

Xuetong Zhang

List of Publications by Year in descending order

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95
papers

8,581
citations

43973

48
h-index

43802

91
g-index

96
all docs

96
docs citations

96
times ranked

10091
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanically strong and highly conductive graphene aerogel and its use as electrodes for electrochemical power sources. <i>Journal of Materials Chemistry</i> , 2011, 21, 6494.	6.7	915
2	What is the choice for supercapacitors: graphene or graphene oxide?. <i>Energy and Environmental Science</i> , 2011, 4, 2826.	15.6	666
3	Green synthesis of carbon nanotube-graphene hybrid aerogels and their use as versatile agents for water purification. <i>Journal of Materials Chemistry</i> , 2012, 22, 8767.	6.7	517
4	Controllable Synthesis of Conducting Polypyrrole Nanostructures. <i>Journal of Physical Chemistry B</i> , 2006, 110, 1158-1165.	1.2	390
5	Multifunctional Aramid Nanofiber/Carbon Nanotube Hybrid Aerogel Films. <i>ACS Nano</i> , 2020, 14, 688-697.	7.3	298
6	Multiresponsive Graphene-Aerogel-Directed Phase-Change Smart Fibers. <i>Advanced Materials</i> , 2018, 30, e1801754.	11.1	272
7	Nanofibrous Kevlar Aerogel Threads for Thermal Insulation in Harsh Environments. <i>ACS Nano</i> , 2019, 13, 5703-5711.	7.3	271
8	Easy and green synthesis of reduced graphite oxide-based hydrogels. <i>Carbon</i> , 2011, 49, 4314-4321.	5.4	247
9	Edge-to-Edge Assembled Graphene Oxide Aerogels with Outstanding Mechanical Performance and Superhigh Chemical Activity. <i>Small</i> , 2013, 9, 1397-1404.	5.2	182
10	From anisotropic graphene aerogels to electron- and photo-driven phase change composites. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17042-17049.	5.2	179
11	Nanoporous Boron Nitride Aerogel Film and Its Smart Composite with Phase Change Materials. <i>ACS Nano</i> , 2020, 14, 16590-16599.	7.3	178
12	Polypyrrole/Silver Coaxial Nanowire Aero-Sponges for Temperature-Independent Stress Sensing and Stress-Triggered Joule Heating. <i>ACS Nano</i> , 2015, 9, 4244-4251.	7.3	175
13	Hygroscopic holey graphene aerogel fibers enable highly efficient moisture capture, heat allocation and microwave absorption. <i>Nature Communications</i> , 2022, 13, 1227.	5.8	168
14	Inorganic/organic mesostructure directed synthesis of wire/ribbon-like polypyrrole nanostructures Electronic supplementary information (ESI) available: FT-IR spectra, powder XRD pattern and conductivities of as-made PPy nanostructures. See http://www.rsc.org/suppdata/cc/b4/b405255b/ . <i>Chemical Communications</i> , 2004, , 1852.	2.2	150
15	3D porous and redox-active prussian blue-in-graphene aerogels for highly efficient electrochemical detection of H ₂ O ₂ . <i>Journal of Materials Chemistry</i> , 2012, 22, 22090.	6.7	143
16	Synthesis and electrical properties of carbon nanotube polyaniline composites. <i>Applied Physics Letters</i> , 2004, 85, 1796-1798.	1.5	142
17	Elastic, Conductive, Polymeric Hydrogels and Sponges. <i>Scientific Reports</i> , 2014, 4, 5792.	1.6	139
18	Nanofibrous Kevlar Aerogel Films and Their Phase-Change Composites for Highly Efficient Infrared Stealth. <i>ACS Nano</i> , 2019, 13, 2236-2245.	7.3	136

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19	Self-crosslinked polyaniline hydrogel electrodes for electrochemical energy storage. <i>Carbon</i> , 2015, 92, 133-141.	5.4	134
20	Surfactant-Directed Polypyrrole/CNT Nanocables: Synthesis, Characterization, and Enhanced Electrical Properties. <i>ChemPhysChem</i> , 2004, 5, 998-1002.	1.0	130
21	Self-floating hybrid hydrogels assembled with conducting polymer hollow spheres and silica aerogel microparticles for solar steam generation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1244-1251.	5.2	129
22	Bifunctional Graphene/ Fe_2O_3 Hybrid Aerogels with Double Nanocrystalline Networks for Enzyme Immobilization. <i>Small</i> , 2013, 9, 2331-2340.	5.2	121
23	Alkali-treated graphene oxide as a solid base catalyst: synthesis and electrochemical capacitance of graphene/carbon composite aerogels. <i>Journal of Materials Chemistry</i> , 2011, 21, 18537.	6.7	114
24	Conducting polymer aerogels from supercritical CO_2 drying PEDOT-PSS hydrogels. <i>Journal of Materials Chemistry</i> , 2010, 20, 5080.	6.7	109
25	Polyimide Aerogel Fibers with Superior Flame Resistance, Strength, Hydrophobicity, and Flexibility Made via a Universal Sol-Gel Confined Transition Strategy. <i>ACS Nano</i> , 2021, 15, 4759-4768.	7.3	108
26	Boron Nitride Aerogels with Superflexibility Ranging from Liquid Nitrogen Temperature to 1000 $^\circ\text{C}$. <i>Advanced Functional Materials</i> , 2019, 29, 1900188.	7.8	97
27	Spontaneous assembly of strong and conductive graphene/polypyrrole hybrid aerogels for energy storage. <i>Nanoscale</i> , 2014, 6, 12912-12920.	2.8	93
28	Reduced-graphene-oxide/metal-oxide p-n heterojunction aerogels as efficient 3D sensing frameworks for phenol detection. <i>Carbon</i> , 2016, 99, 571-578.	5.4	93
29	Reaction-Spun Transparent Silica Aerogel Fibers. <i>ACS Nano</i> , 2020, 14, 11919-11928.	7.3	90
30	Hierarchical Hydrogen Bonds Directed Multifunctional Carbon Nanotube-Based Supramolecular Hydrogels. <i>Small</i> , 2014, 10, 1387-1393.	5.2	85
31	Aligned/Unaligned Conducting Polymer Cryogels with Three-Dimensional Macroporous Architectures from Ice-Segregation-Induced Self-Assembly of PEDOT-PSS. <i>Langmuir</i> , 2011, 27, 1915-1923.	1.6	83
32	Ultralight conducting polymer/carbon nanotube composite aerogels. <i>Carbon</i> , 2011, 49, 1884-1893.	5.4	81
33	Glucono- δ -lactone controlled assembly of graphene oxide hydrogels with selectively reversible gel-sol transition. <i>Soft Matter</i> , 2012, 8, 4609.	1.2	79
34	Conducting polymer/carbon nanotube composite films made by in situ electropolymerization using an ionic surfactant as the supporting electrolyte. <i>Carbon</i> , 2005, 43, 2186-2191.	5.4	74
35	Template-Free Self-Assembly of Fluorine-Free Hydrophobic Polyimide Aerogels with Lotus or Petal Effect. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 16901-16910.	4.0	74
36	Single-Walled Carbon Nanotube-Based Coaxial Nanowires: Synthesis, Characterization, and Electrical Properties. <i>Journal of Physical Chemistry B</i> , 2005, 109, 1101-1107.	1.2	70

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37	Assembling hollow carbon sphere-graphene polyolithic aerogels for thermoelectric cells. <i>Nano Energy</i> , 2017, 39, 470-477.	8.2	70
38	Electrically Conductive, Optically Responsive, and Highly Orientated Ti ₃ C ₂ T _x MXene Aerogel Fibers. <i>Advanced Functional Materials</i> , 2022, 32, 2107767.	7.8	67
39	Fast and one-pot synthesis of silica aerogels via a quasi-solvent-exchange-free ambient pressure drying process. <i>Microporous and Mesoporous Materials</i> , 2015, 218, 192-198.	2.2	65
40	Graphene Aerogel Templated Fabrication of Phase Change Microspheres as Thermal Buffers in Microelectronic Devices. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 41323-41331.	4.0	65
41	Binary Crystallized Supramolecular Aerogels Derived from Host-Guest Inclusion Complexes. <i>ACS Nano</i> , 2015, 9, 11389-11397.	7.3	64
42	Smart and flexible supercapacitor based on a porous carbon nanotube film and polyaniline hydrogel. <i>RSC Advances</i> , 2016, 6, 24946-24951.	1.7	58
43	Cyclic molecule aerogels: a robust cyclodextrin monolith with hierarchically porous structures for removal of micropollutants from water. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4308-4313.	5.2	58
44	Laminated Structural Engineering Strategy toward Carbon Nanotube-Based Aerogel Films. <i>ACS Nano</i> , 2022, 16, 9378-9388.	7.3	58
45	High-Efficiency Cryo-Thermocells Assembled with Anisotropic Holey Graphene Aerogel Electrodes and a Eutectic Redox Electrolyte. <i>Advanced Materials</i> , 2019, 31, e1901403.	11.1	57
46	Programmable Writing of Graphene Oxide/Reduced Graphene Oxide Fibers for Sensible Networks with <i>In Situ</i> Welded Junctions. <i>ACS Nano</i> , 2014, 8, 4325-4333.	7.3	56
47	Bending Stiffness-Directed Fabricating of Kevlar Aerogel-Confined Organic Phase-Change Fibers. <i>ACS Nano</i> , 2021, 15, 15180-15190.	7.3	56
48	Synthesis of conducting polymer hydrogels with 2D building blocks and their potential-dependent gel-sol transitions. <i>Chemical Communications</i> , 2011, 47, 6287.	2.2	55
49	Highly Active Carbon Supported Pd-Ag Nanofacets Catalysts for Hydrogen Production from HCOOH. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 20839-20848.	4.0	53
50	3D printing-directed auxetic Kevlar aerogel architectures with multiple functionalization options. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14243-14253.	5.2	48
51	Emulsion template synthesis of all conducting polymer aerogels with superb adsorption capacity and enhanced electrochemical capacitance. <i>Journal of Materials Chemistry</i> , 2012, 22, 8579.	6.7	44
52	A versatile ambient pressure drying approach to synthesize silica-based composite aerogels. <i>RSC Advances</i> , 2014, 4, 51146-51155.	1.7	43
53	Symbiotic Aerogel Fibers Made via In-Situ Gelation of Aramid Nanofibers with Polyamidoxime for Uranium Extraction. <i>Molecules</i> , 2019, 24, 1821.	1.7	43
54	Solid-Liquid Host-Guest Composites: The Marriage of Porous Solids and Functional Liquids. <i>Advanced Materials</i> , 2021, 33, e2104851.	11.1	37

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55	Thermoresponsive Polyrotaxane Aerogels: Converting Molecular Necklaces into Tough Porous Monoliths. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 1468-1473.	4.0	36
56	Bayberry tannin directed assembly of a bifunctional graphene aerogel for simultaneous solar steam generation and marine uranium extraction. <i>Nanoscale</i> , 2021, 13, 5419-5428.	2.8	36
57	Dendrimer-linked, renewable and magnetic carbon nanotube aerogels. <i>Materials Horizons</i> , 2014, 1, 232-236.	6.4	35
58	Reversible superhydrophobic coatings on lifeless and biotic surfaces via dry-painting of aerogel microparticles. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11408-11415.	5.2	35
59	Flame-Retardant Host-Guest Films for Efficient Thermal Management of Cryogenic Devices. <i>Advanced Functional Materials</i> , 2021, 31, 2102232.	7.8	33
60	Surfactant-free synthesis of silica aerogel microspheres with hierarchically porous structure. <i>Journal of Colloid and Interface Science</i> , 2018, 515, 1-9.	5.0	31
61	Aerogel-Directed Energy-Storage Films with Thermally Stimulant Multiresponsiveness. <i>Langmuir</i> , 2019, 35, 943-949.	1.6	29
62	Phase-separation induced synthesis of superhydrophobic silica aerogel powders and granules. <i>Journal of Solid State Chemistry</i> , 2019, 279, 120971.	1.4	26
63	Electroless Plating of Graphene Aerogel Fibers for Electrothermal and Electromagnetic Applications. <i>Langmuir</i> , 2019, 35, 3814-3821.	1.6	26
64	Nanocomposite hydrogels-Controlled synthesis of chiral polyaniline nanofibers and their inclusion in agarose. <i>Synthetic Metals</i> , 2009, 159, 2135-2140.	2.1	21
65	Calcium-Doped Boron Nitride Aerogel Enables Infrared Stealth at High Temperature Up to 1300°C. <i>Nano-Micro Letters</i> , 2022, 14, 18.	14.4	21
66	Elaborate Size-Tuning of Silica Aerogel Building Blocks Enables Laser-Driven Lighting. <i>Advanced Materials</i> , 2022, 34, e2107168.	11.1	20
67	Potential controlled electrochemical assembly of chiral polyaniline with enhanced stereochemical selectivity. <i>Polymer</i> , 2007, 48, 5473-5479.	1.8	19
68	Defect-Controlled Preparation of UiO-66 Metal-Organic Framework Thin Films with Molecular Sieving Capability. <i>Chemistry - an Asian Journal</i> , 2016, 11, 207-210.	1.7	19
69	General Suspended Printing Strategy toward Programmatically Spatial Kevlar Aerogels. <i>ACS Nano</i> , 2022, 16, 4905-4916.	7.3	19
70	Autocatalytic synthesis of molecular-bridged silica aerogels with excellent absorption and super elasticity. <i>RSC Advances</i> , 2015, 5, 91407-91413.	1.7	18
71	Robust urethane-bridged silica aerogels available for water-carved aerosculptures. <i>New Journal of Chemistry</i> , 2017, 41, 1953-1958.	1.4	18
72	Synthesis and physicochemical properties of graphene/ZrO ₂ composite aerogels. <i>RSC Advances</i> , 2015, 5, 11738-11744.	1.7	17

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73	Preparation and characterization of a composite hydrogel with graphene oxide as an acid catalyst. <i>Soft Matter</i> , 2015, 11, 3215-3221.	1.2	16
74	Comparison of chiral polyaniline carbon nanotube nanocomposites synthesized by aniline dimer-assisted chemistry and electrochemistry methods. <i>Synthetic Metals</i> , 2008, 158, 336-344.	2.1	13
75	Inner Surface-Functionalized Graphene Aerogel Microgranules with Static Microwave Attenuation and Dynamic Infrared Shielding. <i>Langmuir</i> , 2018, 34, 9004-9014.	1.6	13
76	Superhydrophobic polyimide aerogels via conformal coating strategy with excellent underwater performances. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48849.	1.3	13
77	Nanoporous Kevlar Aerogel Confined Phase Change Fluids Enable Superflexible Thermal Diodes. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	13
78	Electrodeposition of Chiral Polymer-Carbon Nanotube Composite Films. <i>ChemPhysChem</i> , 2007, 8, 1766-1769.	1.0	12
79	Controllable Synthesis of Co ³⁺ -Enriched Anisotropy Co ₃ O ₄ Hexagonal Prisms toward Enhanced Lithium Storage. <i>ACS Applied Energy Materials</i> , 2020, 3, 5856-5866.	2.5	12
80	Quasi-static compression properties of graphene aerogel. <i>Diamond and Related Materials</i> , 2021, 111, 108225.	1.8	10
81	Silica Aerogels with Self-Reinforced Microstructure for Bioinspired Hydrogels. <i>Langmuir</i> , 2021, 37, 5923-5931.	1.6	10
82	The influence of the drying method on the microstructure and the compression behavior of graphene aerogel. <i>Diamond and Related Materials</i> , 2022, 121, 108772.	1.8	10
83	Hydrogen bonding directed assembly of simonkolleite aerogel by a sol-gel approach. <i>Materials and Design</i> , 2016, 93, 503-508.	3.3	9
84	Recyclable Nanoporous Materials with Ordered Tunnels Self-Assembled from β - and γ -Cyclodextrins. <i>ChemNanoMat</i> , 2019, 5, 838-846.	1.5	9
85	Graphene aerogel-phase change material host-guest smart films. <i>FlatChem</i> , 2021, 27, 100249.	2.8	9
86	Electrokinetic effect and H ₂ O ₂ boosting in synthetic graphene/ β -FeOOH aerogel films for the generation of electricity. <i>Journal of Materials Chemistry A</i> , 2021, 9, 5588-5596.	5.2	9
87	Bio-inspired design and fabrication of an ultralight and strong nano-carbon gradient composite. <i>Materials and Design</i> , 2016, 107, 198-204.	3.3	7
88	Hot spots-growth on single nanowire controlled by electric charge. <i>Nanoscale</i> , 2016, 8, 12029-12034.	2.8	6
89	Graphene Hybrid Aerogels Made via Phase Transfer Strategy. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600541.	1.9	5
90	Robust Silica-Polyimide Aerogel Blanket for Water-Proof and Flame-Retardant Self-Floating Artificial Island. <i>Frontiers in Materials</i> , 2021, 8, .	1.2	5

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91	Solidâ€“Liquidâ€“Vapor Triphase Gel. Langmuir, 2021, 37, 13501-13511.	1.6	4
92	Recyclable thermo-insulating panels made by reversible gelling of dispersed silica aerogel microparticles. Journal of Sol-Gel Science and Technology, 2023, 106, 432-443.	1.1	2
93	Hybrid Aerogels: Graphene Hybrid Aerogels Made via Phase Transfer Strategy (Adv. Mater. Interfaces) Tj ETQq1 1 0.784314 rgBT /Ove	1.9	1
94	Graphene Aerogel-Directed Fabrication of Phase Change Composites. , 2018, , .		1
95	Conducting Polymer Aerogels. , 0, , .		0