

Ji Liu

List of Publications by Year in descending order

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119
papers

7,166
citations

57758

44
h-index

62596

80
g-index

124
all docs

124
docs citations

124
times ranked

8200
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrogel machines. <i>Materials Today</i> , 2020, 36, 102-124.	14.2	625
2	Tough Supramolecular Polymer Networks with Extreme Stretchability and Fast Room-Temperature Self-Healing. <i>Advanced Materials</i> , 2017, 29, 1605325.	21.0	347
3	Muscle-like fatigue-resistant hydrogels by mechanical training. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 10244-10249.	7.1	318
4	Anti-fatigue-fracture hydrogels. <i>Science Advances</i> , 2019, 5, eaau8528.	10.3	305
5	Fast and Efficient CRISPR/Cas9 Genome Editing In Vivo Enabled by Bioreducible Lipid and Messenger RNA Nanoparticles. <i>Advanced Materials</i> , 2019, 31, e1902575.	21.0	244
6	3D printing of highly stretchable hydrogel with diverse UV curable polymers. <i>Science Advances</i> , 2021, 7, .	10.3	233
7	Gold Nanorods Coated with Mesoporous Silica Shell as Drug Delivery System for Remote Near Infrared Light-Activated Release and Potential Phototherapy. <i>Small</i> , 2015, 11, 2323-2332.	10.0	213
8	Fatigue-resistant adhesion of hydrogels. <i>Nature Communications</i> , 2020, 11, 1071.	12.8	187
9	Biomimetic Supramolecular Polymer Networks Exhibiting both Toughness and Self-Recovery. <i>Advanced Materials</i> , 2017, 29, 1604951.	21.0	185
10	Cucurbit[<i>n</i>]uril-Based Microcapsules Self-Assembled within Microfluidic Droplets: A Versatile Approach for Supramolecular Architectures and Materials. <i>Accounts of Chemical Research</i> , 2017, 50, 208-217.	15.6	181
11	Triphase Microfluidic-Directed Self-Assembly: Anisotropic Colloidal Photonic Crystal Supraparticles and Multicolor Patterns Made Easy. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 2375-2378.	13.8	177
12	Ingestible hydrogel device. <i>Nature Communications</i> , 2019, 10, 493.	12.8	168
13	High-Performance Wearable Micro-Supercapacitors Based on Microfluidic-Directed Nitrogen-Doped Graphene Fiber Electrodes. <i>Advanced Functional Materials</i> , 2017, 27, 1702493.	14.9	144
14	Mechanically Robust and UV-Curable Shape-Memory Polymers for Digital Light Processing Based 4D Printing. <i>Advanced Materials</i> , 2021, 33, e2101298.	21.0	129
15	Poly(<i>N</i> -vinylcaprolactam): A Thermoresponsive Macromolecule with Promising Future in Biomedical Field. <i>Advanced Healthcare Materials</i> , 2014, 3, 1941-1968.	7.6	119
16	Preparation and characterization of organic-soluble acetylated starch nanocrystals. <i>Carbohydrate Polymers</i> , 2010, 80, 1078-1084.	10.2	116
17	Anisotropically Fatigue-Resistant Hydrogels. <i>Advanced Materials</i> , 2021, 33, e2102011.	21.0	114
18	Bioinspired supramolecular fibers drawn from a multiphase self-assembled hydrogel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 8163-8168.	7.1	111

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19	Large-scale colloidal films with robust structural colors. <i>Materials Horizons</i> , 2019, 6, 90-96.	12.2	106
20	Interfacial assembly of dendritic microcapsules with host-guest chemistry. <i>Nature Communications</i> , 2014, 5, 5772.	12.8	101
21	Cucurbit[<i>n</i>]uril Supramolecular Hydrogel Networks as Tough and Healable Adhesives. <i>Advanced Functional Materials</i> , 2018, 28, 1800848.	14.9	98
22	Design of hybrid nanovehicles for remotely triggered drug release: an overview. <i>Journal of Materials Chemistry B</i> , 2015, 3, 6117-6147.	5.8	95
23	Supramolecularly Engineered Circular Bivalent Aptamer for Enhanced Functional Protein Delivery. <i>Journal of the American Chemical Society</i> , 2018, 140, 6780-6784.	13.7	91
24	Dynamic Interfacial Adhesion through Cucurbit[<i>n</i>]uril Molecular Recognition. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8854-8858.	13.8	83
25	A Covalent Black Phosphorus/Metal-Organic Framework Heterostructure for High-Performance Flexible Supercapacitors. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10366-10374.	13.8	82
26	Supramolecular hydrogel microcapsules via cucurbit[8]uril host-guest interactions with triggered and UV-controlled molecular permeability. <i>Chemical Science</i> , 2015, 6, 4929-4933.	7.4	77
27	Synthesis of thermo-responsive poly(<i>N</i> -vinylcaprolactam)-containing block copolymers by cobalt-mediated radical polymerization. <i>Journal of Polymer Science Part A</i> , 2012, 50, 400-408.	2.3	75
28	In-situ Encapsulation of Protein into Nanoscale Hydrogen-Bonded Organic Frameworks for Intracellular Biocatalysis. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22315-22321.	13.8	70
29	Heat-triggered drug release systems based on mesoporous silica nanoparticles filled with a maghemite core and phase-change molecules as gatekeepers. <i>Journal of Materials Chemistry B</i> , 2014, 2, 59-70.	5.8	68
30	Tough Hydrogel Bioadhesives for Sutureless Wound Sealing, Hemostasis and Biointerfaces. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	67
31	Bioinspired 2D Isotropically Fatigue-Resistant Hydrogels. <i>Advanced Materials</i> , 2022, 34, e2107106.	21.0	66
32	Chitin nanocrystals grafted with poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and their effects on thermal behavior of PHBV. <i>Carbohydrate Polymers</i> , 2012, 87, 784-789.	10.2	65
33	Controlling Spatiotemporal Mechanics of Supramolecular Hydrogel Networks with Highly Branched Cucurbit[8]uril Polyrotaxanes. <i>Advanced Functional Materials</i> , 2018, 28, 1702994.	14.9	65
34	Hierarchical Self-Assembly of Discrete Metal-Organic Cages into Supramolecular Nanoparticles for Intracellular Protein Delivery. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 5429-5435.	13.8	64
35	Gold nanorods coated with a thermo-responsive poly(ethylene glycol)- <i>b</i> -poly(<i>N</i> -vinylcaprolactam) corona as drug delivery systems for remotely near infrared-triggered release. <i>Polymer Chemistry</i> , 2014, 5, 799-813.	3.9	63
36	Trigger- detachable Hydrogel Adhesives for Bioelectronic Interfaces. <i>Advanced Functional Materials</i> , 2021, 31, 2106446.	14.9	63

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37	Unexpected stability of aqueous dispersions of raspberry-like colloids. <i>Nature Communications</i> , 2018, 9, 3614.	12.8	57
38	Glucose-, pH- and thermo-responsive nanogels crosslinked by functional superparamagnetic maghemite nanoparticles as innovative drug delivery systems. <i>Journal of Materials Chemistry B</i> , 2014, 2, 1009.	5.8	53
39	Uniform fluorescent photonic crystal supraballs generated from nanocrystal-loaded hydrogel microspheres. <i>Journal of Materials Chemistry</i> , 2010, 20, 6182.	6.7	52
40	Supramolecular Nested Microbeads as Building Blocks for Macroscopic Self-Healing Scaffolds. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3079-3083.	13.8	50
41	Distinguishing relaxation dynamics in transiently crosslinked polymeric networks. <i>Polymer Chemistry</i> , 2017, 8, 5336-5343.	3.9	49
42	Aqueous Polymer Self-Assembly Based on Cucurbit[<i>n</i>]uril-Mediated Host-Guest Interactions. <i>Macromolecular Chemistry and Physics</i> , 2016, 217, 319-332.	2.2	47
43	Biomimetic Supramolecular Fibers Exhibit Water-Induced Supercontraction. <i>Advanced Materials</i> , 2018, 30, e1707169.	21.0	46
44	Supramolecular colloidosomes: fabrication, characterisation and triggered release of cargo. <i>Chemical Communications</i> , 2014, 50, 7048-7051.	4.1	45
45	Reversibly crosslinked thermo- and redox-responsive nanogels for controlled drug release. <i>Polymer Chemistry</i> , 2014, 5, 77-88.	3.9	44
46	Electrostatically Directed Self-Assembly of Ultrathin Supramolecular Polymer Microcapsules. <i>Advanced Functional Materials</i> , 2015, 25, 4091-4100.	14.9	44
47	Spherical Colloidal Photonic Crystals with Selected Lattice Plane Exposure and Enhanced Color Saturation for Dynamic Optical Displays. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 42629-42634.	8.0	43
48	Label-Free Analysis and Sorting of Microalgae and Cyanobacteria in Microdroplets by Intrinsic Chlorophyll Fluorescence for the Identification of Fast Growing Strains. <i>Analytical Chemistry</i> , 2016, 88, 10445-10451.	6.5	42
49	Breath figure lithography for the construction of a hierarchical structure in sponges and their applications to oil/water separation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16369-16375.	10.3	42
50	Supramolecular polymer networks based on cucurbit[8]uril host-guest interactions as aqueous photo-rheological fluids. <i>Polymer Chemistry</i> , 2015, 6, 7652-7657.	3.9	41
51	Hydrogel Bioadhesives with Extreme Acid-Tolerance for Gastric Perforation Repairing. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	41
52	Granular hydrogels for 3D bioprinting applications. <i>View</i> , 2020, 1, 20200060.	5.3	39
53	Sub-5 nm single crystalline organic- <i>n</i> heterojunctions. <i>Nature Communications</i> , 2021, 12, 2774.	12.8	39
54	Dynamic Interfacial Adhesion through Cucurbit[<i>n</i>]uril Molecular Recognition. <i>Angewandte Chemie</i> , 2018, 130, 8992-8996.	2.0	35

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55	Gold Nanorods with Phase-Changing Polymer Corona for Remotely Near-Infrared-Triggered Drug Release. <i>Chemistry - an Asian Journal</i> , 2014, 9, 275-288.	3.3	34
56	Poly(acrylic acid)-block-poly(vinyl alcohol) anchored maghemite nanoparticles designed for multi-stimuli triggered drug release. <i>Nanoscale</i> , 2013, 5, 11464.	5.6	33
57	Microfluidic Droplet-Facilitated Hierarchical Assembly for Dual Cargo Loading and Synergistic Delivery. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 8811-8820.	8.0	33
58	Dynamic intermolecular interactions through hydrogen bonding of water promote heat conduction in hydrogels. <i>Materials Horizons</i> , 2020, 7, 2936-2943.	12.2	33
59	Poly-L-Glutamic Acid Microgel-Encapsulated Probiotics with Gastric Acid Resistance and Smart Inflammatory Factor Targeted Delivery Performance to Ameliorate Colitis. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	33
60	Spatially Controlled Supramolecular Polymerization of Peptide Nanotubes by Microfluidics. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6902-6908.	13.8	32
61	Bioinspired 3D Printing of Functional Materials by Harnessing Enzyme-Induced Biomineralization. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	32
62	Patterned Arrays of Supramolecular Microcapsules. <i>Advanced Functional Materials</i> , 2018, 28, 1800550.	14.9	31
63	Emerging Two-Dimensional Crystallization of Cucurbit[8]uril Complexes: From Supramolecular Polymers to Nanofibers. <i>Journal of the American Chemical Society</i> , 2019, 141, 14021-14025.	13.7	29
64	3D Printed Biocatalytic Living Materials with Dual-Network Reinforced Bioinks. <i>Small</i> , 2022, 18, e2104820.	10.0	29
65	Bioinspired hydrogel microfibrils colour-encoded with colloidal crystals. <i>Materials Horizons</i> , 2019, 6, 1938-1943.	12.2	25
66	Thermo-responsive gold/poly(vinyl alcohol)-b-poly(N-vinylcaprolactam) core-corona nanoparticles as a drug delivery system. <i>Polymer Chemistry</i> , 2014, 5, 5289-5299.	3.9	24
67	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. <i>Soft Matter</i> , 2020, 16, 1668-1677.	2.7	24
68	Droplet-based microfluidic analysis and screening of single plant cells. <i>PLoS ONE</i> , 2018, 13, e0196810.	2.5	23
69	Viscoelastic Hydrogel Microfibers Exploiting Cucurbit[8]uril Host-Guest Chemistry and Microfluidics. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 17929-17935.	8.0	23
70	Photonic Plasticines with Uniform Structural Colors, High Processability, and Self-Healing Properties. <i>Small</i> , 2021, 17, e2007426.	10.0	23
71	Droplet-based microfluidic screening and sorting of microalgal populations for strain engineering applications. <i>Algal Research</i> , 2021, 56, 102293.	4.6	23
72	Dual-responsive supramolecular colloidal microcapsules from cucurbit[8]uril molecular recognition in microfluidic droplets. <i>Polymer Chemistry</i> , 2016, 7, 5996-6002.	3.9	22

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73	Catalytic polymeric nanocomposites via cucurbit[<i>n</i>]uril host-guest interactions. <i>Nanoscale</i> , 2015, 7, 13416-13419.	5.6	20
74	Toward a versatile toolbox for cucurbit[<i>n</i>]uril-based supramolecular hydrogel networks through <i>in situ</i> polymerization. <i>Journal of Polymer Science Part A</i> , 2017, 55, 3105-3109.	2.3	20
75	Structural Design of Robust and Biocompatible Photonic Hydrogels from an <i>In Situ</i> Cross-Linked Hyperbranched Polymer System. <i>Chemistry of Materials</i> , 2018, 30, 6091-6098.	6.7	20
76	Selective RNA interference and gene silencing using reactive oxygen species-responsive lipid nanoparticles. <i>Chemical Communications</i> , 2019, 55, 8170-8173.	4.1	20
77	Acoustic-Controlled Bubble Generation and Fabrication of 3D Polymer Porous Materials. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 22318-22326.	8.0	20
78	Tetraphenylethylene-Featured Fluorescent Supramolecular Nanoparticles for Intracellular Trafficking of Protein Delivery and Neuroprotection. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 26740-26746.	13.8	19
79	Robust Hydrogel Adhesion by Harnessing Bioinspired Interfacial Mineralization. <i>Small</i> , 2022, 18, .	10.0	19
80	Synthesis, crystallization and hydrolysis of aromatic-aliphatic copolyester: Poly(trimethylene terephthalate-co-1,4-bis(4-oxocyclohexylidene)butane-1,4-diol). <i>Journal of Polymer Science Part A: Polymer Chemistry</i> , 2018, 56, 1815-1824.	5.8	18
81	Surface-Bound Cucurbit[8]uril Catenanes on Magnetic Nanoparticles Exhibiting Molecular Recognition. <i>Chemistry - an Asian Journal</i> , 2016, 11, 2382-2386.	3.3	15
82	One-step synthesis of nitrogen-doped multi-emission carbon dots and their fluorescent sensing in HClO and cellular imaging. <i>Mikrochimica Acta</i> , 2021, 188, 330.	5.0	15
83	A Click Approach to Chiral Dendronized Polyfluorene Derivatives. <i>Macromolecular Rapid Communications</i> , 2007, 28, 2249-2255.	3.9	14
84	Droplet microfluidics on analysis of pathogenic microbes for wastewater-based epidemiology. <i>Trends in Analytical Chemistry</i> , 2021, 143, 116333.	11.4	14
85	Fabrication of quantum dot-based photonic materials from small to large via interfacial self-assembly. <i>Journal of Materials Chemistry</i> , 2011, 21, 8496.	6.7	13
86	<i>In Situ</i> Encapsulation of Protein into Nanoscale Hydrogen-Bonded Organic Frameworks for Intracellular Biocatalysis. <i>Angewandte Chemie</i> , 2021, 133, 22489-22495.	2.0	13
87	Hierarchical Self-Assembly of Discrete Metal-Organic Cages into Supramolecular Nanoparticles for Intracellular Protein Delivery. <i>Angewandte Chemie</i> , 2021, 133, 5489-5495.	2.0	13
88	Injectable Granular Hydrogels as Colloidal Assembly Microreactors for Customized Structural Colored Objects. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	13
89	A Novel Aromatic-Aliphatic Copolyester of Poly(ethylene-co-diethylene terephthalate-co-1,4-bis(4-oxocyclohexylidene)butane-1,4-diol). <i>Engineering Chemistry Research</i> , 2010, 49, 9803-9810.	3.7	12
90	Cucurbit[8]uril-Regulated Colloidal Dispersions Exhibiting Photocontrolled Rheological Behavior. <i>Small</i> , 2018, 14, e1703352.	10.0	12

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91	Integration of Palladium Nanoparticles with Surface Engineered Metal-Organic Frameworks for Cell-Selective Bioorthogonal Catalysis and Protein Activity Regulation. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 10117-10124.	8.0	12
92	Visible-Light Facilitated Fluorescence "Switch-On" Labelling of 5-Formylpyrimidine RNA. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 5406-5411.	4.3	11
93	Displacement Induced Off-On Fluorescent Biosensor Targeting IDO1 Activity in Live Cells. <i>Analytical Chemistry</i> , 2019, 91, 14943-14950.	6.5	11
94	Spatially Controlled Supramolecular Polymerization of Peptide Nanotubes by Microfluidics. <i>Angewandte Chemie</i> , 2020, 132, 6969-6975.	2.0	11
95	A Covalent Black Phosphorus/Metal-Organic Framework Hetero-Nanostructure for High-Performance Flexible Supercapacitors. <i>Angewandte Chemie</i> , 2021, 133, 10454-10462.	2.0	11
96	Surface-immobilised micelles via cucurbit[8]uril-rotaxanes for solvent-induced burst release. <i>Chemical Communications</i> , 2015, 51, 4858-4860.	4.1	10
97	Emerging Applications of 3D Printing in Biomanufacturing. <i>Trends in Biotechnology</i> , 2021, 39, 1114-1116.	9.3	10
98	Supracolloidal Architectures Self-Assembled in Microdroplets. <i>Chemistry - A European Journal</i> , 2015, 21, 15516-15519.	3.3	9
99	Polymeric raspberry-like particles via template-assisted polymerisation. <i>Polymer Chemistry</i> , 2019, 10, 3772-3777.	3.9	9
100	Construction of core-shell microcapsules via focused surface acoustic wave microfluidics. <i>Lab on A Chip</i> , 2020, 20, 3104-3108.	6.0	9
101	Microdroplets confined assembly of opal composites in dynamic borate ester-based networks. <i>Chemical Engineering Journal</i> , 2021, 426, 127581.	12.7	9
102	Biaxially Morphing Droplet Shape by an Active Surface. <i>Advanced Materials Interfaces</i> , 2021, 8, 2001199.	3.7	9
103	Material-mediated cell immobilization technology in the biological fermentation proces. <i>Biofuels, Bioproducts and Biorefining</i> , 2021, 15, 1160-1173.	3.7	9
104	Reactive Oxygen Species-Responsive Lipid Nanoparticles for Effective RNAi and Corneal Neovascularization Therapy. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 17022-17031.	8.0	9
105	Highly selective generation of singlet oxygen from dioxygen with atomically dispersed catalysts. <i>Chemical Science</i> , 2022, 13, 5606-5615.	7.4	9
106	Synthesis of poly(ethylene adipate-co-l-lactic acid) copolymers via ring opening polymerization. <i>Polymer Bulletin</i> , 2011, 66, 187-197.	3.3	8
107	Spatially and Reversibly Actuating Soft Gel Structure by Harnessing Multimode Elastic Instabilities. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 36361-36369.	8.0	8
108	Cucurbit[7]uril-based high-performance catalytic microreactors. <i>Nanoscale</i> , 2018, 10, 14835-14839.	5.6	7

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109	Online Handwritten Mongolian Word Recognition Using MWRCNN and Position Maps. , 2016, , .		6
110	Supramolecular Nested Microbeads as Building Blocks for Macroscopic Self-Healing Scaffolds. <i>Angewandte Chemie</i> , 2018, 130, 3133-3137.	2.0	6
111	Sessile Microdroplet-Based Writing Board for Patterning of Structural Colored Hydrogels. <i>Advanced Materials Interfaces</i> , 2021, 8, 2001201.	3.7	6
112	Facile Synthesis of Chiral Diphosphine-Containing Multiple Dendrimeric Catalysts for Enantioselective Hydrogenation. <i>Chinese Journal of Chemistry</i> , 2012, 30, 2009-2015.	4.9	4
113	Single-Cell Analysis Identifies Thymic Maturation Delay in Growth-Restricted Neonatal Mice. <i>Frontiers in Immunology</i> , 2018, 9, 2523.	4.8	4
114	Microfluidic encapsulation of supramolecular optical chemosensors for high-throughput analysis and screening. <i>Sensors and Actuators B: Chemical</i> , 2022, 355, 131302.	7.8	3
115	Bioinspired 2D Isotropically Fatigue-Resistant Hydrogels (<i>Adv. Mater.</i> 8/2022). <i>Advanced Materials</i> , 2022, 34, .	21.0	2
116	DNAzyme-Catalyzed Cellular Oxidative Stress Amplification for Pro-protein Activation in Living Cells. <i>ChemBioChem</i> , 2021, 22, 2608-2613.	2.6	1
117	Injectable Granular Hydrogels as Colloidal Assembly Microreactors for Customized Structural Colored Objects. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	1
118	Wearable Devices: High-Performance Wearable Micro-Supercapacitors Based on Microfluidic-Directed Nitrogen-Doped Graphene Fiber Electrodes (<i>Adv. Funct. Mater.</i> 36/2017). <i>Advanced Functional Materials</i> , 2017, 27, .	14.9	0
119	Shape-Memory Polymers: Mechanically Robust and UV-Curable Shape-Memory Polymers for Digital Light Processing Based 4D Printing (<i>Adv. Mater.</i> 27/2021). <i>Advanced Materials</i> , 2021, 33, 2170210.	21.0	0