Xuetong Zhang

List of Publications by Year in Descending Order

90 papers	6,385 citations	41 h-index	79 g-index
96 ext. papers	7,464 ext. citations	9.7 avg, IF	6.18 L-index

#	Paper	IF	Citations
90	The influence of the drying method on the microstructure and the compression behavior of graphene aerogel. *Diamond and Related Materials*, **2022**, 121, 108772	3.5	2
89	Hygroscopic holey graphene aerogel fibers enable highly efficient moisture capture, heat allocation and microwave absorption.. *Nature Communications*, **2022**, 13, 1227	17.4	23
88	Elaborate Size-tuning of Silica Aerogel Building Blocks Enables Laser-driven Lighting. *Advanced Materials*, **2021**, e2107168	24	4
87	Solid-Liquid-Vapor Triphase Gel. *Langmuir*, **2021**, 37, 13501-13511	4	2
86	Solid-Liquid Host-Guest Composites: The Marriage of Porous Solids and Functional Liquids. *Advanced Materials*, **2021**, 33, e2104851	24	9
85	Graphene aerogel-phase change material host-guest smart films. *FlatChem*, **2021**, 27, 100249	5.1	4
84	Silica Aerogels with Self-Reinforced Microstructure for Bioinspired Hydrogels. *Langmuir*, **2021**, 37, 5923-5931	4	3
83	Quasi-static compression properties of graphene aerogel. *Diamond and Related Materials*, **2021**, 111, 108225	3.5	3
82	Bayberry tannin directed assembly of a bifunctional graphene aerogel for simultaneous solar steam generation and marine uranium extraction. *Nanoscale*, **2021**, 13, 5419-5428	7.7	16
81	Polyimide Aerogel Fibers with Superior Flame Resistance, Strength, Hydrophobicity, and Flexibility Made via a Universal Sol-Gel Confined Transition Strategy. *ACS Nano*, **2021**, 15, 4759-4768	16.7	21
80	Flame-Retardant Host□Guest Films for Efficient Thermal Management of Cryogenic Devices. *Advanced Functional Materials*, **2021**, 31, 2102232	15.6	6
79	Bending Stiffness-Directed Fabricating of Kevlar Aerogel-Confined Organic Phase-Change Fibers. *ACS Nano*, **2021**, 15, 15180-15190	16.7	9
78	Electrokinetic effect and H2O2 boosting in synthetic graphene/□FeOOH aerogel films for the generation of electricity. *Journal of Materials Chemistry A*, **2021**, 9, 5588-5596	13	0
77	Calcium-Doped Boron Nitride Aerogel Enables Infrared Stealth at High Temperature Up to 1300□C. *Nano-Micro Letters*, **2021**, 14, 18	19.5	0
76	Controllable Synthesis of Co3+-Enriched Anisotropy Co3O4 Hexagonal Prisms toward Enhanced Lithium Storage. *ACS Applied Energy Materials*, **2020**, 3, 5856-5866	6.1	8
75	3D printing-directed auxetic Kevlar aerogel architectures with multiple functionalization options. *Journal of Materials Chemistry A*, **2020**, 8, 14243-14253	13	29
74	Superhydrophobic polyimide aerogels via conformal coating strategy with excellent underwater performances. *Journal of Applied Polymer Science*, **2020**, 137, 48849	2.9	7

73	Multifunctional Aramid Nanofiber/Carbon Nanotube Hybrid Aerogel Films. *ACS Nano*, **2020**, 14, 688-697	16.7	142
72	Nanoporous Boron Nitride Aerogel Film and Its Smart Composite with Phase Change Materials. *ACS Nano*, **2020**,	16.7	65
71	Reaction-Spun Transparent Silica Aerogel Fibers. *ACS Nano*, **2020**, 14, 11919-11928	16.7	31
70	Phase-separation induced synthesis of superhydrophobic silica aerogel powders and granules. *Journal of Solid State Chemistry*, **2019**, 279, 120971	3.3	12
69	Self-floating hybrid hydrogels assembled with conducting polymer hollow spheres and silica aerogel microparticles for solar steam generation. *Journal of Materials Chemistry A*, **2019**, 7, 1244-1251	13	89
68	Nanofibrous Kevlar Aerogel Films and Their Phase-Change Composites for Highly Efficient Infrared Stealth. *ACS Nano*, **2019**, 13, 2236-2245	16.7	84
67	Symbiotic Aerogel Fibers Made via In-Situ Gelation of Aramid Nanofibers with Polyamidoxime for Uranium Extraction. *Molecules*, **2019**, 24,	4.8	28
66	High-Efficiency Cryo-Thermocells Assembled with Anisotropic Holey Graphene Aerogel Electrodes and a Eutectic Redox Electrolyte. *Advanced Materials*, **2019**, 31, e1901403	24	33
65	Nanofibrous Kevlar Aerogel Threads for Thermal Insulation in Harsh Environments. *ACS Nano*, **2019**, 13, 5703-5711	16.7	128
64	Recyclable Nanoporous Materials with Ordered Tunnels Self-Assembled from □and □Cyclodextrins. *ChemNanoMat*, **2019**, 5, 838-846	3.5	9
63	Boron Nitride Aerogels with Super-Flexibility Ranging from Liquid Nitrogen Temperature to 1000 □C. *Advanced Functional Materials*, **2019**, 29, 1900188	15.6	55
62	Electroless Plating of Graphene Aerogel Fibers for Electrothermal and Electromagnetic Applications. *Langmuir*, **2019**, 35, 3814-3821	4	15
61	Aerogel-Directed Energy-Storage Films with Thermally Stimulant Multiresponsiveness. *Langmuir*, **2019**, 35, 943-949	4	20
60	Surfactant-free synthesis of silica aerogel microspheres with hierarchically porous structure. *Journal of Colloid and Interface Science*, **2018**, 515, 1-9	9.3	20
59	Thermoresponsive Polyrotaxane Aerogels: Converting Molecular Necklaces into Tough Porous Monoliths. *ACS Applied Materials & Interfaces*, **2018**, 10, 1468-1473	9.5	27
58	Inner Surface-Functionalized Graphene Aerogel Microgranules with Static Microwave Attenuation and Dynamic Infrared Shielding. *Langmuir*, **2018**, 34, 9004-9014	4	10
57	Template-Free Self-Assembly of Fluorine-Free Hydrophobic Polyimide Aerogels with Lotus or Petal Effect. *ACS Applied Materials & Interfaces*, **2018**, 10, 16901-16910	9.5	47
56	Multiresponsive Graphene-Aerogel-Directed Phase-Change Smart Fibers. *Advanced Materials*, **2018**, 30, e1801754	24	172

55	Graphene Aerogel-Directed Fabrication of Phase Change Composites **2018**,		1
54	Robust urethane-bridged silica aerogels available for water-carved aerosculptures. *New Journal of Chemistry*, **2017**, 41, 1953-1958	3.6	14
53	Cyclic molecule aerogels: a robust cyclodextrin monolith with hierarchically porous structures for removal of micropollutants from water. *Journal of Materials Chemistry A*, **2017**, 5, 4308-4313	13	48
52	Assembling hollow carbon sphere-graphene polylithic aerogels for thermoelectric cells. *Nano Energy*, **2017**, 39, 470-477	17.1	54
51	Graphene Aerogel Templated Fabrication of Phase Change Microspheres as Thermal Buffers in Microelectronic Devices. *ACS Applied Materials & Interfaces*, **2017**, 9, 41323-41331	9.5	51
50	Graphene Hybrid Aerogels Made via Phase Transfer Strategy. *Advanced Materials Interfaces*, **2016**, 3, 1600541	4.6	5
49	From anisotropic graphene aerogels to electron- and photo-driven phase change composites. *Journal of Materials Chemistry A*, **2016**, 4, 17042-17049	13	129
48	"Hot spots" growth on single nanowire controlled by electric charge. *Nanoscale*, **2016**, 8, 12029-34	7.7	6
47	Hydrogen bonding directed assembly of simonkolleite aerogel by a sol-gel approach. *Materials and Design*, **2016**, 93, 503-508	8.1	7
46	Smart and flexible supercapacitor based on a porous carbon nanotube film and polyaniline hydrogel. *RSC Advances*, **2016**, 6, 24946-24951	3.7	48
45	Reduced-graphene-oxide/metal-oxide p-n heterojunction aerogels as efficient 3D sensing frameworks for phenol detection. *Carbon*, **2016**, 99, 571-578	10.4	83
44	Defect-Controlled Preparation of UiO-66 Metal-Organic Framework Thin Films with Molecular Sieving Capability. *Chemistry - an Asian Journal*, **2016**, 11, 207-10	4.5	14
43	Bio-inspired design and fabrication of an ultralight and strong nano-carbon gradient composite. *Materials and Design*, **2016**, 107, 198-204	8.1	6
42	Reversible superhydrophobic coatings on lifeless and biotic surfaces via dry-painting of aerogel microparticles. *Journal of Materials Chemistry A*, **2016**, 4, 11408-11415	13	27
41	Highly Active Carbon Supported Pd-Ag Nanofacets Catalysts for Hydrogen Production from HCOOH. *ACS Applied Materials & Interfaces*, **2016**, 8, 20839-48	9.5	41
40	Fast and one-pot synthesis of silica aerogels via a quasi-solvent-exchange-free ambient pressure drying process. *Microporous and Mesoporous Materials*, **2015**, 218, 192-198	5.3	56
39	Polypyrrole/silver coaxial nanowire aero-sponges for temperature-independent stress sensing and stress-triggered Joule heating. *ACS Nano*, **2015**, 9, 4244-51	16.7	127
38	Preparation and characterization of a composite hydrogel with graphene oxide as an acid catalyst. *Soft Matter*, **2015**, 11, 3215-21	3.6	16

37	Self-crosslinked polyaniline hydrogel electrodes for electrochemical energy storage. *Carbon*, **2015**, 92, 133-141	10.4	112
36	Binary Crystallized Supramolecular Aerogels Derived from Host-Guest Inclusion Complexes. *ACS Nano*, **2015**, 9, 11389-97	16.7	53
35	Autocatalytic synthesis of molecular-bridged silica aerogels with excellent absorption and super elasticity. *RSC Advances*, **2015**, 5, 91407-91413	3.7	15
34	Synthesis and physicochemical properties of graphene/ZrO2 composite aerogels. *RSC Advances*, **2015**, 5, 11738-11744	3.7	13
33	Elastic, conductive, polymeric hydrogels and sponges. *Scientific Reports*, **2014**, 4, 5792	4.9	120
32	Hierarchical hydrogen bonds directed multi-functional carbon nanotube-based supramolecular hydrogels. *Small*, **2014**, 10, 1387-93	11	74
31	Programmable writing of graphene oxide/reduced graphene oxide fibers for sensible networks with in situ welded junctions. *ACS Nano*, **2014**, 8, 4325-33	16.7	45
30	Spontaneous assembly of strong and conductive graphene/polypyrrole hybrid aerogels for energy storage. *Nanoscale*, **2014**, 6, 12912-20	7.7	81
29	A versatile ambient pressure drying approach to synthesize silica-based composite aerogels. *RSC Advances*, **2014**, 4, 51146-51155	3.7	38
28	Dendrimer-linked, renewable and magnetic carbon nanotube aerogels. *Materials Horizons*, **2014**, 1, 232-236	14	31
27	Bifunctional graphene/□FeO□ hybrid aerogels with double nanocrystalline networks for enzyme immobilization. *Small*, **2013**, 9, 2331-40	11	111
26	Edge-to-edge assembled graphene oxide aerogels with outstanding mechanical performance and superhigh chemical activity. *Small*, **2013**, 9, 1397-404	11	169
25	3D porous and redox-active prussian blue-in-graphene aerogels for highly efficient electrochemical detection of H2O2. *Journal of Materials Chemistry*, **2012**, 22, 22090		128
24	Emulsion template synthesis of all conducting polymer aerogels with superb adsorption capacity and enhanced electrochemical capacitance. *Journal of Materials Chemistry*, **2012**, 22, 8579		41
23	Glucono-□lactone controlled assembly of graphene oxide hydrogels with selectively reversible gel□sol transition. *Soft Matter*, **2012**, 8, 4609	3.6	73
22	Green synthesis of carbon nanotube□graphene hybrid aerogels and their use as versatile agents for water purification. *Journal of Materials Chemistry*, **2012**, 22, 8767		460
21	What is the choice for supercapacitors: graphene or graphene oxide?. *Energy and Environmental Science*, **2011**, 4, 2826	35.4	568
20	Mechanically strong and highly conductive graphene aerogel and its use as electrodes for electrochemical power sources. *Journal of Materials Chemistry*, **2011**, 21, 6494		818

19	Aligned/unaligned conducting polymer cryogels with three-dimensional macroporous architectures from ice-segregation-induced self-assembly of PEDOT-PSS. *Langmuir*, **2011**, 27, 1915-23	4	67
18	Alkali-treated graphene oxide as a solid base catalyst: synthesis and electrochemical capacitance of graphene/carbon composite aerogels. *Journal of Materials Chemistry*, **2011**, 21, 18537		102
17	Synthesis of conducting polymer hydrogels with 2D building blocks and their potential-dependent gel-sol transitions. *Chemical Communications*, **2011**, 47, 6287-9	5.8	53
16	Ultralight conducting polymer/carbon nanotube composite aerogels. *Carbon*, **2011**, 49, 1884-1893	10.4	69
15	Easy and green synthesis of reduced graphite oxide-based hydrogels. *Carbon*, **2011**, 49, 4314-4321	10.4	217
14	Conducting polymer aerogels from supercritical CO2 drying PEDOT-PSS hydrogels. *Journal of Materials Chemistry*, **2010**, 20, 5080		92
13	Nanocomposite hydrogels□ontrolled synthesis of chiral polyaniline nanofibers and their inclusion in agarose. *Synthetic Metals*, **2009**, 159, 2135-2140	3.6	19
12	Comparison of chiral polyaniline carbon nanotube nanocomposites synthesized by aniline dimer-assisted chemistry and electrochemistry methods. *Synthetic Metals*, **2008**, 158, 336-344	3.6	12
11	Electrodeposition of chiral polymer-carbon nanotube composite films. *ChemPhysChem*, **2007**, 8, 1766-9	3.2	11
10	Potential controlled electrochemical assembly of chiral polyaniline with□enhanced stereochemical selectivity. *Polymer*, **2007**, 48, 5473-5479	3.9	19
9	Controllable synthesis of conducting polypyrrole nanostructures. *Journal of Physical Chemistry B*, **2006**, 110, 1158-65	3.4	353
8	Single-walled carbon nanotube-based coaxial nanowires: synthesis, characterization, and electrical properties. *Journal of Physical Chemistry B*, **2005**, 109, 1101-7	3.4	68
7	Conducting polymer/carbon nanotube composite films made by in situ electropolymerization using an ionic surfactant as the supporting electrolyte. *Carbon*, **2005**, 43, 2186-2191	10.4	70
6	Surfactant-directed polypyrrole/CNT nanocables: synthesis, characterization, and enhanced electrical properties. *ChemPhysChem*, **2004**, 5, 998-1002	3.2	127
5	Inorganic/organic mesostructure directed synthesis of wire/ribbon-like polypyrrole nanostructures. *Chemical Communications*, **2004**, 1852-3	5.8	139
4	Synthesis and electrical properties of carbon nanotube polyaniline composites. *Applied Physics Letters*, **2004**, 85, 1796-1798	3.4	125
3	Nanoporous Kevlar Aerogel Confined Phase Change Fluids Enable Super-Flexible Thermal Diodes. *Advanced Functional Materials*,2200137	15.6	1
2	Electrically Conductive, Optically Responsive, and Highly Orientated Ti3C2Tx MXene Aerogel Fibers. *Advanced Functional Materials*,2107767	15.6	12

List of Publications

1 Recyclable thermo-insulating panels made by reversible gelling of dispersed silica aerogel microparticles. *Journal of Sol-Gel Science and Technology*,1 2.3