

Shanyu Zhao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2383378/publications.pdf>

Version: 2024-02-01

48
papers

2,694
citations

279798

23
h-index

214800

47
g-index

52
all docs

52
docs citations

52
times ranked

2529
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomimetic Light-Driven Aerogel Passive Pump for Volatile Organic Pollutant Removal. <i>Advanced Science</i> , 2022, 9, e2105819.	11.2	13
2	Heterogeneous silica-polyimide aerogel-in-aerogel nanocomposites. <i>Chemical Engineering Journal</i> , 2022, 443, 136401.	12.7	35
3	Superinsulating nanocellulose aerogels: Effect of density and nanofiber alignment. <i>Carbohydrate Polymers</i> , 2022, 292, 119675.	10.2	14
4	Thermal-Switchable, Trifunctional Ceramic-Hydrogel Nanocomposites Enable Full-Lifecycle Security in Practical Battery Systems. <i>ACS Nano</i> , 2022, 16, 10729-10741.	14.6	30
5	Chemie der Chitosan-Aerogele: Lenkung der dreidimensionalen Poren für maßgeschneiderte Anwendungen. <i>Angewandte Chemie</i> , 2021, 133, 9913-9938.	2.0	0
6	Chemistry of Chitosan Aerogels: Three-Dimensional Pore Control for Tailored Applications. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 9828-9851.	13.8	98
7	Transparent, Aldehyde-Free Chitosan Aerogel. <i>Carbohydrate Polymers</i> , 2021, 251, 117089.	10.2	34
8	Printed aerogels: chemistry, processing, and applications. <i>Chemical Society Reviews</i> , 2021, 50, 3842-3888.	38.1	128
9	Template-free synthesis of hybrid silica nanoparticle with functionalized mesostructure for efficient methylene blue removal. <i>Materials and Design</i> , 2021, 201, 109494.	7.0	20
10	Ureido Functionalization through Amine-Urea Transamidation under Mild Reaction Conditions. <i>Polymers</i> , 2021, 13, 1583.	4.5	4
11	Robust Barium Phosphonate Metal-Organic Frameworks Synthesized under Aqueous Conditions. , 2021, 3, 1010-1015.		3
12	Aerogel Spring-Back Correlates with Strain Recovery: Effect of Silica Concentration and Aging. <i>Advanced Engineering Materials</i> , 2021, 23, 2100376.	3.5	13
13	Tailoring the hydrophobicity of wrinkled silica nanoparticles and of the adsorption medium as a strategy for immobilizing lipase: An efficient catalyst for biofuel production. <i>Microporous and Mesoporous Materials</i> , 2021, 328, 111504.	4.4	12
14	Durability of silica aerogel cementitious composites – freeze-thaw resistance, water resistance and drying shrinkage. <i>Advances in Cement Research</i> , 2020, 32, 527-536.	1.6	17
15	Phase transfer agents facilitate the production of superinsulating silica aerogel powders by simultaneous hydrophobization and solvent- and ion-exchange. <i>Chemical Engineering Journal</i> , 2020, 381, 122421.	12.7	19
16	Polymer-Assisted Fabrication of Silver Nanowire Cellular Monoliths: Toward Hydrophobic and Ultraflexible High-Performance Electromagnetic Interference Shielding Materials. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 38584-38592.	8.0	38
17	Additive manufacturing of silica aerogels. <i>Nature</i> , 2020, 584, 387-392.	27.8	323
18	Silica aerogels with tailored chemical functionality. <i>Materials and Design</i> , 2020, 193, 108833.	7.0	53

#	ARTICLE	IF	CITATIONS
19	Solvents, CO ₂ and biopolymers: Structure formation in chitosan aerogel. Carbohydrate Polymers, 2020, 247, 116680.	10.2	17
20	Flexible and Ultrathin Waterproof Cellular Membranes Based on High-Conjunction Metal-Wrapped Polymer Nanofibers for Electromagnetic Interference Shielding. Advanced Materials, 2020, 32, e1908496.	21.0	234
21	Strong, Machinable, and Insulating Chitosan-Urea Aerogels: Toward Ambient Pressure Drying of Biopolymer Aerogel Monoliths. ACS Applied Materials & Interfaces, 2020, 12, 22037-22049.	8.0	71
22	Study of physical properties and microstructure of aerogel-cement mortars for improving the fire safety of high-performance concrete linings in tunnels. Cement and Concrete Composites, 2019, 104, 103414.	10.7	44
23	Reinforced and superinsulating silica aerogel through in situ cross-linking with silane terminated prepolymers. Acta Materialia, 2018, 147, 322-328.	7.9	28
24	Biopolymer-Aerogele und -Schäume: Chemie, Eigenschaften und Anwendungen. Angewandte Chemie, 2018, 130, 7704-7733.	2.0	21
25	Biopolymer Aerogels and Foams: Chemistry, Properties, and Applications. Angewandte Chemie - International Edition, 2018, 57, 7580-7608.	13.8	470
26	Hydrophobic TiO ₂ -SiO ₂ Aerogel Composites for Fast Removal of Organic Pollutants. ChemistrySelect, 2018, 3, 10483-10490.	1.5	8
27	Merging flexibility with superinsulation: Machinable, nanofibrous pullulan-silica aerogel composites. Materials and Design, 2018, 160, 294-302.	7.0	23
28	High Efficiency Thermoacoustic Loudspeaker Made with a Silica Aerogel Substrate. Advanced Materials Technologies, 2018, 3, 1800139.	5.8	11
29	Fast and Minimal-Solvent Production of Superinsulating Silica Aerogel Granulate. Angewandte Chemie, 2017, 129, 4831-4834.	2.0	14
30	Fast and Minimal-Solvent Production of Superinsulating Silica Aerogel Granulate. Angewandte Chemie - International Edition, 2017, 56, 4753-4756.	13.8	99
31	Microwave-assisted hydrothermal synthesis of carbon materials with tunable microstructure. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 1032-1037.	1.0	2
32	Dynamics of Silica Aerogel's Hydrophobic Groups: A Quasielastic Neutron Scattering Study. Journal of Physical Chemistry C, 2017, 121, 20335-20344.	3.1	6
33	Carbon Dots and Fluorescein: The Ideal FRET Pair for the Fabrication of a Precise and Fully Reversible Ammonia Sensor. Proceedings (mdpi), 2017, 1, 488.	0.2	1
34	A Novel Environmental Route to Ambient Pressure Dried Thermal Insulating Silica Aerogel via Recycled Coal Gangue. Advances in Materials Science and Engineering, 2016, 2016, 1-9.	1.8	10
35	Thermal assessment of ambient pressure dried silica aerogel composite boards at laboratory and field scale. Energy and Buildings, 2016, 128, 111-118.	6.7	65
36	Breakthroughs in cost-effective, scalable production of superinsulating, ambient-dried silica aerogel and silica-biopolymer hybrid aerogels: from laboratory to pilot scale. Journal of Sol-Gel Science and Technology, 2016, 79, 308-318.	2.4	52

#	ARTICLE	IF	CITATIONS
37	Facile One-Pot Synthesis of Mechanically Robust Biopolymer-Silica Nanocomposite Aerogel by Cogelation of Silicic Acid with Chitosan in Aqueous Media. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 5674-5683.	6.7	68
38	Structural characteristics and photocatalytic activity of ambient pressure dried SiO ₂ /TiO ₂ aerogel composites by one-step solvent exchange/surface modification. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2016, 31, 80-86.	1.0	10
39	Strong, Thermally Superinsulating Biopolymer-Silica Aerogel Hybrids by Cogelation of Silicic Acid with Pectin. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14282-14286.	13.8	132
40	Synthesis and thermal insulation performance of silica aerogel from recycled coal gangue by means of ambient pressure drying. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2015, 30, 908-913.	1.0	13
41	Multiscale Assembly of Superinsulating Silica Aerogels Within Silylated Nanocellulosic Scaffolds: Improved Mechanical Properties Promoted by Nanoscale Chemical Compatibilization. <i>Advanced Functional Materials</i> , 2015, 25, 2326-2334.	14.9	229
42	Dimensional and Structural Control of Silica Aerogel Membranes for Miniaturized Motionless Gas Pumps. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 18803-18814.	8.0	28
43	Surface Chemistry of Hydrophobic Silica Aerogels. <i>Chemistry of Materials</i> , 2015, 27, 6737-6745.	6.7	100
44	Facile ambient temperature synthesis and characterization of a stable nano-sized hollow silica particles using soluble-poly(methacrylic acid) sodium salt templating. <i>Materials Letters</i> , 2014, 126, 92-96.	2.6	7
45	Influence of drying methods on fractal geometric characteristics of mesoporous silica aerogels. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2013, 28, 476-482.	1.0	1
46	Synthesis of a sugar-organometallic compound 1,1'-difurfurylferrocene and its microwave preparation of carbon/iron oxide nanocomposite. <i>Applied Surface Science</i> , 2013, 264, 242-246.	6.1	4
47	Synthesis of novel chitane-silica aerogels with spontaneous Au and Ag nanoparticles formation in aerogels matrix. <i>Microporous and Mesoporous Materials</i> , 2013, 171, 147-155.	4.4	10
48	Synthesis and characteristics of mesoporous silica aerogels with one-step solvent exchange/surface modification. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2009, 24, 613-618.	1.0	21