

# Xuechang Zhou

## List of Publications by Citations

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110  
papers

4,021  
citations

37  
h-index

58  
g-index

120  
ext. papers

5,068  
ext. citations

8.8  
avg, IF

5.95  
L-index

#	Paper	IF	Citations
110	Rational Fabrication of Anti-Freezing, Non-Drying Tough Organohydrogels by One-Pot Solvent Displacement. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 6568-6571	16.4	213
109	Stretchable conductors with ultrahigh tensile strain and stable metallic conductance enabled by prestrained polyelectrolyte nanoplatforms. <i>Advanced Materials</i> , <b>2011</b> , 23, 3090-4	24	173
108	Liquid Metal-Based Transient Circuits for Flexible and Recyclable Electronics. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1808739	15.6	138
107	Matrix-assisted catalytic printing for the fabrication of multiscale, flexible, foldable, and stretchable metal conductors. <i>Advanced Materials</i> , <b>2013</b> , 25, 3343-50	24	137
106	Recent progress in fabrication and application of polydimethylsiloxane sponges. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 16467-16497	13	136
105	Three-dimensional compressible and stretchable conductive composites. <i>Advanced Materials</i> , <b>2014</b> , 26, 810-5	24	134
104	Liquid metal sponges for mechanically durable, all-soft, electrical conductors. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 1586-1590	7.1	103
103	Conformational Transition of Tethered Poly(N-isopropylacrylamide) Chains in Coronas of Micelles and Vesicles. <i>Macromolecules</i> , <b>2005</b> , 38, 909-914	5.5	98
102	Biomimetic anti-freezing polymeric hydrogels: keeping soft-wet materials active in cold environments. <i>Materials Horizons</i> , <b>2021</b> , 8, 351-369	14.4	85
101	Liquid Metal-Based Soft Microfluidics. <i>Small</i> , <b>2020</b> , 16, e1903841	11	84
100	High-absorption recyclable photothermal membranes used in a bionic system for high-efficiency solar desalination via enhanced localized heating. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 20044-20052 <sup>13</sup>		82
99	Biomimicking Topographic Elastomeric Petals (E-Petals) for Omnidirectional Stretchable and Printable Electronics. <i>Advanced Science</i> , <b>2015</b> , 2, 1400021	13.6	79
98	Salt-assisted direct exfoliation of graphite into high-quality, large-size, few-layer graphene sheets. <i>Nanoscale</i> , <b>2013</b> , 5, 7202-8	7.7	77
97	Chemotaxis-driven delivery of nano-pathogenoids for complete eradication of tumors post-phototherapy. <i>Nature Communications</i> , <b>2020</b> , 11, 1126	17.4	75
96	Liquid metal droplets with high elasticity, mobility and mechanical robustness. <i>Materials Horizons</i> , <b>2017</b> , 4, 591-597	14.4	70
95	Mechano-regulated surface for manipulating liquid droplets. <i>Nature Communications</i> , <b>2017</b> , 8, 14831	17.4	70
94	A high-absorption and self-driven salt-resistant black gold nanoparticle-deposited sponge for highly efficient, salt-free, and long-term durable solar desalination. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 2581-2588	13	65

93	Fabrication of arbitrary three-dimensional polymer structures by rational control of the spacing between nanobrushes. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 6506-10	16.4	64
92	Bacterial outer membrane vesicles as a platform for biomedical applications: An update. <i>Journal of Controlled Release</i> , <b>2020</b> , 323, 253-268	11.7	62
91	Nanoliter dispensing method by degassed poly(dimethylsiloxane) microchannels and its application in protein crystallization. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 4924-30	7.8	61
90	Rational Fabrication of Anti-Freezing, Non-Drying Tough Organohydrogels by One-Pot Solvent Displacement. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 6678-6681	3.6	60
89	Robust Fabrication of Nonstick, Noncorrosive, Conductive Graphene-Coated Liquid Metal Droplets for Droplet-Based, Floating Electrodes. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1706277	15.6	57
88	Light-Induced Shape Morphing of Liquid Metal Nanodroplets Enabled by Polydopamine Coating. <i>Small</i> , <b>2019</b> , 15, e1804838	11	57
87	3D-patterned polymer brush surfaces. <i>Nanoscale</i> , <b>2011</b> , 3, 4929	7.7	56
86	3D Stretchable, Compressible, and Highly Conductive Metal-Coated Polydimethylsiloxane Sponges. <i>Advanced Materials Technologies</i> , <b>2016</b> , 1, 1600117	6.8	55
85	Surface-grafted polymer-assisted electroless deposition of metals for flexible and stretchable electronics. <i>Chemistry - an Asian Journal</i> , <b>2012</b> , 7, 862-70	4.5	51
84	Biomimetic Extreme-Temperature- and Environment-Adaptable Hydrogels. <i>ChemPhysChem</i> , <b>2019</b> , 20, 2139-2154	3.2	48
83	Massively parallel patterning of complex 2D and 3D functional polymer brushes by polymer pen lithography. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 11955-64	9.5	48
82	Thermoresponsive triblock copolymer aggregates investigated by laser light scattering. <i>Journal of Physical Chemistry B</i> , <b>2007</b> , 111, 5111-5	3.4	45
81	Skin-Inspired Surface-Microstructured Tough Hydrogel Electrolytes for Stretchable Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 21895-21903	9.5	42
80	Scalable and Automated Fabrication of Conductive Tough-Hydrogel Microfibers with Ultrastretchability, 3D Printability, and Stress Sensitivity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 11204-11212	9.5	42
79	Analysis and Transformations of Room-Temperature Liquid Metal Interfaces - A Closer Look through Interfacial Tension. <i>ChemPhysChem</i> , <b>2018</b> , 19, 1584-1592	3.2	42
78	Mechanochemical Regulated Origami with Tough Hydrogels by Ion Transfer Printing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 9077-9084	9.5	41
77	Constructing the Phase Diagram of an Aqueous Solution of Poly(N-isopropyl acrylamide) by Controlled Microevaporation in a Nanoliter Microchamber. <i>Macromolecular Rapid Communications</i> , <b>2008</b> , 29, 1363-1367	4.8	41
76	"Freezing", morphing, and folding of stretchy tough hydrogels. <i>Journal of Materials Chemistry B</i> , <b>2017</b> , 5, 5726-5732	7.3	38

75	Organic sponge photocatalysis. <i>Green Chemistry</i> , <b>2017</b> , 19, 2925-2930	10	37
74	Hydrophilic Sponges for Leaf-Inspired Continuous Pumping of Liquids. <i>Advanced Science</i> , <b>2017</b> , 4, 1700028	3.6	36
73	Polymer pen lithography using dual-elastomer tip arrays. <i>Small</i> , <b>2012</b> , 8, 2664-9	11	36
72	Wearable Wire-Shaped Symmetric Supercapacitors Based on Activated Carbon-Coated Graphite Fibers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 34302-34310	9.5	36
71	Defect-free, high resolution patterning of liquid metals using reversibly sealed, reusable polydimethylsiloxane microchannels for flexible electronic applications. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 6790-6797	7.1	33
70	Polymer nanostructures made by scanning probe lithography: recent progress in material applications. <i>Macromolecular Rapid Communications</i> , <b>2012</b> , 33, 359-73	4.8	32
69	Microfluidic Patterning of Metal Structures for Flexible Conductors by In Situ Polymer-Assisted Electroless Deposition. <i>Advanced Science</i> , <b>2017</b> , 4, 1600313	13.6	32
68	Anisotropic liquid metal-elastomer composites. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 10166-10172	7.1	31
67	Aqueous and air-compatible fabrication of high-performance conductive textiles. <i>Chemistry - an Asian Journal</i> , <b>2014</b> , 9, 2170-7	4.5	31
66	Softening and Shape Morphing of Stiff Tough Hydrogels by Localized Unlocking of the Trivalent Ionically Cross-Linked Centers. <i>Macromolecular Rapid Communications</i> , <b>2018</b> , 39, e1800143	4.8	30
65	A Highly Sensitive Glucose Biosensor Based on Gold Nanoparticles/Bovine Serum Albumin/Fe <sub>3</sub> O <sub>4</sub> Biocomposite Nanoparticles. <i>Electrochimica Acta</i> , <b>2016</b> , 222, 1709-1715	6.7	28
64	Bifunctional organic sponge photocatalyst for efficient cross-dehydrogenative coupling of tertiary amines to ketones. <i>Chemical Communications</i> , <b>2017</b> , 53, 12536-12539	5.8	27
63	Elastic Cu@PPy sponge for hybrid device with energy conversion and storage. <i>Nano Energy</i> , <b>2019</b> , 58, 852-861	17.1	27
62	High-resolution, large-area, serial fabrication of 3D polymer brush structures by parallel dip-pen nanodisplacement lithography. <i>Small</i> , <b>2012</b> , 8, 3568-72	11	27
61	Intrinsically adhesive, highly sensitive and temperature tolerant flexible sensors based on double network organohydrogels. <i>Chemical Engineering Journal</i> , <b>2021</b> , 413, 127544	14.7	27
60	Electric Actuation of Liquid Metal Droplets in Acidified Aqueous Electrolyte. <i>Langmuir</i> , <b>2019</b> , 35, 372-381	4	26
59	Low-temperature thermal stabilization of polyacrylonitrile-based precursor fibers towards efficient preparation of carbon fibers with improved mechanical properties. <i>Polymer</i> , <b>2015</b> , 76, 131-139	3.9	25
58	Large-Area Patterning of Metal Nanostructures by Dip-Pen Nanodisplacement Lithography for Optical Applications. <i>Small</i> , <b>2017</b> , 13, 1702003	11	24

57	Tough protein organohydrogels. <i>Journal of Materials Chemistry B</i> , <b>2018</b> , 6, 7366-7372	7.3	24
56	Adsorption of polymeric micelles and vesicles on a surface investigated by quartz crystal microbalance. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 21055-9	3.4	23
55	Robust, multiscale liquid-metal patterning enabled by a sacrificial sealing layer for flexible and wearable wireless powering. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 15243-15251	7.1	23
54	Red and Near-Infrared Light-Cleavable Polymers. <i>Macromolecular Rapid Communications</i> , <b>2018</b> , 39, e1800034	10.34	22
53	Solution-processable, soft, self-adhesive, and conductive polymer composites for soft electronics.. <i>Nature Communications</i> , <b>2022</b> , 13, 358	17.4	22
52	Directed Aromatic C-H Activation/Acetoxylation Catalyzed by Pd Nanoparticles Supported on Graphene Oxide. <i>Organic Letters</i> , <b>2017</b> , 19, 6470-6473	6.2	21
51	Enhancing the colloidal stability of detonation synthesized diamond particles in aqueous solutions by adsorbing organic mono-, bi- and tridentate molecules. <i>Journal of Colloid and Interface Science</i> , <b>2017</b> , 499, 102-109	9.3	20
50	Antifreezing Heat-Resistant Hollow Hydrogel Tubes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 18746-18754	9.5	20
49	Critical Review on the Physical Properties of Gallium-Based Liquid Metals and Selected Pathways for Their Alteration. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 20113-20142	3.8	20
48	Stretchable, Healable, and Degradable Soft Ionic Microdevices Based on Multifunctional Soaking-Toughened Dual-Dynamic-Network Organohydrogel Electrolytes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 56393-56402	9.5	19
47	Enhanced nucleation of diamond on three dimensional tools via stabilized colloidal nanodiamond in electrostatic self-assembly seeding process. <i>Journal of Colloid and Interface Science</i> , <b>2017</b> , 506, 543-552	9.3	19
46	Construction of 3D polymer brushes by dip-pen nanodisplacement lithography: understanding the molecular displacement for ultrafine and high-speed patterning. <i>Small</i> , <b>2015</b> , 11, 613-21	11	18
45	Ultra-stretchable and fast self-healing ionic hydrogel in cryogenic environments for artificial nerve fiber.. <i>Advanced Materials</i> , <b>2022</b> , e2105416	24	18
44	Surface Tension of the Oxide Skin of Gallium-Based Liquid Metals. <i>Langmuir</i> , <b>2021</b> , 37, 9017-9025	4	18
43	Liquid Metal-Mediated Mechanochemical Polymerization. <i>Macromolecular Rapid Communications</i> , <b>2019</b> , 40, e1900537	4.8	18
42	Acidity-triggered TAT-presenting nanocarriers augment tumor retention and nuclear translocation of drugs. <i>Nano Research</i> , <b>2018</b> , 11, 5716-5734	10	18
41	Shape morphing of anisotropy-encoded tough hydrogels enabled by asymmetrically-induced swelling and site-specific mechanical strengthening. <i>Journal of Materials Chemistry B</i> , <b>2018</b> , 6, 4731-4737	7.3	17
40	Densely Populated Bismuth Nanosphere Semi-Embedded Carbon Felt for Ultrahigh-Rate and Stable Vanadium Redox Flow Batteries. <i>Small</i> , <b>2020</b> , 16, e1907333	11	16

39	Recyclable, weldable, mechanically durable, and programmable liquid metal-elastomer composites. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 10953-10965	13	16
38	Organic Cotton Photocatalysis. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 14759-14766	8.3	16
37	TiB <sub>2</sub> barrier interlayer approach for HFCVD diamond deposition onto cemented carbide tools. <i>Diamond and Related Materials</i> , <b>2018</b> , 83, 126-133	3.5	14
36	Controlling Directional Liquid Motion on Micro- and Nanocrystalline Diamond/BC Composite Gradient Films. <i>Langmuir</i> , <b>2018</b> , 34, 1419-1428	4	14
35	Adherent and low friction nanocrystalline diamond films via adsorbing organic molecules in self-assembly seeding process. <i>Applied Surface Science</i> , <b>2018</b> , 456, 75-82	6.7	14
34	Interfacing of surfaces with gallium-based liquid metals: Approaches for mitigation and augmentation of liquid metal adhesion on surfaces. <i>Applied Materials Today</i> , <b>2020</b> , 21, 100868	6.6	14
33	Polydimethylsiloxane Sponge-Supported Nanometer Gold: Highly Efficient Recyclable Catalyst for Cross-Dehydrogenative Coupling in Water. <i>ChemSusChem</i> , <b>2018</b> , 11, 3586-3590	8.3	13
32	Liquid-mediated three-dimensional scanning probe nanosculpting. <i>Small</i> , <b>2013</b> , 9, 2851-6	11	13
31	Corrosion-Resistant Functional Diamond Coatings for Reliable Interfacing of Liquid Metals with Solid Metals. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 40891-40900	9.5	13
30	Engineering hydrogels by soaking: from mechanical strengthening to environmental adaptation. <i>Chemical Communications</i> , <b>2020</b> , 56, 13731-13747	5.8	13
29	Wearable Biofuel Cells: Advances from Fabrication to Application. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1803976	5.6	12
28	Recent advances in hybrid measurement methods based on atomic force microscopy and surface sensitive measurement techniques. <i>RSC Advances</i> , <b>2017</b> , 7, 47464-47499	3.7	11
27	Transferable, transparent and functional polymer@graphene 2D objects. <i>NPG Asia Materials</i> , <b>2014</b> , 6, e130-e130	10.3	11
26	Fabrication of Arbitrary Three-Dimensional Polymer Structures by Rational Control of the Spacing between Nanobrushes. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 6636-6640	3.6	10
25	A domain-based DNA circuit for smart single-nucleotide variant identification. <i>Chemical Communications</i> , <b>2018</b> , 54, 1311-1314	5.8	10
24	Recent advances in atmosphere water harvesting: Design principle, materials, devices, and applications. <i>Nano Today</i> , <b>2021</b> , 40, 101283	17.9	10
23	A DNA kinetics competition strategy of hybridization chain reaction for molecular information processing circuit construction. <i>Chemical Communications</i> , <b>2017</b> , 53, 1789-1792	5.8	8
22	Environmentally Stable, Highly Conductive, and Mechanically Robust Metallized Textiles. <i>ACS Applied Electronic Materials</i> , <b>2021</b> , 3, 1477-1488	4	8

21	High compressive strength metallic architectures prepared via polyelectrolyte-brush assisted metal deposition on 3D printed lattices. <i>Nano Structures Nano Objects</i> , <b>2018</b> , 16, 420-427	5.6	7
20	A pneumatic valve controlled microdevice for bioanalysis. <i>Biomicrofluidics</i> , <b>2013</b> , 7, 54116	3.2	7
19	Bioinspired, Mechano-Regulated Interfaces for Rationally Designed, Dynamically Controlled Collection of Oil Spills from Water. <i>Global Challenges</i> , <b>2017</b> , 1, 1600014	4.3	6
18	Photonic porous silicon-based hybrid particles by soft-lithography. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 1754-1758		6
17	Bioinspired Tough Organohydrogel Dynamic Interfaces Enabled Subzero Temperature Antifrosting, Deicing, and Antiadhesion. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 55501-55509	9.5	6
16	Polydimethylsiloxane sponge supported DMAP on polymer brushes: Highly efficient recyclable base catalyst and ligand in water. <i>Journal of Catalysis</i> , <b>2018</b> , 367, 264-268	7.3	6
15	Dispersion of polystyrene inside polystyrene-b-poly(N-isopropylacrylamide) micelles in water. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2010</b> , 48, 749-755	2.6	5
14	Recent progress in creating complex and multiplexed surface-grafted macromolecular architectures. <i>Soft Matter</i> , <b>2020</b> , 16, 8736-8759	3.6	5
13	Site-Specific Oxidation-Induced Stiffening and Shape Morphing of Soft Tough Hydrogels. <i>Macromolecular Materials and Engineering</i> , <b>2019</b> , 304, 1800589	3.9	5
12	On the Interaction of Surfactants with Gallium-Based Liquid Metals. <i>ChemistrySelect</i> , <b>2021</b> , 6, 10625-10633	3.8	4
11	Ultrahigh resolution, serial fabrication of three dimensionally-patterned protein nanostructures by liquid-mediated non-contact scanning probe lithography. <i>RSC Advances</i> , <b>2016</b> , 6, 50331-50335	3.7	4
10	Ionic-Covalent Hybrid Tough Hydrogels Enabled by the in Situ Release of Metal Ions from Insoluble Salts or Alkalis. <i>ACS Applied Polymer Materials</i> , <b>2019</b> , 1, 3222-3226	4.3	4
9	Tough hybrid microgel-reinforced hydrogels dependent on the size and modulus of the microgels. <i>Soft Matter</i> , <b>2021</b> , 17, 1566-1573	3.6	3
8	Elastic Sponges: Hydrophilic Sponges for Leaf-Inspired Continuous Pumping of Liquids (Adv. Sci. 6/2017). <i>Advanced Science</i> , <b>2017</b> , 4,	13.6	1
7	Analysis and Transformations of Room-Temperature Liquid Metal Interfaces A Closer Look through Interfacial Tension. <i>ChemPhysChem</i> , <b>2018</b> , 19, 1551-1551	3.2	1
6	Stacking chip for quantitative bioanalysis. <i>Talanta</i> , <b>2017</b> , 175, 483-487	6.2	1
5	Sealing of Immersion Deuterium Dioxide and Its Application to Signal Maintenance for Ex-Vivo and In-Vivo Multiphoton Microscopy Excited at the 1700-nm Window. <i>IEEE Photonics Journal</i> , <b>2017</b> , 9, 1-8	1.8	1
4	Polymer Brushes: Liquid-Mediated Three-Dimensional Scanning Probe Nanosculpting (Small 17/2013). <i>Small</i> , <b>2013</b> , 9, 2850-2850	11	1



3	Liquid Metal Superelastic Fiber Mat Enabling Highly Permeable Wearable Electronics Toward Comfortable e-Skins. <i>Chemical Research in Chinese Universities</i> , <b>2021</b> , 37, 615-616	2.2	1
2	Composite Materials: Three-Dimensional Compressible and Stretchable Conductive Composites (Adv. Mater. 5/2014). <i>Advanced Materials</i> , <b>2014</b> , 26, 666-666	24	0
1	Liquid Metal Nanodroplets: Light-Induced Shape Morphing of Liquid Metal Nanodroplets Enabled by Polydopamine Coating (Small 9/2019). <i>Small</i> , <b>2019</b> , 15, 1970047	11	