

Modern Inorganic Aerogels

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Citation Report

#	ARTICLE	IF	CITATIONS
1	3D assembly of preformed colloidal nanoparticles into gels and aerogels: function-led design. <i>Chemical Communications</i> , 2017, 53, 12608-12621.	2.2	42
2	Chitin Liquid-Crystal-Templated Oxide Semiconductor Aerogels. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 30812-30820.	4.0	15
3	Biotemplated Lightweight Al_2O_3 -Alumina Aerogels. <i>Chemistry of Materials</i> , 2018, 30, 1602-1609.	3.2	37
4	Aerogels Derived from Polymer Nanofibers and Their Applications. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1700724.	2.0	64
5	Novel 3D Hybrid Nanofiber Aerogels Coupled with BMP-2 Peptides for Cranial Bone Regeneration. <i>Advanced Healthcare Materials</i> , 2018, 7, e1701415.	3.9	78
6	Metal Oxide Aerogels with Controlled Crystallinity and Faceting from the Epoxide-Driven Cross-Linking of Colloidal Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 16041-16048.	4.0	11
7	Luminescent alumina-based aerogels modified with tris(8-hydroxyquinolino)aluminum. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 86, 400-409.	1.1	13
8	Ultralight and fire-resistant ceramic nanofibrous aerogels with temperature-invariant superelasticity. <i>Science Advances</i> , 2018, 4, eaas8925.	4.7	414
9	Monolithic aerogel photocatalysts: a review. <i>Journal of Materials Chemistry A</i> , 2018, 6, 754-775.	5.2	152
10	Simple Synthesis of Au-Pd Alloy Nanowire Networks as Macroscopic, Flexible Electrocatalysts with Excellent Performance. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 602-613.	4.0	36
11	EurOgels: A ferromagnetic semiconductor with a porous structure prepared via the assembly of hybrid nanorods. <i>Nanoscale</i> , 2018, 10, 19272-19276.	2.8	3
12	pH-Dependent growth of atomic Pd layers on trisoctahedral gold nanoparticles to realize enhanced performance in electrocatalysis and chemical catalysis. <i>Nanoscale</i> , 2018, 10, 22302-22311.	2.8	12
13	Fire-resistant, ultralight, superelastic and thermally insulated polybenzazole aerogels. <i>Journal of Materials Chemistry A</i> , 2018, 6, 20769-20777.	5.2	49
14	Poly(Urethane-Acrylate) Aerogels via Radical Polymerization of Dendritic Urethane-Acrylate Monomers. <i>Materials</i> , 2018, 11, 2249.	1.3	21
15	Design and Application of High Optical Quality YAG:Ce Nanocrystal-Loaded Silica Aerogels. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 32304-32312.	4.0	12
16	Ultra-low-density silver aerogels via freeze-substitution. <i>APL Materials</i> , 2018, 6, .	2.2	16
17	Preparation and characterization of bifunctional Zn doped TiO_2 aerogels toward Rhodamine B in water. <i>Materials Research Express</i> , 2018, 5, 115511.	0.8	5
18	Preparation of ZrC/SiC porous self-supporting monoliths via sol-gel process using polyethylene glycol as phase separation inducer. <i>Journal of the European Ceramic Society</i> , 2018, 38, 4806-4813.	2.8	16

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19	Regulating Surface Facets of Metallic Aerogel Electrocatalysts by Size-Dependent Localized Ostwald Ripening. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 23081-23093.	4.0	26
22	From Nanoparticle Assembly to Monolithic Aerogels of YAG, Rare Earth Fluorides, and Composites. <i>Chemistry of Materials</i> , 2018, 30, 5460-5467.	3.2	13
23	Electrostatic-Driven Gelation of Colloidal Nanocrystals. <i>Langmuir</i> , 2018, 34, 9167-9174.	1.6	12
24	Aerogel templating on functionalized fibers of nanocellulose networks. <i>Materials Chemistry Frontiers</i> , 2018, 2, 1655-1663.	3.2	9
25	Upscaled Preparation of Trimethylsilylated Chitosan Aerogel. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 10421-10430.	1.8	25
26	Millimeter-Size Spherical Polyurea Aerogel Beads with Narrow Size Distribution. <i>Gels</i> , 2018, 4, 66.	2.1	20
27	Gelation of plasmonic metal oxide nanocrystals by polymer-induced depletion attractions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8925-8930.	3.3	32
28	Emerging Hierarchical Aerogels: Self-Assembly of Metal and Semiconductor Nanocrystals. <i>Advanced Materials</i> , 2018, 30, e1707518.	11.1	104
29	Robust polyimide nano/microfibre aerogels welded by solvent-vapour for environmental applications. <i>Royal Society Open Science</i> , 2019, 6, 190596.	1.1	21
30	Single iron atoms stabilized by microporous defects of biomass-derived carbon aerogels as high-performance cathode electrocatalysts for aluminum-air batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20840-20846.	5.2	68
31	Resilient, fire-retardant and mechanically strong polyimide-polyvinylpolymethylsiloxane composite aerogel prepared via stepwise chemical liquid deposition. <i>Materials and Design</i> , 2019, 183, 108096.	3.3	38
32	Emerging Noble Metal Aerogels: State of the Art and a Look Forward. <i>Matter</i> , 2019, 1, 39-56.	5.0	84
33	Self-Templated Conversion of Metallogel into Heterostructured TMP@Carbon Quasiaerogels Boosting Bifunctional Electrocatalysis. <i>Advanced Functional Materials</i> , 2019, 29, 1903660.	7.8	93
34	Rare-Earth Zirconate $\text{Ln}_2\text{Zr}_2\text{O}_7$ (Ln: La, Nd, Gd, and Dy) Powders, Xerogels, and Aerogels: Preparation, Structure, and Properties. <i>Inorganic Chemistry</i> , 2019, 58, 14467-14477.	1.9	23
35	Versatile Aerogels for Sensors. <i>Small</i> , 2019, 15, e1902826.	5.2	94
36	Synthesis of light weight, high strength biomass-derived composite aerogels with low thermal conductivities. <i>Cellulose</i> , 2019, 26, 8699-8712.	2.4	13
37	The advances of polysaccharide-based aerogels: Preparation and potential application. <i>Carbohydrate Polymers</i> , 2019, 226, 115242.	5.1	113
38	Aerogel, a high performance material for thermal insulation - A brief overview of the building applications. <i>E3S Web of Conferences</i> , 2019, 111, 06069.	0.2	16

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39	Nanofibrous Aerogel Bulk Assembled by Cross-Linked SiC/SiO ₂ Core-Shell Nanofibers with Multifunctionality and Temperature-Invariant Hyperelasticity. <i>ACS Nano</i> , 2019, 13, 11603-11612.	7.3	53
40	Nanoporous Metallic Network as a Large-Scale 3D Source of Second Harmonic Light. <i>Journal of Physical Chemistry C</i> , 2019, 123, 25331-25340.	1.5	7
41	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
42	An Opinion Paper on Aerogels for Biomedical and Environmental Applications. <i>Molecules</i> , 2019, 24, 1815.	1.7	115
43	Carbon Aerogels for Environmental Clean-up. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 3126-3141.	1.0	52
44	A clear solution: semiconductor nanocrystals as photoinitiators in solvent free polymerization. <i>Nanoscale</i> , 2019, 11, 11209-11216.	2.8	19
45	A versatile ethanolic approach to metal aerogels (Pt, Pd, Au, Ag, Cu and Co). <i>Materials Chemistry Frontiers</i> , 2019, 3, 1586-1592.	3.2	28
46	A Versatile Strategy for Tailoring Noble Metal Supramolecular Gels/Aerogels and Their Application in Hydrogen Evolution. <i>ACS Applied Nano Materials</i> , 2019, 2, 3012-3020.	2.4	8
47	Recyclable Nanoporous Materials with Ordered Tunnels Self-Assembled from β - and γ -Cyclodextrins. <i>ChemNanoMat</i> , 2019, 5, 838-846.	1.5	9
48	Carbothermal conversion of self-supporting organic/inorganic interpenetrating networks to porous metal boride monoliths. <i>Journal of the American Ceramic Society</i> , 2019, 102, 5746-5762.	1.9	7
49	Photoluminescent porous aerogel monoliths containing ZnEu-complex: the first example of aerogel modified with a heteronuclear metal complex. <i>Journal of Sol-Gel Science and Technology</i> , 2019, 92, 304-318.	1.1	13
50	Diffusion- and reaction-limited cluster aggregation revisited. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 5723-5729.	1.3	79
51	Robust, ultra-insulative and transparent polyethylene-based hybrid silica aerogel with a novel non-particulate structure. <i>Journal of Colloid and Interface Science</i> , 2019, 548, 206-216.	5.0	25
52	2020 roadmap on pore materials for energy and environmental applications. <i>Chinese Chemical Letters</i> , 2019, 30, 2110-2122.	4.8	75
53	Assembly of reduced graphene oxides into a three-dimensional porous structure via confinement within robust cellulose oligomer networks. <i>RSC Advances</i> , 2019, 9, 38848-38854.	1.7	7
54	Diffusion-Limited Cluster Aggregation: Impact of Rotational Diffusion. <i>Journal of Physical Chemistry C</i> , 2019, 123, 950-954.	1.5	24
55	Resorcinol-formaldehyde based carbon aerogel: Preparation, structure and applications in energy storage devices. <i>Microporous and Mesoporous Materials</i> , 2019, 279, 293-315.	2.2	78
56	Progress of binary cooperative complementary interfacial nanomaterials. <i>Nano Today</i> , 2019, 24, 48-80.	6.2	14

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57	Promoting Electrocatalysis upon Aerogels. <i>Advanced Materials</i> , 2019, 31, e1804881.	11.1	146
58	Ultralight, hydrophobic, monolithic konjac glucomannan-silica composite aerogel with thermal insulation and mechanical properties. <i>Carbohydrate Polymers</i> , 2019, 207, 246-255.	5.1	60
59	Self-assembly of ultralight and compressible inorganic sponges with hierarchical porosity by electrospinning. <i>Ceramics International</i> , 2020, 46, 768-774.	2.3	17
60	Hierarchical microfibrillar gels from evaporation-induced anisotropic self-assembly of in situ-generated nanocrystals. <i>Journal of Colloid and Interface Science</i> , 2020, 558, 78-84.	5.0	4
61	Superhydrophobic and luminescent highly porous nanostructured alumina monoliths modified with tris(8-hydroxyquinolinato)aluminium. <i>Microporous and Mesoporous Materials</i> , 2020, 293, 109804.	2.2	7
62	Hybrid Plasmonic Aerogel Materials as Optical Superheaters with Engineered Resonances. <i>Angewandte Chemie</i> , 2020, 132, 1713-1719.	1.6	9
63	Engineering Self-Supported Noble Metal Foams Toward Electrocatalysis and Beyond. <i>Advanced Energy Materials</i> , 2020, 10, 1901945.	10.2	89
64	Hybrid Plasmonic Aerogel Materials as Optical Superheaters with Engineered Resonances. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 1696-1702.	7.2	13
65	Boron nitride aerogels consisting of varied superstructures. <i>Nanoscale Advances</i> , 2020, 2, 149-155.	2.2	20
66	Exploiting kinetics for assembly of multicomponent nanoparticle networks with programmable control of heterogeneity. <i>Chemical Communications</i> , 2020, 56, 458-461.	2.2	6
67	From colloidal dispersions to aerogels: How to master nanoparticle gelation. <i>Nano Today</i> , 2020, 30, 100827.	6.2	113
68	Synthesis of chitosan aerogels as promising carriers for drug delivery: A review. <i>Carbohydrate Polymers</i> , 2020, 231, 115744.	5.1	177
69	Novel and simple design of nanostructured, super-insulative and flexible hybrid silica aerogel with a new macromolecular polyether-based precursor. <i>Journal of Colloid and Interface Science</i> , 2020, 561, 890-901.	5.0	37
70	Nanocellulose aerogel-based porous coaxial fibers for thermal insulation. <i>Nano Energy</i> , 2020, 68, 104305.	8.2	99
71	A Review on Revolutionary Natural Biopolymer-Based Aerogels for Antibacterial Delivery. <i>Antibiotics</i> , 2020, 9, 648.	1.5	71
72	Self-reinforcement of Light, Temperature-Resistant Silica Nanofibrous Aerogels with Tunable Mechanical Properties. <i>Advanced Fiber Materials</i> , 2020, 2, 338-347.	7.9	58
73	Control over Structure and Properties in Nanocrystal Aerogels at the Nano-, Micro-, and Macroscale. <i>Accounts of Chemical Research</i> , 2020, 53, 2414-2424.	7.6	45
74	Nanoporous Boron Nitride Aerogel Film and Its Smart Composite with Phase Change Materials. <i>ACS Nano</i> , 2020, 14, 16590-16599.	7.3	178

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75	Synthesis of a Crystalline and Transparent Aerogel Composed of Ni-Al Layered Double Hydroxide Nanoparticles through Crystallization from Amorphous Hydrogel. <i>Langmuir</i> , 2020, 36, 9436-9442.	1.6	7
76	Disturbance-Promoted Unconventional and Rapid Fabrication of Self-Healable Noble Metal Gels for (Photo-)Electrocatalysis. <i>Matter</i> , 2020, 2, 908-920.	5.0	49
77	Promoting the electrocatalytic properties of nickel aerogel by gold decoration for efficient electrocatalytic oxygen evolution in alkali. <i>Chemical Communications</i> , 2020, 56, 15446-15449.	2.2	14
78	Smart Porous Multi-Stimulus Polysaccharide-Based Biomaterials for Tissue Engineering. <i>Molecules</i> , 2020, 25, 5286.	1.7	10
79	Solvent Vapor Strengthened Polyimide Nanofiber-Based Aerogels with High Resilience and Controllable Porous Structure. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 53104-53114.	4.0	18
80	Preparation and Electrocatalysis Application of Pure Metallic Aerogel: A Review. <i>Catalysts</i> , 2020, 10, 1376.	1.6	13
81	Linear correlation between specific surface and grafting density of tunable aerogels of microfibrillated cellulose from different origins. <i>Cellulose</i> , 2020, 27, 7979-7995.	2.4	0
82	Nanoporous Aerogels for Defense and Aerospace Applications. , 2020, , 121-163.		3
83	Polymeric hybrid aerogels and their biomedical applications. <i>Soft Matter</i> , 2020, 16, 9160-9175.	1.2	50
84	Gel Electrocatalysts: An Emerging Material Platform for Electrochemical Energy Conversion. <i>Advanced Materials</i> , 2020, 32, e2003191.	11.1	78
85	High-Performance Bismuth-Doped Nickel Aerogel Electrocatalyst for the Methanol Oxidation Reaction. <i>Angewandte Chemie</i> , 2020, 132, 13995-14003.	1.6	22
86	Anomalous Anisotropic Nanoparticle Aggregation in Cu ₂ (OH) ₃ Br Gels. <i>Langmuir</i> , 2020, 36, 8311-8321.	1.6	0
87	Large, Rapid Swelling of High-cis Polydicyclopentadiene Aerogels Suitable for Solvent-Responsive Actuators. <i>Polymers</i> , 2020, 12, 1033.	2.0	6
88	Freeze-Thaw-Promoted Fabrication of Clean and Hierarchically Structured Noble-Metal Aerogels for Electrocatalysis and Photoelectrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8293-8300.	7.2	56
89	Superhydrophobic highly flexible doubly cross-linked aerogel/carbon nanotube composites as strain/pressure sensors. <i>Journal of Materials Chemistry B</i> , 2020, 8, 4883-4889.	2.9	25
90	A Versatile Route to Assemble Semiconductor Nanoparticles into Functional Aerogels by Means of Trivalent Cations. <i>Small</i> , 2020, 16, e1906934.	5.2	29
91	Freeze-Thaw-Promoted Fabrication of Clean and Hierarchically Structured Noble-Metal Aerogels for Electrocatalysis and Photoelectrocatalysis. <i>Angewandte Chemie</i> , 2020, 132, 8370-8377.	1.6	13
92	Unveiling reductant chemistry in fabricating noble metal aerogels for superior oxygen evolution and ethanol oxidation. <i>Nature Communications</i> , 2020, 11, 1590.	5.8	106

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93	1D Ceric Hydrogen Phosphate Aerogels: Noncarbonaceous Ultraflyweight Monolithic Aerogels. ACS Omega, 2020, 5, 17592-17600.	1.6	8
94	Silica Aerogels/Xerogels Modified with Nitrogen-Containing Groups for Heavy Metal Adsorption. Molecules, 2020, 25, 2788.	1.7	19
95	Facile synthesis of robust hybrid xerogels by an emulsion assistant method. Chemical Engineering Journal, 2020, 401, 125937.	6.6	4
96	Sol-gel derived porous ultra-high temperature ceramics. Journal of Advanced Ceramics, 2020, 9, 1-16.	8.9	103
97	Engineering Multimetallic Aerogels for pH-Universal HER and ORR Electrocatalysis. Advanced Energy Materials, 2020, 10, 1903857.	10.2	83
98	Ultralight and Hydrophobic Palygorskite-based Aerogels with Prominent Thermal Insulation and Flame Retardancy. ACS Applied Materials & Interfaces, 2020, 12, 11815-11824.	4.0	69
99	Monolithic metal-containing TiO ₂ aerogels assembled from crystalline pre-formed nanoparticles as efficient photocatalysts for H ₂ generation. Applied Catalysis B: Environmental, 2020, 267, 118660.	10.8	57
100	Promoting the Electrocatalytic Performance of Noble Metal Aerogels by Ligand-Directed Modulation. Angewandte Chemie - International Edition, 2020, 59, 5706-5711.	7.2	58
101	High-Performance Bismuth-Doped Nickel Aerogel Electrocatalyst for the Methanol Oxidation Reaction. Angewandte Chemie - International Edition, 2020, 59, 13891-13899.	7.2	179
102	Universal Gelation of Metal Oxide Nanocrystals via Depletion Attractions. Nano Letters, 2020, 20, 4007-4013.	4.5	16
103	Effect of different chemical liquid deposition methods on the microstructure and properties of polyimide-polyvinylpolymethylsiloxane composite aerogels. Journal of Supercritical Fluids, 2020, 160, 104811.	1.6	8
104	Multiresponsive White-Light Emitting Aerogel Prepared with Codoped Lanthanide/Thymidine/Carbon Dots. ACS Applied Materials & Interfaces, 2020, 12, 22191-22199.	4.0	34
105	Robust Silica-Cellulose Composite Aerogels with a Nanoscale Interpenetrating Network Structure Prepared Using a Streamlined Process. Polymers, 2020, 12, 807.	2.0	9
106	Fire retardant cellulose aerogel with improved strength and hydrophobic surface by one-pot method. Journal of Applied Polymer Science, 2021, 138, 50224.	1.3	8
107	Thermal insulation coatings based on microporous particles from Pickering emulsion polymerization. Progress in Organic Coatings, 2021, 151, 106023.	1.9	9
108	Elastic ceramic aerogels for thermal superinsulation under extreme conditions. Materials Today, 2021, 42, 162-177.	8.3	73
109	A Roadmap for 3D Metal Aerogels: Materials Design and Application Attempts. Matter, 2021, 4, 54-94.	5.0	60
110	Proving a Paradigm in Methanol Steam Reforming: Catalytically Highly Selective In _x Pd _y /In ₂ O ₃ Interfaces. ACS Catalysis, 2021, 11, 304-312.	5.5	24

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111	Lightweight and Flexible Phenolic Aerogels with Three-Dimensional Foam Reinforcement for Acoustic and Thermal Insulation. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 1241-1249.	1.8	28
112	Transparent, ultraflexible, and superinsulating nanofibrous biocomposite aerogels <i>via</i> ambient pressure drying. <i>Journal of Materials Chemistry A</i> , 2021, 9, 5769-5779.	5.2	12
113	Carbon aerogel composites for gas sensing. , 2021, , 49-73.		2
114	Insights into light and mass transport in nanoparticle-based aerogels: the advantages of monolithic 3D photocatalysts. <i>Journal of Materials Chemistry A</i> , 2021, 9, 22380-22391.	5.2	13
115	Aerogels as promising materials for antibacterial applications: a mini-review. <i>Biomaterials Science</i> , 2021, 9, 7034-7048.	2.6	15
116	Porous Materials for Applications in Energy and Environment. , 2021, , 579-597.		2
117	Fabrication and application of macroscopic nanowire aerogels. <i>Nanoscale</i> , 2021, 13, 7430-7446.	2.8	8
118	Printed aerogels: chemistry, processing, and applications. <i>Chemical Society Reviews</i> , 2021, 50, 3842-3888.	18.7	128
119	Advances on Dimensional Structure Designs and Functional Applications of Aerogels. <i>Acta Chimica Sinica</i> , 2021, 79, 430.	0.5	8
120	Ultralight hybrid silica aerogels derived from supramolecular hydrogels self-assembled from insoluble nano building blocks. <i>RSC Advances</i> , 2021, 11, 7331-7337.	1.7	4
121	Silica-Based Aerogels with Tunable Properties: The Highly Efficient BF ₃ -Catalyzed Preparation and Look inside Their Structure. <i>Macromolecules</i> , 2021, 54, 1961-1975.	2.2	10
122	Effects of linker flexibility on phase behavior and structure of linked colloidal gels. <i>Journal of Chemical Physics</i> , 2021, 154, 074901.	1.2	15
123	Organic-Inorganic Hybrid Nanocrystal-based Cryogels with Size-Controlled Mesopores and Macropores. <i>Langmuir</i> , 2021, 37, 2884-2890.	1.6	3
124	Recent advances in novel aerogels through the hybrid aggregation of inorganic nanomaterials and polymeric fibers for thermal insulation. <i>Aggregate</i> , 2021, 2, e30.	5.2	26
125	Synthesis of cellulose aerogels as promising carriers for drug delivery: a review. <i>Cellulose</i> , 2021, 28, 2697-2714.	2.4	39
126	Recent advances of noble metal aerogels in biosensing. <i>View</i> , 2021, 2, 20200124.	2.7	29
127	Peptide Gelators to Template Inorganic Nanoparticle Formation. <i>Gels</i> , 2021, 7, 14.	2.1	17
128	Preparation of aerogel beads and microspheres based on chitosan and cellulose for drug delivery: A review. <i>International Journal of Biological Macromolecules</i> , 2021, 170, 751-767.	3.6	75

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129	Preparation and Characterization of PTFE/PI Nanofiber Composite Assembled Sponges. <i>Fibers and Polymers</i> , 2021, 22, 664-675.	1.1	6
130	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
131	Silica Aerogels with Self-Reinforced Microstructure for Bioinspired Hydrogels. <i>Langmuir</i> , 2021, 37, 5923-5931.	1.6	10
132	Engineering Fractal Photonic Metamaterials by Stochastic Self-Assembly of Nanoparticles. <i>Advanced Photonics Research</i> , 2021, 2, 2100020.	1.7	6
134	Aerogelation of Polymer-Coated Photoluminescent, Plasmonic, and Magnetic Nanoparticles for Biosensing Applications. <i>ACS Applied Nano Materials</i> , 2021, 4, 6678-6688.	2.4	13
135	Robust Gels Composed of Self-Assembled Cello-oligosaccharide Networks. <i>Bulletin of the Chemical Society of Japan</i> , 2021, 94, 2279-2289.	2.0	20
137	Cellulose-Based Hydrogels and Aerogels Embedded with Silver Nanoparticles: Preparation and Characterization. <i>Gels</i> , 2021, 7, 82.	2.1	17
138	Engineering of aerogel-based electrocatalysts for oxygen evolution reaction. <i>Electrochemical Science Advances</i> , 2022, 2, e2100113.	1.2	1
139	Emerging trends in polymer aerogel nanoarchitectures, surfaces, interfaces and applications. <i>Surfaces and Interfaces</i> , 2021, 25, 101258.	1.5	48
140	Diamond-doped silica aerogel for solar geoengineering. <i>Diamond and Related Materials</i> , 2021, 117, 108474.	1.8	2
141	A scalable molecular-templating strategy toward well-defined microporous carbon aerogels for efficient water treatment and electrocatalysis. <i>Chemical Engineering Journal</i> , 2021, 418, 129315.	6.6	8
142	Synthesis of Free-Standing Silver Foam via Oriented and Additive Nanojoining. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 38637-38646.	4.0	3
143	Boosted output performance of nanocellulose-based triboelectric nanogenerators via device engineering and surface functionalization. <i>Carbohydrate Polymers</i> , 2021, 266, 118120.	5.1	14
144	Polymer derived ceramic aerogels. <i>Current Opinion in Solid State and Materials Science</i> , 2021, 25, 100936.	5.6	19
145	Ultrafast Generation of Nanostructured Noble Metal Aerogels by a Microwave Method for Electrocatalytic Hydrogen Evolution and Ethanol Oxidation. <i>ACS Applied Nano Materials</i> , 2021, 4, 11221-11230.	2.4	10
146	Enhancement of Structural Stability of Graphene Aerogel for Thermal Energy Harvesting. <i>ACS Applied Energy Materials</i> , 2021, 4, 11666-11674.	2.5	26
147	Performance regulation of silica aerogel powder synthesized by a two-step Sol-gel process with a fast ambient pressure drying route. <i>Journal of Non-Crystalline Solids</i> , 2021, 567, 120923.	1.5	27
148	Robust Silica-Bacterial Cellulose Composite Aerogel Fibers for Thermal Insulation Textile. <i>Gels</i> , 2021, 7, 145.	2.1	20

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149	Nanoparticle surfactants for kinetically arrested photoactive assemblies to track light-induced electron transfer. <i>Nature Nanotechnology</i> , 2021, 16, 1121-1129.	15.6	16
150	Novolac aerogel thermal diffusion and efficiency enhancement using paraffin wax core/polyurethane shell phase-change material nanocapsules. <i>International Journal of Energy Research</i> , 2022, 46, 1962-1977.	2.2	4
151	Synthesis of nanocellulose aerogels and Cu-BTC/nanocellulose aerogel composites for adsorption of organic dyes and heavy metal ions. <i>Scientific Reports</i> , 2021, 11, 18553.	1.6	33
152	A Metallic Ion-Induced Self-Assembly Enabling Nanowire-Based Aerogels. <i>Small</i> , 2021, 17, e2103406.	5.2	3
153	A Liquid Crystal Elastomer-Based Unprecedented Two-Way Shape-Memory Aerogel. <i>Advanced Science</i> , 2021, 8, e2102674.	5.6	27
154	Self-assembly of mercury-ion recognizing CuS nanocrystals into 3D sponge-like aerogel towards superior mercury capturer with outstanding selectivity and efficiency. <i>Chemical Engineering Journal</i> , 2021, 426, 130868.	6.6	10
155	Influence of diamine rigidity and dianhydride rigidity on the microstructure, thermal and mechanical properties of cross-linked polyimide aerogels. <i>Journal of Porous Materials</i> , 2021, 28, 717-725.	1.3	3
156	Promoting the Electrocatalytic Performance of Noble Metal Aerogels by Ligand-Directed Modulation. <i>Angewandte Chemie</i> , 2020, 132, 5755-5760.	1.6	14
157	Effect of Aging Solvents on Physicochemical and Thermal Properties of Silica Xerogels Derived from Steel Slag. <i>ChemistrySelect</i> , 2020, 5, 1586-1591.	0.7	9
158	Application and influence factors of capacitive deionization method for removing inorganic contaminated ions. <i>Environmental Pollutants and Bioavailability</i> , 2021, 33, 365-376.	1.3	3
159	Noble metal aerogels rapidly synthesized by ultrasound for electrocatalytic reaction. <i>Chinese Chemical Letters</i> , 2022, 33, 2021-2025.	4.8	8
160	Integrating Highly Porous and Flexible Au Hydrogels with Soft-MEMS Technologies for High-Performance Wearable Biosensing. <i>Analytical Chemistry</i> , 2021, 93, 14068-14075.	3.2	28
161	Crosslinking polydopamine/cellulose nanofibril composite aerogels by metal coordination bonds for significantly improved thermal stability, flame resistance, and thermal insulation properties. <i>Cellulose</i> , 2021, 28, 10987-10997.	2.4	15
162	Nanoporous Aerogels for Defense and Aerospace Applications. , 2019, , 1-43.		0
163	Porous Materials for Applications in Energy and Environment. , 2020, , 1-19.		0
164	Revealing the Effect of Nanoscopic Design on the Charge Carrier Separation Processes in Semiconductor-Metal Nanoparticle Gel Networks. <i>Advanced Optical Materials</i> , 2022, 10, 2101712.	3.6	10
165	PREPARATION AND LYOPHILIC PROPERTIES OF CHITOSAN AEROGELS MODIFIED WITH GLYCYDYL METHACRYLATE COPOLYMERS. <i>Izvestia Volgograd State Technical University</i> , 2020, , 82-89.	0.0	0
166	Facile Preparation of Biocompatible and Transparent Silica Aerogels as Ionogels Using Choline Dihydrogen Phosphate Ionic Liquid. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 206.	1.3	3

#	ARTICLE	IF	CITATIONS
167	Effect of residual Na ⁺ on the properties of aerogel prepared with sodium silicate via APD. <i>Journal of Non-Crystalline Solids</i> , 2022, 575, 121200.	1.5	7
168	Temperature and Composition Dependent Optical Properties of CdSe/CdS Dot/Rod-Based Aerogel Networks. <i>ChemPhysChem</i> , 2022, 23, .	1.0	6
169	Solid-Liquid-Vapor Triphase Gel. <i>Langmuir</i> , 2021, 37, 13501-13511.	1.6	4
170	Elastic geopolymer based on nanotechnology: Synthesis, characterization, properties, and applications. <i>Ceramics International</i> , 2022, 48, 5965-5971.	2.3	1
171	Elastic and highly fatigue resistant ZrO ₂ -SiO ₂ nanofibrous aerogel with low energy dissipation for thermal insulation. <i>Chemical Engineering Journal</i> , 2022, 433, 133628.	6.6	31
172	Noble-Metal Nanorod Cryoaerogels with Electrocatalytically Active Surface Sites. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 57774-57785.	4.0	9
173	Superhydrophobic Silica Aerogels and Their Layer-by-Layer Structure for Thermal Management in Harsh Cold and Hot Environments. <i>ACS Nano</i> , 2021, 15, 19771-19782.	7.3	57
174	A review on nanofiber reinforced aerogels for energy storage and conversion applications. <i>Journal of Energy Storage</i> , 2022, 46, 103927.	3.9	39
175	Preparation and thermal insulation performance characterization of endothermic opacifier doped silica aerogel. <i>International Journal of Thermal Sciences</i> , 2022, 174, 107431.	2.6	10
176	Biomass vs inorganic and plastic-based aerogels: Structural design, functional tailoring, resource-efficient applications and sustainability analysis. <i>Progress in Materials Science</i> , 2022, 125, 100915.	16.0	73
177	Recent Advances in the Synthesis and Application of Three-Dimensional Graphene-Based Aerogels. <i>Molecules</i> , 2022, 27, 924.	1.7	14
178	One-Step Fabrication of Hollow Spherical Cellulose Beads: Application in pH-Responsive Therapeutic Delivery. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 3726-3739.	4.0	11
179	Electroreduction of carbon dioxide to formate using highly efficient bimetallic Sn-Pd aerogels. <i>Materials Advances</i> , 2022, 3, 1224-1230.	2.6	11
180	Versatile Route for Multifunctional Aerogels Including Flaxseed Mucilage and Nanocrystals. <i>Macromolecular Rapid Communications</i> , 2022, 43, e2100794.	2.0	5
181	Additive-Free, Gelled Nanoinks as a 3D Printing Toolbox for Hierarchically Structured Bulk Aerogels. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	8
182	Rational design of in situ modified resorcinol formaldehyde aerogels for removing chlortetracycline antibiotics from aqueous solutions. <i>Polymer Engineering and Science</i> , 0, , .	1.5	4
183	Assembling Inorganic Nanocrystal Gels. <i>Nano Letters</i> , 2022, 22, 1457-1466.	4.5	27
184	Natural polysaccharide-based aerogels and their applications in oil-water separations: a review. <i>Journal of Materials Chemistry A</i> , 2022, 10, 8129-8158.	5.2	48

#	ARTICLE	IF	CITATIONS
185	Interparticle Interaction Matters: Charge Carrier Dynamics in Hybrid Semiconductorâ€“Metal Cryoaerogels. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	8
186	Fibrous Aerogels for Solar Vapor Generation. <i>Frontiers in Chemistry</i> , 2022, 10, 843070.	1.8	5
187	Optimized preparation of thermal insulation hydrophobic SiO ₂ aerogel based on orthogonal design method. <i>Journal of Porous Materials</i> , 2022, 29, 1027-1037.	1.3	14
188	The Importance of the Macroscopic Geometry in Gasâ€“Phase Photocatalysis. <i>Advanced Science</i> , 2022, 9, e2105363.	5.6	22
189	Colloidal CdS Quantum Dot Fibers Prepared by Electrospinning of Their Wet Gel for Quantum Nanowires. <i>ACS Applied Nano Materials</i> , 2022, 5, 3756-3762.	2.4	1
190	Biopolymer-based membranes: green technologies for the separation of oilâ€“water mixtures and the reduction of oil pollution. <i>Clean Technologies and Environmental Policy</i> , 2022, 24, 1961-1985.	2.1	5
191	Self-Supported Three-Dimensional Quantum Dot Aerogels as a Promising Photocatalyst for CO ₂ Reduction. <i>Chemistry of Materials</i> , 2022, 34, 2687-2695.	3.2	12
192	Ligandâ€“Free CsPbBr ₃ Perovskite Quantum Dots in Silicaâ€“Aerogel Composites with Enhanced Stability for wâ€“LED and Display by Substituting Pb ²⁺ with Pr ³⁺ or Gd ³⁺ Ions. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	11
193	Bimetallic Ir_{<i>x</i>}Pb nanowire networks with enhanced electrocatalytic activity for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 11196-11204.	5.2	6
194	Interparticle Distance Variation in Semiconductor Nanoplatelet Stacks. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	6
195	Spanning Network Gels from Nanoparticles and Graph Theoretical Analysis of Their Structure and Properties. <i>Advanced Materials</i> , 2022, 34, e2201313.	11.1	7
196	Expanding the Range: AuCu Metal Aerogels from H ₂ O and EtOH. <i>Catalysts</i> , 2022, 12, 441.	1.6	3
197	Silica Aerogel-Filled Polymer Foams by Emulsion-Templating: A One-Pot Synthesis, Hierarchical Architecture and Thermal Conductivity. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
198	Controllable electrostatic manipulation of structure building blocks in noble metal aerogels. <i>Materials Advances</i> , 2022, 3, 5760-5771.	2.6	6
199	Processing of aerogels and their applications toward CO ₂ adsorption and electrochemical reduction: a review. <i>Environmental Science and Pollution Research</i> , 2022, 29, 47942-47968.	2.7	4
200	Direct synthesis of highly stretchable ceramic nanofibrous aerogels via 3D reaction electrospinning. <i>Nature Communications</i> , 2022, 13, 2637.	5.8	61
201	Cyclodextrin-Based Aerogels: A Review of Nanomaterials Systems and Applications. <i>ACS Applied Nano Materials</i> , 2022, 5, 13921-13939.	2.4	4
202	Influencing the coupling between network building blocks in CdSe/CdS dot/rod aerogels by partial cation exchange. <i>Journal of Chemical Physics</i> , 2022, 156, .	1.2	5

#	ARTICLE	IF	CITATIONS
203	Tunable selectivity on copper-bismuth bimetallic aerogels for electrochemical CO ₂ reduction. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121650.	10.8	18
204	High entropy (LaCeSmEuNd) ₂ Zr ₂ O ₇ ceramic aerogel with low thermal conductivity and excellent structural heat resistance. <i>Journal of the European Ceramic Society</i> , 2022, 42, 5964-5972.	2.8	9
205	CO ₂ Electroreduction on Unsupported PdPt Aerogels: Effects of Alloying and Surface Composition on Product Selectivity. <i>ACS Applied Energy Materials</i> , 2022, 5, 8460-8471.	2.5	16
206	Robust and highly resilient waterborne polyurethane-based composite aerogels prepared by blending with aramid nanofibers. <i>Composites Science and Technology</i> , 2022, 228, 109622.	3.8	18
207	Biomass-based porous composites with heat transfer characteristics: preparation, performance and evaluation - a review. <i>Journal of Porous Materials</i> , 2022, 29, 1667-1687.	1.3	2
208	Silica aerogel-filled polymer foams by emulsion-templating: One-pot synthesis, hierarchical architecture and thermal conductivity. <i>Chemical Engineering Journal</i> , 2022, 450, 138251.	6.6	7
209	Multifunctional SiC@SiO ₂ Nanofiber Aerogel with Ultrabroadband Electromagnetic Wave Absorption. <i>Nano-Micro Letters</i> , 2022, 14, .	14.4	134
210	Current status of sol-gel processing of glasses, ceramics, and organic-inorganic hybrids: a brief review. <i>Journal of the Ceramic Society of Japan</i> , 2022, 130, 575-583.	0.5	5
212	Effects of drying conditions on physicochemical properties of epoxide sol-gel derived γ -Fe ₂ O ₃ and NiO: A comparison between xerogels and aerogels. <i>Ceramics International</i> , 2022, 48, 33340-33349.	2.3	6
213	Supercritical Fluid Technologies for the Incorporation of Synthetic and Natural Active Compounds into Materials for Drug Formulation and Delivery. <i>Pharmaceutics</i> , 2022, 14, 1670.	2.0	15
214	The Aramid-Coating-on-Aramid Strategy toward Strong, Tough, and Foldable Polymer Aerogel Films. <i>ACS Nano</i> , 2022, 16, 14334-14343.	7.3	20
215	Nanoscale Kevlar Liquid Crystal Aerogel Fibers. <i>ACS Nano</i> , 2022, 16, 15237-15248.	7.3	21
216	Large-scale synthesis of macroscopic layered inorganic-organic hybrid nanobelt aerogel monoliths with multifunctionality. <i>Cell Reports Physical Science</i> , 2022, , 101079.	2.8	0
217	Novel aminophosphonate ligand for the preparation of catalytically active silica aerogels with finely dispersed palladium. <i>Journal of Porous Materials</i> , 2023, 30, 449-457.	1.3	2
218	Insights into sustainable aerogels from lignocellulosic materials. <i>Journal of Materials Chemistry A</i> , 2022, 10, 23467-23482.	5.2	5
219	Comparative Study of Covalent and van der Waals CdS Quantum Dot Assemblies from Many-Body Perturbation Theory. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 10153-10161.	2.1	2
220	Toward a Realistic Model of Diffusion-Limited Aggregation: Rotation, Size-Dependent Diffusivities, and Settling. <i>ACS Omega</i> , 2022, 7, 40826-40835.	1.6	9
221	Fabrication and property of hydrophobic polyvinyl alcohol /clay aerogel via irradiation-crosslinking and ambient-drying. <i>Composites Communications</i> , 2022, 36, 101359.	3.3	3

#	ARTICLE	IF	CITATIONS
222	Nanoparticle-Based Aerogels and Their Prospective Future Applications. Journal of Physical Chemistry C, 2022, 126, 19011-19023.	1.5	5
223	Influence of drying technique on Pt/In ₂ O ₃ aerogels for methanol steam reforming. Journal of Sol-Gel Science and Technology, 2023, 107, 218-226.	1.1	4
224	Aerogels-Inspired based Photo and Electrocatalyst for Water Splitting to Produce Hydrogen. Applied Materials Today, 2022, 29, 101670.	2.3	4
225	3D fibrous aerogels from 1D polymer nanofibers for energy and environmental applications. Journal of Materials Chemistry A, 2023, 11, 512-547.	5.2	52
226	Preparation of aerogel-like SiOC ceramic with honeycomb structure and its high-temperature performance. Journal of Alloys and Compounds, 2023, 937, 168438.	2.8	7
227	Using small angle x-ray scattering to examine the aggregation mechanism in silica nanoparticle-based ambigels for improved optical clarity. Journal of Chemical Physics, 2023, 158, .	1.2	5
228	Recent Advances in MXene-Based Aerogels: Fabrication, Performance and Application. Advanced Functional Materials, 2023, 33, .	7.8	22
229	Dispersible SnO ₂ :Sb and TiO ₂ Nanocrystals After Calcination at High Temperature. Small, 2023, 19, .	5.2	2
230	Multifunctional Aerogels: A comprehensive review on types, synthesis and applications of aerogels. Journal of Sol-Gel Science and Technology, 2023, 105, 324-336.	1.1	20
231	Recent Advances in Carbon and Activated Carbon Nanostructured Aerogels Prepared from Agricultural Wastes for Wastewater Treatment Applications. Agriculture (Switzerland), 2023, 13, 208.	1.4	11
232	Flexible, multifunctional aerogel films based on PBO nanofibers and their application in wearable electronic devices. Electrochimica Acta, 2023, 441, 141802.	2.6	3
233	Preparation and characterization of toughened polyurea aerogels incorporating linear long-chain in the structure. Polymer Engineering and Science, 2023, 63, 1001-1010.	1.5	3
234	The Rising Aerogel Fibers: Status, Challenges, and Opportunities. Advanced Science, 2023, 10, .	5.6	26
235	Silica aerogels: from materials research to industrial applications. International Materials Reviews, 2023, 68, 862-900.	9.4	11
236	Montmorillonite-based aerogels assisted environmental remediation. Applied Clay Science, 2023, 236, 106887.	2.6	9
237	Porous Semiconductor Compounds with Engineered Morphology as a Platform for Various Applications. Physica Status Solidi - Rapid Research Letters, 2023, 17, .	1.2	3
238	Alpha Al ₂ O ₃ Nanosheet-Based Biphasic Aerogels with High-Temperature Resistance up to 1600 Å°C. ACS Applied Materials & Interfaces, 2023, 15, 6848-6858.	4.0	7
239	Superstretchable Hybrid Aerogels by Self-templating Strategy for Cross-Media Thermal Management. Macromolecular Rapid Communications, 2023, 44, .	2.0	4

#	ARTICLE	IF	CITATIONS
240	Smart Energy-Absorbing Aerogel-Based Honeycombs with Selectively Nanoconfined Shear-Stiffening Gel. <i>Small Methods</i> , 2023, 7, .	4.6	5
242	Investigation of the Photocatalytic Hydrogen Production of Semiconductor Nanocrystal-Based Hydrogels. <i>Small</i> , 2023, 19, .	5.2	7
243	Characterization and assessment of aerogel-modified asphalt binders. <i>International Journal of Pavement Engineering</i> , 2023, 24, .	2.2	1
244	Enhanced performance of Ru-based infrared imaging sensor array with electrospun thermal isolation structure. <i>IEEE Sensors Journal</i> , 2023, , 1-1.	2.4	0
245	Smart materials – A state-of-the-art-review. <i>Materials Today: Proceedings</i> , 2023, , .	0.9	1
249	A comprehensive review of graphene-based aerogels for biomedical applications. The impact of synthesis parameters onto material microstructure and porosity. <i>Archives of Civil and Mechanical Engineering</i> , 2023, 23, .	1.9	3
264	Design, characterization and applications of nanocolloidal hydrogels. <i>Chemical Society Reviews</i> , 2023, 52, 5317-5339.	18.7	8
272	Chalcogenide Aerogels. <i>Springer Handbooks</i> , 2023, , 989-1010.	0.3	0
273	Noble Metal Aerogels. <i>Springer Handbooks</i> , 2023, , 1089-1127.	0.3	0
274	Potential of Anisotropic Cellulose Aerogels. <i>Springer Handbooks</i> , 2023, , 727-745.	0.3	0
275	The Story of Aerogel. <i>Springer Handbooks</i> , 2023, , 1-50.	0.3	1
277	Nanoparticle-Based Inorganic Aerogels. <i>Springer Handbooks</i> , 2023, , 1041-1060.	0.3	0
278	Aerogel-Like Metals Produced Through Physical Vapor Deposition. <i>Springer Handbooks</i> , 2023, , 1189-1210.	0.3	0
284	Metal Fluoride and Fluorinated Metal Oxide Aerogels. <i>Springer Handbooks</i> , 2023, , 1011-1039.	0.3	0
297	Advanced nanofabrication for elastic inorganic aerogels. <i>Nano Research</i> , 0, , .	5.8	0
300	Natural polymers, silica, and carbon-based aerogels: catalytic applications in fine chemical synthesis. An overview. , 2024, , 255-289.		0