Xuechang Zhou

List of Publications by Year in Descending Order

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	Solution-processable, soft, self-adhesive, and conductive polymer composites for soft electronics.. *Nature Communications*, **2022**, 13, 358	17.4	22
109	Ultra-stretchable and fast self-healing ionic hydrogel in cryogenic environments for artificial nerve fiber.. *Advanced Materials*, **2022**, e2105416	24	18
108	On the Interaction of Surfactants with Gallium-Based Liquid Metals. *ChemistrySelect*, **2021**, 6, 10625-10636	1.8	4
107	Environmentally Stable, Highly Conductive, and Mechanically Robust Metallized Textiles. *ACS Applied Electronic Materials*, **2021**, 3, 1477-1488	4	8
106	Liquid Metal Superelastic Fiber Mat Enabling Highly Permeable Wearable Electronics Toward Comfortable e-Skins. *Chemical Research in Chinese Universities*, **2021**, 37, 615-616	2.2	1
105	Surface Tension of the Oxide Skin of Gallium-Based Liquid Metals. *Langmuir*, **2021**, 37, 9017-9025	4	18
104	Tough hybrid microgel-reinforced hydrogels dependent on the size and modulus of the microgels. *Soft Matter*, **2021**, 17, 1566-1573	3.6	3
103	Intrinsically adhesive, highly sensitive and temperature tolerant flexible sensors based on double network organohydrogels. *Chemical Engineering Journal*, **2021**, 413, 127544	14.7	27
102	Biomimetic anti-freezing polymeric hydrogels: keeping soft-wet materials active in cold environments. *Materials Horizons*, **2021**, 8, 351-369	14.4	85
101	Recyclable, weldable, mechanically durable, and programmable liquid metal-elastomer composites. *Journal of Materials Chemistry A*, **2021**, 9, 10953-10965	13	16
100	Critical Review on the Physical Properties of Gallium-Based Liquid Metals and Selected Pathways for Their Alteration. *Journal of Physical Chemistry C*, **2021**, 125, 20113-20142	3.8	20
99	Recent advances in atmosphere water harvesting: Design principle, materials, devices, and applications. *Nano Today*, **2021**, 40, 101283	17.9	10
98	Stretchable, Healable, and Degradable Soft Ionic Microdevices Based on Multifunctional Soaking-Toughened Dual-Dynamic-Network Organohydrogel Electrolytes. *ACS Applied Materials & Interfaces*, **2020**, 12, 56393-56402	9.5	19
97	Chemotaxis-driven delivery of nano-pathogenoids for complete eradication of tumors post-phototherapy. *Nature Communications*, **2020**, 11, 1126	17.4	75
96	Bacterial outer membrane vesicles as a platform for biomedical applications: An update. *Journal of Controlled Release*, **2020**, 323, 253-268	11.7	62
95	Bioinspired Tough Organohydrogel Dynamic Interfaces Enabled Subzero Temperature Antifrosting, Deicing, and Antiadhesion. *ACS Applied Materials & Interfaces*, **2020**, 12, 55501-55509	9.5	6
94	Densely Populated Bismuth Nanosphere Semi-Embedded Carbon Felt for Ultrahigh-Rate and Stable Vanadium Redox Flow Batteries. *Small*, **2020**, 16, e1907333	11	16

93	Corrosion-Resistant Functional Diamond Coatings for Reliable Interfacing of Liquid Metals with Solid Metals. *ACS Applied Materials & Interfaces*, **2020**, 12, 40891-40900	9.5	13
92	Recent progress in creating complex and multiplexed surface-grafted macromolecular architectures. *Soft Matter*, **2020**, 16, 8736-8759	3.6	5
91	Interfacing of surfaces with gallium-based liquid metals approaches for mitigation and augmentation of liquid metal adhesion on surfaces. *Applied Materials Today*, **2020**, 21, 100868	6.6	14
90	Engineering hydrogels by soaking: from mechanical strengthening to environmental adaptation. *Chemical Communications*, **2020**, 56, 13731-13747	5.8	13
89	Liquid Metal-Based Soft Microfluidics. *Small*, **2020**, 16, e1903841	11	84
88	A high-absorption and self-driven salt-resistant black gold nanoparticle-deposited sponge for highly efficient, salt-free, and long-term durable solar desalination. *Journal of Materials Chemistry A* , **2019**, 7, 2581-2588	13	65
87	Liquid Metal-Based Transient Circuits for Flexible and Recyclable Electronics. *Advanced Functional Materials*, **2019**, 29, 1808739	15.6	138
86	Elastic Cu@PPy sponge for hybrid device with energy conversion and storage. *Nano Energy*, **2019**, 58, 852-861	17.1	27
85	Skin-Inspired Surface-Microstructured Tough Hydrogel Electrolytes for Stretchable Supercapacitors. *ACS Applied Materials & Interfaces*, **2019**, 11, 21895-21903	9.5	42
84	Antifreezing Heat-Resistant Hollow Hydrogel Tubes. *ACS Applied Materials & Interfaces*, **2019**, 11, 18746-18754	9.5	20
83	Biomimetic Extreme-Temperature- and Environment-Adaptable Hydrogels. *ChemPhysChem*, **2019**, 20, 2139-2154	3.2	48
82	Anisotropic liquid metal elastomer composites. *Journal of Materials Chemistry C*, **2019**, 7, 10166-10172	7.1	31
81	Liquid Metal Nanodroplets: Light-Induced Shape Morphing of Liquid Metal Nanodroplets Enabled by Polydopamine Coating (Small 9/2019). *Small*, **2019**, 15, 1970047	11	
80	Liquid Metal-Mediated Mechanochemical Polymerization. *Macromolecular Rapid Communications*, **2019**, 40, e1900537	4.8	18
79	Ionic covalent Hybrid Tough Hydrogels Enabled by the in Situ Release of Metal Ions from Insoluble Salts or Alkalis. *ACS Applied Polymer Materials*, **2019**, 1, 3222-3226	4.3	4
78	Robust, multiscale liquid-metal patterning enabled by a sacrificial sealing layer for flexible and wearable wireless powering. *Journal of Materials Chemistry C*, **2019**, 7, 15243-15251	7.1	23
77	Electric Actuation of Liquid Metal Droplets in Acidified Aqueous Electrolyte. *Langmuir*, **2019**, 35, 372-381	4	26
76	Light-Induced Shape Morphing of Liquid Metal Nanodroplets Enabled by Polydopamine Coating. *Small*, **2019**, 15, e1804838	11	57

75	Site-Specific Oxidation-Induced Stiffening and Shape Morphing of Soft Tough Hydrogels. *Macromolecular Materials and Engineering*, **2019**, 304, 1800589	3.9	5
74	Mechanochemical Regulated Origami with Tough Hydrogels by Ion Transfer Printing. *ACS Applied Materials & Interfaces*, **2018**, 10, 9077-9084	9.5	41
73	Scalable and Automated Fabrication of Conductive Tough-Hydrogel Microfibers with Ultrastretchability, 3D Printability, and Stress Sensitivity. *ACS Applied Materials & Interfaces*, **2018**, 10, 11204-11212	9.5	42
72	Rational Fabrication of Anti-Freezing, Non-Drying Tough Organohydrogels by One-Pot Solvent Displacement. *Angewandte Chemie*, **2018**, 130, 6678-6681	3.6	60
71	Rational Fabrication of Anti-Freezing, Non-Drying Tough Organohydrogels by One-Pot Solvent Displacement. *Angewandte Chemie - International Edition*, **2018**, 57, 6568-6571	16.4	213
70	TiB2 barrier interlayer approach for HFCVD diamond deposition onto cemented carbide tools. *Diamond and Related Materials*, **2018**, 83, 126-133	3.5	14
69	Controlling Directional Liquid Motion on Micro- and Nanocrystalline Diamond/SiC Composite Gradient Films. *Langmuir*, **2018**, 34, 1419-1428	4	14
68	Robust Fabrication of Nonstick, Noncorrosive, Conductive Graphene-Coated Liquid Metal Droplets for Droplet-Based, Floating Electrodes. *Advanced Functional Materials*, **2018**, 28, 1706277	15.6	57
67	Red and Near-Infrared Light-Cleavable Polymers. *Macromolecular Rapid Communications*, **2018**, 39, e1800384	4.8	22
66	Analysis and Transformations of Room-Temperature Liquid Metal Interfaces - A Closer Look through Interfacial Tension. *ChemPhysChem*, **2018**, 19, 1584-1592	3.2	42
65	High compressive strength metallic architectures prepared via polyelectrolyte-brush assisted metal deposition on 3D printed lattices. *Nano Structures Nano Objects*, **2018**, 16, 420-427	5.6	7
64	Analysis and Transformations of Room-Temperature Liquid Metal Interfaces A Closer Look through Interfacial Tension. *ChemPhysChem*, **2018**, 19, 1551-1551	3.2	1
63	Shape morphing of anisotropy-encoded tough hydrogels enabled by asymmetrically-induced swelling and site-specific mechanical strengthening. *Journal of Materials Chemistry B*, **2018**, 6, 4731-4737	7.3	17
62	Softening and Shape Morphing of Stiff Tough Hydrogels by Localized Unlocking of the Trivalent Ionically Cross-Linked Centers. *Macromolecular Rapid Communications*, **2018**, 39, e1800143	4.8	30
61	Polydimethylsiloxane Sponge-Supported Nanometer Gold: Highly Efficient Recyclable Catalyst for Cross-Dehydrogenative Coupling in Water. *ChemSusChem*, **2018**, 11, 3586-3590	8.3	13
60	Adherent and low friction nanocrystalline diamond films via adsorbing organic molecules in self-assembly seeding process. *Applied Surface Science*, **2018**, 456, 75-82	6.7	14
59	Acidity-triggered TAT-presenting nanocarriers augment tumor retention and nuclear translocation of drugs. *Nano Research*, **2018**, 11, 5716-5734	10	18
58	A domain-based DNA circuit for smart single-nucleotide variant identification. *Chemical Communications*, **2018**, 54, 1311-1314	5.8	10

57	Tough protein organohydrogels. *Journal of Materials Chemistry B*, **2018**, 6, 7366-7372	7.3	24
56	Polydimethylsiloxane sponge supported DMAP on polymer brushes: Highly efficient recyclable base catalyst and ligand in water. *Journal of Catalysis*, **2018**, 367, 264-268	7.3	6
55	Organic Cotton Photocatalysis. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 14759-14766	8.3	16
54	Wearable Wire-Shaped Symmetric Supercapacitors Based on Activated Carbon-Coated Graphite Fibers. *ACS Applied Materials & Interfaces*, **2018**, 10, 34302-34310	9.5	36
53	Organic sponge photocatalysis. *Green Chemistry*, **2017**, 19, 2925-2930	10	37
52	Liquid metal droplets with high elasticity, mobility and mechanical robustness. *Materials Horizons*, **2017**, 4, 591-597	14.4	70
51	Bioinspired, Mechano-Regulated Interfaces for Rationally Designed, Dynamically Controlled Collection of Oil Spills from Water. *Global Challenges*, **2017**, 1, 1600014	4.3	6
50	Hydrophilic Sponges for Leaf-Inspired Continuous Pumping of Liquids. *Advanced Science*, **2017**, 4, 1700028	13.6	36
49	Elastic Sponges: Hydrophilic Sponges for Leaf-Inspired Continuous Pumping of Liquids (Adv. Sci. 6/2017). *Advanced Science*, **2017**, 4,	13.6	1
48	Recent progress in fabrication and application of polydimethylsiloxane sponges. *Journal of Materials Chemistry A*, **2017**, 5, 16467-16497	13	136
47	Defect-free, high resolution patterning of liquid metals using reversibly sealed, reusable polydimethylsiloxane microchannels for flexible electronic applications. *Journal of Materials Chemistry C*, **2017**, 5, 6790-6797	7.1	33
46	Mechano-regulated surface for manipulating liquid droplets. *Nature Communications*, **2017**, 8, 14831	17.4	70
45	Enhancing the colloidal stability of detonation synthesized diamond particles in aqueous solutions by adsorbing organic mono-, bi- and tridentate molecules. *Journal of Colloid and Interface Science*, **2017**, 499, 102-109	9.3	20
44	A DNA kinetics competition strategy of hybridization chain reaction for molecular information processing circuit construction. *Chemical Communications*, **2017**, 53, 1789-1792	5.8	8
43	Liquid metal sponges for mechanically durable, all-soft, electrical conductors. *Journal of Materials Chemistry C*, **2017**, 5, 1586-1590	7.1	103
42	Bifunctional organic sponge photocatalyst for efficient cross-dehydrogenative coupling of tertiary amines to ketones. *Chemical Communications*, **2017**, 53, 12536-12539	5.8	27
41	Recent advances in hybrid measurement methods based on atomic force microscopy and surface sensitive measurement techniques. *RSC Advances*, **2017**, 7, 47464-47499	3.7	11
40	High-absorption recyclable photothermal membranes used in a bionic system for high-efficiency solar desalination via enhanced localized heating. *Journal of Materials Chemistry A*, **2017**, 5, 20044-20052	13	82

39	Large-Area Patterning of Metal Nanostructures by Dip-Pen Nanodisplacement Lithography for Optical Applications. *Small*, **2017**, 13, 1702003	11	24
38	Enhanced nucleation of diamond on three dimensional tools via stabilized colloidal nanodiamond in electrostatic self-assembly seeding process. *Journal of Colloid and Interface Science*, **2017**, 506, 543-552	9.3	19
37	Stacking chip for quantitative bioanalysis. *Talanta*, **2017**, 175, 483-487	6.2	1
36	Directed Aromatic C-H Activation/Acetoxylation Catalyzed by Pd Nanoparticles Supported on Graphene Oxide. *Organic Letters*, **2017**, 19, 6470-6473	6.2	21
35	"Freezing", morphing, and folding of stretchy tough hydrogels. *Journal of Materials Chemistry B*, **2017**, 5, 5726-5732	7.3	38
34	Microfluidic Patterning of Metal Structures for Flexible Conductors by In Situ Polymer-Assisted Electroless Deposition. *Advanced Science*, **2017**, 4, 1600313	13.6	32
33	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. *IEEE Photonics Journal*, **2017**, 9, 1-8	1.8	1
32	A Highly Sensitive Glucose Biosensor Based on Gold Nanoparticles/Bovine Serum Albumin/Fe3O4 Biocomposite Nanoparticles. *Electrochimica Acta*, **2016**, 222, 1709-1715	6.7	28
31	Ultrahigh resolution, serial fabrication of three dimensionally-patterned protein nanostructures by liquid-mediated non-contact scanning probe lithography. *RSC Advances*, **2016**, 6, 50331-50335	3.7	4
30	3D Stretchable, Compressible, and Highly Conductive Metal-Coated Polydimethylsiloxane Sponges. *Advanced Materials Technologies*, **2016**, 1, 1600117	6.8	55
29	Biomimicking Topographic Elastomeric Petals (E-Petals) for Omnidirectional Stretchable and Printable Electronics. *Advanced Science*, **2015**, 2, 1400021	13.6	79
28	Low-temperature thermal stabilization of polyacrylontrile-based precursor fibers towards efficient preparation of carbon fibers with improved mechanical properties. *Polymer*, **2015**, 76, 131-139	3.9	25
27	Construction of 3D polymer brushes by dip-pen nanodisplacement lithography: understanding the molecular displacement for ultrafine and high-speed patterning. *Small*, **2015**, 11, 613-21	11	18
26	Massively parallel patterning of complex 2D and 3D functional polymer brushes by polymer pen lithography. *ACS Applied Materials & Interfaces*, **2014**, 6, 11955-64	9.5	48
25	Three-dimensional compressible and stretchable conductive composites. *Advanced Materials*, **2014**, 26, 810-5	24	134
24	Composite Materials: Three-Dimensional Compressible and Stretchable Conductive Composites (Adv. Mater. 5/2014). *Advanced Materials*, **2014**, 26, 666-666	24	0
23	Transferable, transparent and functional polymer@graphene 2D objects. *NPG Asia Materials*, **2014**, 6, e130-e130	10.3	11
22	Aqueous and air-compatible fabrication of high-performance conductive textiles. *Chemistry - an Asian Journal*, **2014**, 9, 2170-7	4.5	31

21	A pneumatic valve controlled microdevice for bioanalysis. *Biomicrofluidics*, **2013**, 7, 54116	3.2	7
20	Liquid-mediated three-dimensional scanning probe nanosculpting. *Small*, **2013**, 9, 2851-6	11	13
19	Matrix-assisted catalytic printing for the fabrication of multiscale, flexible, foldable, and stretchable metal conductors. *Advanced Materials*, **2013**, 25, 3343-50	24	137
18	Salt-assisted direct exfoliation of graphite into high-quality, large-size, few-layer graphene sheets. *Nanoscale*, **2013**, 5, 7202-8	7.7	77
17	Polymer Brushes: Liquid-Mediated Three-Dimensional Scanning Probe Nanosculpting (Small 17/2013). *Small*, **2013**, 9, 2850-2850	11	1
16	Polymer nanostructures made by scanning probe lithography: recent progress in material applications. *Macromolecular Rapid Communications*, **2012**, 33, 359-73	4.8	32
15	High-resolution, large-area, serial fabrication of 3D polymer brush structures by parallel dip-pen nanodisplacement lithography. *Small*, **2012**, 8, 3568-72	11	27
14	Polymer pen lithography using dual-elastomer tip arrays. *Small*, **2012**, 8, 2664-9	11	36
13	Surface-grafted polymer-assisted electroless deposition of metals for flexible and stretchable electronics. *Chemistry - an Asian Journal*, **2012**, 7, 862-70	4.5	51
12	3D-patterned polymer brush surfaces. *Nanoscale*, **2011**, 3, 4929	7.7	56
11	Photonic porous silicon-based hybrid particles by soft-lithography. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 1754-1758		6
10	Stretchable conductors with ultrahigh tensile strain and stable metallic conductance enabled by prestrained polyelectrolyte nanoplatforms. *Advanced Materials*, **2011**, 23, 3090-4	24	173
9	Fabrication of Arbitrary Three-Dimensional Polymer Structures by Rational Control of the Spacing between Nanobrushes. *Angewandte Chemie*, **2011**, 123, 6636-6640	3.6	10
8	Fabrication of arbitrary three-dimensional polymer structures by rational control of the spacing between nanobrushes. *Angewandte Chemie - International Edition*, **2011**, 50, 6506-10	16.4	64
7	Dispersion of polystyrene inside polystyrene-b-poly(N-isopropylacrylamide) micelles in water. *Journal of Polymer Science, Part B: Polymer Physics*, **2010**, 48, 749-755	2.6	5
6	Constructing the Phase Diagram of an Aqueous Solution of Poly(N-isopropyl acrylamide) by Controlled Microevaporation in a Nanoliter Microchamber. *Macromolecular Rapid Communications*, **2008**, 29, 1363-1367	4.8	41
5	Thermoresponsive triblock copolymer aggregates investigated by laser light scattering. *Journal of Physical Chemistry B*, **2007**, 111, 5111-5	3.4	45
4	Nanoliter dispensing method by degassed poly(dimethylsiloxane) microchannels and its application in protein crystallization. *Analytical Chemistry*, **2007**, 79, 4924-30	7.8	61

3	Adsorption of polymeric micelles and vesicles on a surface investigated by quartz crystal microbalance. *Journal of Physical Chemistry B*, **2006**, 110, 21055-9	3.4	23
2	Conformational Transition of Tethered Poly(N-isopropylacrylamide) Chains in Coronas of Micelles and Vesicles. *Macromolecules*, **2005**, 38, 909-914	5.5	98
1	Wearable Biofuel Cells: Advances from Fabrication to Application. *Advanced Functional Materials*,2103976	15.6	12