	2.2	11
46	Direct observation of two-dimensional nematic and smectic ordering in freely suspended films of a bolaamphiphilic liquid crystal. <i>Soft Matter</i> , 2011, 7, 9978.	2.7	11
47	Indication of a twist-grain-boundary-twist-bend phase of flexible core bent-shape chiral dimers. <i>Soft Matter</i> , 2019, 15, 3283-3290.	2.7	11
48	Deciphering helix assembly in the heliconical nematic phase <i>via</i> tender resonant X-ray scattering. <i>Journal of Materials Chemistry C</i> , 2021, 9, 10020-10028.	5.5	11
49	Effect of main and side chain chlorination on the photovoltaic properties of benzodithiophene- <i>alt</i> -benzotriazole polymers. <i>Journal of Materials Chemistry C</i> , 2020, 8, 15426-15435.	5.5	10
50	The interplay between spatial and heliconical orientational order in twist-bend nematic materials. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 4055-4063.	2.8	10
51	Ferroelectric and antiferroelectric odd-even behavior in a tricarbosilane-terminated liquid crystal homologous series. <i>Chemical Science</i> , 2014, 5, 1869-1874.	7.4	8
52	Binary mixtures of bent-core molecules forming distinct types of B4 phase nano- and microfilament morphologies. <i>Liquid Crystals</i> , 2021, 48, 1129-1139.	2.2	8
53	Understanding and Manipulating Helical Nanofilaments in Binary Systems with Achiral Dopants. <i>Nano Letters</i> , 2022, 22, 4569-4575.	9.1	5