

# Mingjun Huang

## List of Publications by Year in descending order

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Version: 2024-02-01

66  
papers

3,098  
citations

172457

29  
h-index

161849

54  
g-index

68  
all docs

68  
docs citations

68  
times ranked

2492  
citing authors

#	ARTICLE	IF	CITATIONS
1	Selective assemblies of giant tetrahedra via precisely controlled positional interactions. <i>Science</i> , 2015, 348, 424-428.	12.6	338
2	Ultra-high-voltage Ni-rich layered cathodes in practical Li metal batteries enabled by a sulfonamide-based electrolyte. <i>Nature Energy</i> , 2021, 6, 495-505.	39.5	323
3	Geometry induced sequence of nanoscale Frank-Kasper and quasicrystal mesophases in giant surfactants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 14195-14200.	7.1	201
4	FSI-inspired solvent and $\alpha$ -full fluorosulfonyl- $\beta$ -electrolyte for 4 V class lithium-metal batteries. <i>Energy and Environmental Science</i> , 2020, 13, 212-220.	30.8	198
5	Two-Dimensional Nanocrystals of Molecular Janus Particles. <i>Journal of the American Chemical Society</i> , 2014, 136, 10691-10699.	13.7	117
6	Identification of a Frank-Kasper Z phase from shape amphiphile self-assembly. <i>Nature Chemistry</i> , 2019, 11, 899-905.	13.6	114
7	Development of ferroelectric nematic fluids with giant- $\hat{\mu}$ dielectricity and nonlinear optical properties. <i>Science Advances</i> , 2021, 7, .	10.3	90
8	Manipulation of Self-Assembled Nanostructure Dimensions in Molecular Janus Particles. <i>ACS Nano</i> , 2016, 10, 6585-6596.	14.6	79
9	Toward Controlled Hierarchical Heterogeneities in Giant Molecules with Precisely Arranged Nano Building Blocks. <i>ACS Central Science</i> , 2016, 2, 48-54.	11.3	76
10	The role of architectural engineering in macromolecular self-assemblies via non-covalent interactions: A molecular LEGO approach. <i>Progress in Polymer Science</i> , 2020, 103, 101230.	24.7	75
11	Giant surfactants based on molecular nanoparticles: Precise synthesis and solution self-assembly. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2014, 52, 1309-1325.	2.1	69
12	Hierarchical Self-Organization of AB <sub>n</sub> Dendron-like Molecules into a Supramolecular Lattice Sequence. <i>ACS Central Science</i> , 2017, 3, 860-867.	11.3	69
13	Self-Assembly of Concentric Hexagons and Hierarchical Self-Assembly of Supramolecular Metal-Organic Nanoribbons at the Solid/Liquid Interface. <i>Journal of the American Chemical Society</i> , 2016, 138, 9258-9268.	13.7	68
14	Sequence-Mandated, Distinct Assembly of Giant Molecules. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15014-15019.	13.8	57
15	Mesoatom alloys via self-sorting approach of giant molecules blends. <i>Giant</i> , 2020, 4, 100031.	5.1	57
16	Exploring shape amphiphiles beyond giant surfactants: molecular design and click synthesis. <i>Polymer Chemistry</i> , 2013, 4, 1056-1067.	3.9	54
17	Highly Asymmetric Phase Behaviors of Polyhedral Oligomeric Silsesquioxane-Based Multiheaded Giant Surfactants. <i>ACS Nano</i> , 2018, 12, 1868-1877.	14.6	54
18	Molecular Design of Stable Sulfamide- and Sulfonamide-Based Electrolytes for Aprotic Li-O <sub>2</sub> Batteries. <i>CheM</i> , 2019, 5, 2630-2641.	11.7	53

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19	Molecularly Tunable Polyanions for Single-Ion Conductors and Poly(solvate ionic liquids). <i>Chemistry of Materials</i> , 2021, 33, 524-534.	6.7	53
20	Topologically Directed Assemblies of Semiconducting Sphere-Rod Conjugates. <i>Journal of the American Chemical Society</i> , 2017, 139, 18616-18622.	13.7	51
21	Spontaneous helielectric nematic liquid crystals: Electric analog to helimagnets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	51
22	Synthesis of fullerene-containing poly(ethylene oxide)- <i>block</i> -polystyrene as model shape amphiphiles with variable composition, diverse architecture, and high fullerene functionality. <i>Polymer Chemistry</i> , 2012, 3, 124-134.	3.9	44
23	PolyMOF Nanoparticles: Dual Roles of a Multivalent polyMOF Ligand in Size Control and Surface Functionalization. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16676-16681.	13.8	44
24	Frank-Kasper and related quasicrystal spherical phases in macromolecules. <i>Science China Chemistry</i> , 2018, 61, 33-45.	8.2	39
25	Transition Kinetics of Self-Assembled Supramolecular Dodecagonal Quasicrystal and Frank-Kasper $\text{If}$ Phases in $\text{AB}_n$ Dendron-Like Giant Molecules. <i>ACS Macro Letters</i> , 2019, 8, 875-881.	4.8	39
26	How Far Can We Push the Rigid Oligomers/Polymers toward Ferroelectric Nematic Liquid Crystals?. <i>Journal of the American Chemical Society</i> , 2021, 143, 17857-17861.	13.7	36
27	Clicking-fluorinated polyhedral oligomeric silsesquioxane onto polymers: a modular approach toward shape amphiphiles with fluororous molecular clusters. <i>Polymer Chemistry</i> , 2014, 5, 3588.	3.9	35
28	Mapping a stable solvent structure landscape for aprotic Li-air battery organic electrolytes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23987-23998.	10.3	33
29	Sequential Click-Synthesis of Nano-Diamond-Ring-like Giant Surfactants Based on Functionalized Hydrophilic POSS/C <sub>60</sub> Tethered with Cyclic Polystyrenes. <i>Macromolecules</i> , 2014, 47, 4160-4168.	4.8	30
30	Hydrogen-Bonding-Induced Nanophase Separation in Giant Surfactants Consisting of Hydrophilic [60]Fullerene Tethered to Block Copolymers at Different Locations. <i>Macromolecules</i> , 2015, 48, 5496-5503.	4.8	29
31	Breaking Parallel Orientation of Rods via a Dendritic Architecture toward Diverse Supramolecular Structures. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11879-11885.	13.8	28
32	Spherical Supramolecular Structures Constructed via Chemically Symmetric Perylene Bisimides: Beyond Columnar Assembly. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18563-18571.	13.8	28
33	Ordered Mesoporous Silica Pyrolyzed from Single-Source Self-Assembled Organic-Inorganic Giant Surfactants. <i>Journal of the American Chemical Society</i> , 2021, 143, 12935-12942.	13.7	28
34	General phase-structure relationship in polar rod-shaped liquid crystals: Importance of shape anisotropy and dipolar strength. <i>Giant</i> , 2022, 11, 100109.	5.1	27
35	Fluorinated Aryl Sulfonimide Tagged (FAST) salts: modular synthesis and structure-property relationships for battery applications. <i>Energy and Environmental Science</i> , 2018, 11, 1326-1334.	30.8	26
36	Constituent Isomerism-Induced Quasicrystal and Frank-Kasper $\text{If}$ Superlattices Based on Nanosized Shape Amphiphiles. <i>CCS Chemistry</i> , 2021, 3, 1434-1444.	7.8	26

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37	Development of emergent ferroelectric nematic liquid crystals with highly fluorinated and rigid mesogens. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 11536-11543.	2.8	26
38	Confinement Effect on the Surface of a Metal-Organic Polyhedron: Tunable Thermoresponsiveness and Water Permeability. <i>Macromolecules</i> , 2020, 53, 7178-7186.	4.8	24
39	Expanding quasiperiodicity in soft matter: Supramolecular decagonal quasicrystals by binary giant molecule blends. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	24
40	Superlattice Engineering with Chemically Precise Molecular Building Blocks. <i>Journal of the American Chemical Society</i> , 2021, 143, 21613-21621.	13.7	23
41	Anionic synthesis of a clickable middle-chain azidefunctionalized polystyrene and its application in shape amphiphiles. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2013, 31, 71-82.	3.8	20
42	Supramolecular Self-Assembly of Perylene Bisimide-Based Rigid Giant Tetrahedra. <i>ACS Nano</i> , 2020, 14, 8266-8275.	14.6	19
43	Polar Liquid Crystalline Polymers Bearing Mesogenic Side Chains with Large Dipole Moment. <i>Macromolecules</i> , 2021, 54, 6045-6051.	4.8	19
44	Synthesis, structure, photo- and electro-luminescence of an iridium(III) complex with a novel carbazole functionalized $\beta^2$ -diketone ligand. <i>RSC Advances</i> , 2014, 4, 554-562.	3.6	18
45	Fine-tuned order-order phase transitions in giant surfactants via interfacial engineering. <i>Giant</i> , 2020, 1, 100002.	5.1	17
46	A Physically Cross-Linked Hydrogen-Bonded Polymeric Composite Binder for High-Performance Silicon Anodes. <i>ACS Applied Energy Materials</i> , 2021, 4, 10886-10895.	5.1	14
47	Inclusion Crystallization of Silicotungstic Acid and Poly(ethylene oxide) and Its Impact on Proton Conductivities. <i>Macromolecules</i> , 2020, 53, 1415-1421.	4.8	13
48	Unimolecular Nanoparticles toward More Precise Regulations of Self-Assembled Superlattices in Soft Matter. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	13
49	Nontrivial phase matching in helielectric polarization helices: Universal phase matching theory, validation, and electric switching. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	13
50	Geometry-Directed Self-Assembly of Polymeric Molecular Frameworks. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2024-2029.	13.8	12
51	Rational Route Toward the Frank-Kasper Z Phase: Effect of Precise Geometrical Tuning on the Supramolecular Assembly of Giant Shape Amphiphiles. <i>Macromolecules</i> , 2021, 54, 7777-7785.	4.8	12
52	Design of S-Substituted Fluorinated Aryl Sulfonamide-Tagged (S-FAST) Anions To Enable New Solvate Ionic Liquids for Battery Applications. <i>Chemistry of Materials</i> , 2019, 31, 7558-7564.	6.7	11
53	Complex self-assembled lattices from simple polymer blends. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 19618-19620.	7.1	11
54	Breaking Parallel Orientation of Rods via a Dendritic Architecture toward Diverse Supramolecular Structures. <i>Angewandte Chemie</i> , 2019, 131, 12005-12011.	2.0	10

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55	Sequenceâ€Mandated, Distinct Assembly of Giant Molecules. <i>Angewandte Chemie</i> , 2017, 129, 15210-15215.	2.0	9
56	Spherical Supramolecular Structures Constructed via Chemically Symmetric Perylene Bisimides: Beyond Columnar Assembly. <i>Angewandte Chemie</i> , 2020, 132, 18722-18730.	2.0	9
57	Soft Alloys Constructed with Distinct Mesoatoms via Selfâ€Sorting Assembly of Giant Shape Amphiphiles. <i>Angewandte Chemie - International Edition</i> , 2022, , .	13.8	9
58	Stereoisomer effect on ferroelectric nematics: stabilization and phase behavior diversification. <i>Journal of Materials Chemistry C</i> , 2022, 10, 8762-8766.	5.5	8
59	Hybrid Hairy Platelets with Tunable Structures by Inclusion Crystallization of Polyferrocene-Containing Block Copolymers and Silicotungstic Acid. <i>ACS Macro Letters</i> , 2021, 10, 272-277.	4.8	7
60	PolyMOF Nanoparticles: Dual Roles of a Multivalent polyMOF Ligand in Size Control and Surface Functionalization. <i>Angewandte Chemie</i> , 2019, 131, 16829-16834.	2.0	5
61	Hierarchical Structure with an Unusual Honeycomb Fullerene Scaffold by a Fullereneâ€Triphenylene Shape Amphiphile. <i>Macromolecules</i> , 2020, 53, 6056-6062.	4.8	5
62	Soft Alloys Constructed with Distinct Mesoatoms via Selfâ€Sorting Assembly of Giant Shape Amphiphiles. <i>Angewandte Chemie</i> , 0, , .	2.0	2
63	Unimolecular Nanoparticles toward more Precise Regulations of Selfâ€assembled Superlattices in Soft Matter. <i>Angewandte Chemie</i> , 0, , .	2.0	2
64	A Polymer Network Layer Containing Dually Anchored Ionic Liquids for Stable Lithiumâ€Sulfur Batteries. <i>Macromolecular Rapid Communications</i> , 2023, 44, e2200246.	3.9	2
65	Geometryâ€Directed Selfâ€Assembly of Polymeric Molecular Frameworks. <i>Angewandte Chemie</i> , 2021, 133, 2052-2057.	2.0	1
66	RÃ¼cktitelbild: Geometryâ€Directed Selfâ€Assembly of Polymeric Molecular Frameworks ( <i>Angew. Chem.</i> ) Tj ETQq0,0,0 rgBT 0 Overlock	2.0	0