

Aerogel insulation for building applications: A state-of-

Energy and Buildings

43, 761-769

DOI: [10.1016/j.enbuild.2010.12.012](https://doi.org/10.1016/j.enbuild.2010.12.012)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Eco-efficient Construction and Building Materials. , 2011, , .		51
2	Template-free co-assembly of preformed Au and TiO ₂ nanoparticles into multicomponent 3D aerogels. Journal of Materials Chemistry, 2011, 21, 16893.	6.7	77
3	Traditional, state-of-the-art and future thermal building insulation materials and solutions “ Properties, requirements and possibilities. Energy and Buildings, 2011, 43, 2549-2563.	3.1	864
4	Vacuum Insulation Panels (VIPs) for building construction industry “ A review of the contemporary developments and future directions. Applied Energy, 2011, 88, 3592-3602.	5.1	198
5	Comprehensive characterization of thermophysical properties in solids using thermal impedance. Journal of Applied Physics, 2012, 112, .	1.1	3
6	Sustainable refurbishment in building technology. Smart and Sustainable Built Environment, 2012, 1, 241-252.	2.2	21
7	Toxicity of nanoparticles. , 2012, , 427-475.		8
8	Experimental performance evaluation of aerogel glazing systems. Applied Energy, 2012, 97, 430-437.	5.1	160
9	Glazing systems with silica aerogel for energy savings in buildings. Applied Energy, 2012, 98, 396-403.	5.1	199
10	Predicted and in situ performance of a solar air collector incorporating a translucent granular aerogel cover. Energy and Buildings, 2012, 49, 173-187.	3.1	41
11	Using nanocapsules as building blocks to fabricate organic polymer nanofoam with ultra low thermal conductivity and high mechanical strength. Polymer, 2012, 53, 5699-5705.	1.8	23
12	Preparation and characterization of monolithic methylsilicone xerogels doped with liquid-phase synthesized TiO ₂ . Journal of Non-Crystalline Solids, 2012, 358, 2922-2926.	1.5	3
13	Optical properties of high-performance liquid crystal “xerogel microcomposite electro-optical film. Journal of Materials Research, 2012, 27, 1257-1264.	1.2	8
14	Accelerated climate ageing of building materials, components and structures in the laboratory. Journal of Materials Science, 2012, 47, 6475-6496.	1.7	104
15	Analyses on performances of heat and multilayer reflection insulators. Journal of Central South University, 2012, 19, 1645-1656.	1.2	6
16	Fenestration of today and tomorrow: A state-of-the-art review and future research opportunities. Solar Energy Materials and Solar Cells, 2012, 96, 1-28.	3.0	430
17	Hierarchical Zinc Oxide Materials with Multiple Porosity Prepared by Ultrafast Temperature Gradient Chemical Gas “Phase Synthesis. Advanced Materials, 2012, 24, 543-548.	11.1	43
18	Monodisperse Hollow Silica Nanospheres for Nano Insulation Materials: Synthesis, Characterization, and Life Cycle Assessment. ACS Applied Materials & Interfaces, 2013, 5, 761-767.	4.0	137

#	ARTICLE	IF	CITATIONS
19	Preparation of Aerogel-Modified Expanded Perlite and its Application in Heat Insulation Coating. <i>Advanced Materials Research</i> , 0, 668, 360-364.	0.3	9
20	Passive alternatives to mechanical air conditioning of building: A review. <i>Building and Environment</i> , 2013, 66, 54-64.	3.0	137
21	Modeling of phonon heat transfer in spherical segment of silica aerogel grains. <i>Physica B: Condensed Matter</i> , 2013, 420, 58-63.	1.3	11
22	CO2 capture using particulate silica aerogel immobilized with tetraethylenepentamine. <i>Microporous and Mesoporous Materials</i> , 2013, 176, 123-131.	2.2	86
24	Relationship analysis of processing parameters with micro and macro structure of silica aerogel dried at ambient pressure. <i>Journal of Non-Crystalline Solids</i> , 2013, 376, 30-37.	1.5	45
25	A review of state-of-the-art aerogel applications in buildings. <i>International Journal of Low-Carbon Technologies</i> , 2013, 8, 1-6.	1.2	133
26	Solar radiation glazing factors for window panes, glass structures and electrochromic windows in buildings—Measurement and calculation. <i>Solar Energy Materials and Solar Cells</i> , 2013, 116, 291-323.	3.0	151
27	Window spacers and edge seals in insulating glass units: A state-of-the-art review and future perspectives. <i>Energy and Buildings</i> , 2013, 58, 263-280.	3.1	81
28	Effective thermal conductivity of the solid backbone of aerogel. <i>International Journal of Heat and Mass Transfer</i> , 2013, 64, 452-456.	2.5	73
29	Systematic studies of tannin-formaldehyde aerogels: preparation and properties. <i>Science and Technology of Advanced Materials</i> , 2013, 14, 015001.	2.8	47
30	Nanotechnology innovations for the construction industry. <i>Progress in Materials Science</i> , 2013, 58, 1056-1102.	16.0	269
31	Chemical retreating for gel-typed aerogel and insulation performance of cement containing aerogel. <i>Construction and Building Materials</i> , 2013, 40, 501-505.	3.2	98
32	Synthesis and properties of magnesium carbonate xerogels and aerogels. <i>Journal of Non-Crystalline Solids</i> , 2013, 361, 100-105.	1.5	17
33	Monolithic Composites of Silica Aerogels by Reactive Supercritical Deposition of Hydroxy-Terminated Poly(Dimethylsiloxane). <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 11708-11717.	4.0	41
34	Nanogel Windows. , 2013, , 555-582.		10
35	High performance thermal insulation materials for buildings. , 2013, , 188-206.		8
36	Synthesis of Flexible Aerogel Composites Reinforced with Electrospun Nanofibers and Microparticles for Thermal Insulation. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-8.	1.5	32
37	Silica nanogel for energy-efficient windows. , 2013, , 207-235.		13

#	ARTICLE	IF	CITATIONS
38	Preparation and Aging of Polyurethane Foams Filled with Silica Aerogels. <i>Kobunshi Ronbunshu</i> , 2013, 70, 123-128.	0.2	3
40	Preparation of Silica Aerogel/Acrylic Resin Composites. <i>Kobunshi Ronbunshu</i> , 2013, 70, 35-41.	0.2	1
41	Aerogels as Promising Thermal Insulating Materials: An Overview. <i>Journal of Materials</i> , 2014, 2014, 1-10.	0.1	109
42	<i>Buildings</i> , 2015, , 671-738.		13
43	Lightweight and thermally insulating aerogel glass materials. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 799-808.	1.1	19
44	Trombe walls with nanoporous aerogel insulation applied to UK housing refurbishments. <i>International Journal of Smart and Nano Materials</i> , 2014, 5, 283-303.	2.0	10
45	Mechanical and Adiabatic Properties of Silica Aerogel Doped with TiO ₂ Nanowire. <i>Key Engineering Materials</i> , 2014, 633, 336-339.	0.4	0
46	Resource management in organized housing settlements, a case study at Kastoria Region, Greece. <i>Energy and Buildings</i> , 2014, 74, 17-29.	3.1	4
47	Improvement of window thermal performance using aerogel insulation film for building energy saving. <i>Journal of Thermal Analysis and Calorimetry</i> , 2014, 116, 219-224.	2.0	23
48	Analysis on existent thermal insulating plasters towards innovative applications: Evaluation methodology for a real cost-performance comparison. <i>Energy and Buildings</i> , 2014, 77, 40-47.	3.1	49
49	Optimizing insulation thickness and analysing environmental impacts of aerogel-based thermal superinsulation in buildings. <i>Energy and Buildings</i> , 2014, 77, 28-39.	3.1	132
50	Advanced thermal insulation and absorption properties of recycled cellulose aerogels. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 445, 128-134.	2.3	217
51	Toward aerogel based thermal superinsulation in buildings: A comprehensive review. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 34, 273-299.	8.2	541
52	Thermal conductivity and characterization of compacted, granular silica aerogel. <i>Energy and Buildings</i> , 2014, 79, 47-57.	3.1	86
53	Mechanical properties of monolithic silica aerogels made from polyethoxydisiloxanes. <i>Microporous and Mesoporous Materials</i> , 2014, 183, 23-29.	2.2	207
54	Eco-efficient construction and building materials research under the EU Framework Programme Horizon 2020. <i>Construction and Building Materials</i> , 2014, 51, 151-162.	3.2	180
55	Vacuum insulation panel products: A state-of-the-art review and future research pathways. <i>Applied Energy</i> , 2014, 116, 355-375.	5.1	187
56	Vacuum insulated panels for sustainable buildings: a review of research and applications. <i>International Journal of Energy Research</i> , 2014, 38, 1-19.	2.2	54

#	ARTICLE	IF	CITATIONS
57	Ultra-flyweight hydrophobic poly(m-phenylenediamine) aerogel with micro-spherical shell structures as a high-performance selective adsorbent for oil contamination. RSC Advances, 2014, 4, 49000-49005.	1.7	20
58	The thermal conductivity of polymethylsilsesquioxane aerogels and xerogels with varied pore sizes for practical application as thermal superinsulators. Journal of Materials Chemistry A, 2014, 2, 6525-6531.	5.2	176
59	A versatile ambient pressure drying approach to synthesize silica-based composite aerogels. RSC Advances, 2014, 4, 51146-51155.	1.7	43
60	Coupling model for heat transfer between solid and gas phases in aerogel and experimental investigation. International Journal of Heat and Mass Transfer, 2014, 79, 126-136.	2.5	87
61	Multipurpose characterization of glazing systems with silica aerogel: In-field experimental analysis of thermal-energy, lighting and acoustic performance. Building and Environment, 2014, 81, 92-102.	3.0	94
62	Hygrothermal performance of exterior walls covered with aerogel-based insulating rendering. Energy and Buildings, 2014, 84, 241-251.	3.1	100
63	Synthesis and Properties of Step-Growth Polyamide Aerogels Cross-linked with Triacid Chlorides. Chemistry of Materials, 2014, 26, 4163-4171.	3.2	87
64	Nano Insulation Materials: Synthesis and Life Cycle Assessment. Procedia CIRP, 2014, 15, 490-495.	1.0	36
65	Performance investigation of heat insulation solar glass for low-carbon buildings. Energy Conversion and Management, 2014, 88, 834-841.	4.4	65
66	Insulating glazing units with silica aerogel granules: The impact of particle size. Applied Energy, 2014, 128, 27-34.	5.1	110
67	Mechanical and thermal performance of aerogel-filled sandwich panels for building insulation. Energy and Buildings, 2014, 76, 336-346.	3.1	46
68	Cement-based renders with insulating properties. Construction and Building Materials, 2014, 65, 427-431.	3.2	9
69	Improving the energy-efficiency of historic masonry buildings. A case study: A minor centre in the Abruzzo region, Italy. Energy and Buildings, 2014, 80, 415-423.	3.1	67
70	Development of Innovative Aerogel Based Plasters: Preliminary Thermal and Acoustic Performance Evaluation. Sustainability, 2014, 6, 5839-5852.	1.6	95
71	Effect from a Variable U-Value in Adaptive Building Components with Controlled Internal Air Pressure. Energy Procedia, 2015, 78, 376-381.	1.8	30
72	Coupling VIPs and ABPs: Assessment of Overall Thermal Performance in Building Wall Insulation. Energy Procedia, 2015, 78, 2760-2765.	1.8	7
73	An energy retrofitting methodology of Mediterranean historical buildings. Management of Environmental Quality, 2015, 26, 984-997.	2.2	9
74	High Performance Aerogel Containing Plaster for Historic Buildings with Structured Façades. Energy Procedia, 2015, 78, 949-954.	1.8	45

#	ARTICLE	IF	CITATIONS
78	A Facile and Fast Gelation Process to Prepare Highly Spherical Millimeter-Sized Silica Aerogel Beads. International Journal of Applied Ceramic Technology, 2015, 12, E244.	1.1	3
79	Polymer/Carbon-Based Hybrid Aerogels: Preparation, Properties and Applications. Materials, 2015, 8, 6806-6848.	1.3	163
80	Organic-Inorganic Polymer Hybrids: Synthetic Strategies and Applications. , 2015, , 11-63.		16
81	The development of a monolithic aerogel glazed window for an energy retrofitting project. Applied Energy, 2015, 154, 603-615.	5.1	135
82	Silica Aerogels: A Multifunctional Building Material. , 2015, , 35-41.		4
83	Application of super-insulating translucent silica aerogel glazing system on commercial building envelope of humid subtropical climates – Impact on space cooling load. Energy, 2015, 83, 316-325.	4.5	83
84	The effect of embedding highly insulating granular aerogel in cellulosic aerogel. Journal of Supercritical Fluids, 2015, 106, 93-99.	1.6	20
85	An overview of feasibilities and challenge of conductive cellulose for rechargeable lithium based battery. Renewable and Sustainable Energy Reviews, 2015, 50, 204-213.	8.2	40
86	Thermal Energy Storage with Super Insulating Materials: A Parametrical Analysis. Energy Procedia, 2015, 78, 441-446.	1.8	18
87	Synthesis and thermal insulation performance of silica aerogel from recycled coal gangue by means of ambient pressure drying. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 908-913.	0.4	13
88	Thermal Properties of Silica Aerogel Formula. Journal of Heat Transfer, 2015, 137, .	1.2	21
89	Development of Glazing Systems with Silica Aerogel. Energy Procedia, 2015, 78, 394-399.	1.8	25
90	Advances of thermal conductivity models of nanoscale silica aerogel insulation material. Applied Thermal Engineering, 2015, 81, 28-50.	3.0	278
91	Alkali-activated concrete binders as inorganic thermal insulator materials. , 2015, , 687-728.		5
92	Effect of polymer molecular weight and deposition temperature on the properties of silica aerogel/hydroxy-terminated poly(dimethylsiloxane) nanocomposites prepared by reactive supercritical deposition. Journal of Supercritical Fluids, 2015, 105, 99-107.	1.6	5
93	Robust Superhydrophobic Bridged Silsesquioxane Aerogels with Tunable Performances and Their Applications. ACS Applied Materials & Interfaces, 2015, 7, 2016-2024.	4.0	80
94	Phase change materials and products for building applications: A state-of-the-art review and future research opportunities. Energy and Buildings, 2015, 94, 150-176.	3.1	419
95	Experimental investigations of aerogel-incorporated ultra-high performance concrete. Construction and Building Materials, 2015, 77, 307-316.	3.2	122

#	ARTICLE	IF	CITATIONS
96	Dense nanopowder composites for thermal insulation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 439-442.	0.8	8
97	Policies and Programs for Sustainable Energy Innovations. <i>Innovation, Technology and Knowledge Management</i> , 2015, , .	0.4	1
98	Preparation and characterization of granular silica aerogel/polyisocyanurate rigid foam composites. <i>Construction and Building Materials</i> , 2015, 93, 309-316.	3.2	54
99	Silica aerogel/epoxy composites with preserved aerogel pores and low thermal conductivity. <i>E-Polymers</i> , 2015, 15, 111-117.	1.3	37
100	Mechanical and thermal properties of nanofibrillated cellulose reinforced silica aerogel composites. <i>Microporous and Mesoporous Materials</i> , 2015, 217, 150-158.	2.2	92
101	Aerogel granule aging driven by moisture and solar radiation. <i>Energy and Buildings</i> , 2015, 103, 238-248.	3.1	49
102	Aerogel-Assisted Support Pillars for Thermal Performance Enhancement of Vacuum Glazing: A CFD Research for a Commercial Product. <i>Arabian Journal for Science and Engineering</i> , 2015, 40, 2233-2238.	1.1	42
103	Thermal runaway propagation model for designing a safer battery pack with 25 Ah LiNi Co Mn O2 large format lithium ion battery. <i>Applied Energy</i> , 2015, 154, 74-91.	5.1	293
104	Silica aerogel/polyvinyl alcohol (PVA) insulation composites with preserved aerogel pores using interfaces between the superhydrophobic aerogel and hydrophilic PVA solution. <i>Composites Part A: Applied Science and Manufacturing</i> , 2015, 75, 39-45.	3.8	74
105	Fenestration for reducing building cooling needs. , 2015, , 441-471.		4
106	A comprehensive review of heat recovery systems for building applications. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 47, 665-682.	8.2	131
107	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.	7.8	229
108	Facile synthesis of strong aluminaâ€“cellulose aerogels by a freeze-drying method. <i>Materials Letters</i> , 2015, 152, 9-12.	1.3	51
109	Effect of facade components on energy efficiency in office buildings. <i>Applied Energy</i> , 2015, 158, 422-432.	5.1	73
110	Concentrating Solar Power. <i>Chemical Reviews</i> , 2015, 115, 12797-12838.	23.0	438
111	Building envelope with a new aerogel-based insulating rendering: Experimental and numerical study, cost analysis, and thickness optimization. <i>Applied Energy</i> , 2015, 159, 490-501.	5.1	83
112	Thermal transport in nano-porous insulation of aerogel: Factors, models and outlook. <i>Energy</i> , 2015, 90, 701-721.	4.5	155
113	Super insulated aerogel windows: Impact on daylighting and thermal performance. <i>Building and Environment</i> , 2015, 94, 231-238.	3.0	52

#	ARTICLE	IF	CITATIONS
114	Formation of polysaccharide aerogels in ethanol. RSC Advances, 2015, 5, 77362-77371.	1.7	62
115	Development of guarded hot plate apparatus utilizing Peltier module for precise thermal conductivity measurement of insulation materials. International Journal of Heat and Mass Transfer, 2015, 91, 1157-1166.	2.5	39
116	Numerical modeling and optimization of an insulation system for underground thermal energy storage. Applied Thermal Engineering, 2015, 91, 687-693.	3.0	9
117	Laser induced instantaneous gelation: aerogels for 3D printing. Journal of Materials Chemistry A, 2015, 3, 17606-17611.	5.2	23
118	Applications of Terahertz Spectroscopy in the Field of Construction and Building Materials. Applied Spectroscopy Reviews, 2015, 50, 279-303.	3.4	41
119	Generation of nanocellular foams from ABS terpolymers. European Polymer Journal, 2015, 65, 209-220.	2.6	26
120	Impact of convection on thermal performance of aerogel granulate glazing systems. Energy and Buildings, 2015, 88, 165-173.	3.1	45
121	Spectral and angular solar properties of a PCM-filled double glazing unit. Energy and Buildings, 2015, 87, 302-312.	3.1	100
122	Nano-fibrillated cellulose-zeolites based new hybrid composites aerogels with super thermal insulating properties. Industrial Crops and Products, 2015, 65, 374-382.	2.5	98
123	Thermal barrier coatings based on alumina microparticles. Progress in Organic Coatings, 2015, 78, 124-132.	1.9	16
124	Polyurethane-silica hybrid foam by sol-gel approach: Chemical and functional properties. Polymer, 2015, 56, 20-28.	1.8	71
125	The role of window glazing on daylighting and energy saving in buildings. Renewable and Sustainable Energy Reviews, 2015, 42, 323-343.	8.2	344
126	Thermal performance investigation of heat insulation solar glass: A comparative experimental study. Energy and Buildings, 2015, 86, 595-600.	3.1	97
127	Supercritical impregnation of drugs and supercritical fluid deposition of metals into aerogels. Journal of Materials Science, 2015, 50, 1-12.	1.7	51
128	Shortened aerogel fabrication times using an ethanol-water azeotrope as a gelation and drying solvent. Journal of Materials Chemistry A, 2015, 3, 762-772.	5.2	28
129	CNF-reinforced polymer aerogels: Influence of the synthesis variables and economic evaluation. Chemical Engineering Journal, 2015, 262, 691-701.	6.6	20
130	Polymer nano-foams for insulating applications prepared from CO2 foaming. Progress in Polymer Science, 2015, 41, 122-145.	11.8	233
131	Performance evaluation of buildings with advanced thermal insulation system: A numerical study. Journal of Facade Design and Engineering, 2016, 4, 19-34.	0.1	9

#	ARTICLE	IF	CITATIONS
132	Microstructure, Mechanical and Thermal Properties of Three-dimensional Braided Glass Fiber Reinforced Phenolic Cryogel Composites. <i>Frontiers in Forests and Global Change</i> , 2016, 35, 193-208.	0.6	1
133	Modeling and Optimization of the Thermal Performance of a Wood-Cement Block in a Low-Energy House Construction. <i>Energies</i> , 2016, 9, 677.	1.6	11
134	Synthesis and Characterization of Fibre Reinforced Silica Aerogel Blankets for Thermal Protection. <i>Advances in Materials Science and Engineering</i> , 2016, 2016, 1-8.	1.0	38
135	A Novel Environmental Route to Ambient Pressure Dried Thermal Insulating Silica Aerogel via Recycled Coal Gangue. <i>Advances in Materials Science and Engineering</i> , 2016, 2016, 1-9.	1.0	10
136	Nano-based thermal insulation for energy-efficient buildings. , 2016, , 129-181.		19
137	Grand Canonical Monte Carlo Simulation of Nitrogen Adsorption in a Silica Aerogel Model. <i>Computation</i> , 2016, 4, 18.	1.0	5
138	Thermal assessment of ambient pressure dried silica aerogel composite boards at laboratory and field scale. <i>Energy and Buildings</i> , 2016, 128, 111-118.	3.1	65
139	Silica-cellulose hybrid aerogels for thermal and acoustic insulation applications. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 506, 298-305.	2.3	157
140	Forty years of regulations on the thermal performance of the building envelope in Europe: Achievements, perspectives and challenges. <i>Energy and Buildings</i> , 2016, 127, 942-952.	3.1	53
141	Nanodevices and Novel Materials for Energy-Efficient constructions. <i>Energy Procedia</i> , 2016, 101, 113-120.	1.8	0
142	Development of micro / nano-size hollow silicate particles for thermal energy saving application. <i>MRS Advances</i> , 2016, 1, 3947-3952.	0.5	2
143	Analysis of the optical and thermal properties of transparent insulating materials containing gas bubbles. <i>Applied Thermal Engineering</i> , 2016, 100, 468-477.	3.0	11
144	Performance evaluation of aerogel-based and perlite-based prototyped insulations for internal thermal retrofitting: HMT model validation by monitoring at demo scale. <i>Energy and Buildings</i> , 2016, 126, 275-286.	3.1	40
145	Pore morphology and acoustic properties of open-pore phenolic cryogel acoustic multi-structured plates. <i>Materials Letters</i> , 2016, 176, 199-201.	1.3	10
146	Insulation materials for the building sector: A review and comparative analysis. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 62, 988-1011.	8.2	615
147	Aerogel-aerogel composites for normal temperature range thermal insulations. <i>Journal of Non-Crystalline Solids</i> , 2016, 441, 42-48.	1.5	38
148	Effect of nano vacuum insulation panel and nanogel glazing on the energy performance of office building. <i>Applied Energy</i> , 2016, 173, 141-151.	5.1	39
149	Recent advances in aerogels for environmental remediation applications: A review. <i>Chemical Engineering Journal</i> , 2016, 300, 98-118.	6.6	494

#	ARTICLE	IF	CITATIONS
150	Tough Polymer Aerogels Incorporating a Conformal Inorganic Coating for Low Flammability and Durable Hydrophobicity. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 13051-13057.	4.0	50
151	Advanced three dimensional characterization of silica-based ultraporous materials. <i>RSC Advances</i> , 2016, 6, 10625-10632.	1.7	30
152	Flammability and oxidation kinetics of hydrophobic silica aerogels. <i>Journal of Hazardous Materials</i> , 2016, 320, 350-358.	6.5	54
153	Hydrophobic treatment of wood fibrous thermal insulator by octadecyltrichlorosilane and its influence on hygric properties and resistance against moulds. <i>Composites Part B: Engineering</i> , 2016, 106, 285-293.	5.9	42
154	Energy performance and economic viability of nano aerogel glazing and nano vacuum insulation panel in multi-story office building. <i>Energy</i> , 2016, 113, 949-956.	4.5	54
155	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.	3.2	68
156	Heavy metals in Iberian soils: Removal by current adsorbents/amendments and prospective for aerogels. <i>Advances in Colloid and Interface Science</i> , 2016, 237, 28-42.	7.0	70
157	The control of ice crystal growth and effect on porous structure of konjac glucomannan-based aerogels. <i>International Journal of Biological Macromolecules</i> , 2016, 92, 1130-1135.	3.6	70
158	Numerical investigation of heat transfer on the building insulation materials with successive layers of polystyrene and various inert gases. <i>Journal of Thermal Science and Technology</i> , 2016, 11, JTST0015-JTST0015.	0.6	0
159	Transparent Ethylene-Bridged Polymethylsiloxane Aerogels and Xerogels with Improved Bending Flexibility. <i>Langmuir</i> , 2016, 32, 13427-13434.	1.6	49
160	Calcined clays as binder for thermal insulating and structural aerogel incorporated mortar. <i>Cement and Concrete Composites</i> , 2016, 72, 213-221.	4.6	42
161	Thermal and strength properties of lightweight concretes with the addition of aerogel particles. <i>Advances in Cement Research</i> , 2016, 28, 567-575.	0.7	47
162	Preparation of aerogel-eicosane microparticles for thermoregulatory coating on textile. <i>Applied Thermal Engineering</i> , 2016, 107, 602-611.	3.0	45
163	Application of Nanotechnology-Based Thermal Insulation Materials in Building Construction. <i>Slovak Journal of Civil Engineering</i> , 2016, 24, 17-23.	0.2	13
164	Synthesis and biomedical applications of aerogels: Possibilities and challenges. <i>Advances in Colloid and Interface Science</i> , 2016, 236, 1-27.	7.0	270
165	A smart building material for low/zero carbon applications: heat insulation solar glass characteristic results from laboratory and in situ tests. <i>International Journal of Low-Carbon Technologies</i> , 0, , ctw009.	1.2	3
166	<i>Advances in Nanocomposites</i> , , 2016, , .		4
167	Effects of Nanoporosity on the Mechanical Properties and Applications of Aerogels in Composite Structures. , 2016, , 97-126.		0

#	ARTICLE	IF	CITATIONS
168	Aerogels for thermal insulation in high-performance textiles. <i>Textile Progress</i> , 2016, 48, 55-118.	1.3	63
169	Interface-mediated extremely low thermal conductivity of graphene aerogel. <i>Carbon</i> , 2016, 98, 381-390.	5.4	120
170	Development of fracture free clay-based aerogel: Formulation and architectural mechanisms. <i>Composites Part B: Engineering</i> , 2016, 91, 169-175.	5.9	25
171	The impact of internal aerogel retrofitting on the thermal bridges of residential buildings: An experimental and statistical research. <i>Energy and Buildings</i> , 2016, 116, 449-454.	3.1	41
172	Determination of Scattering and Absorption Coefficients of Porous Silica Aerogel Composites. <i>Journal of Heat Transfer</i> , 2016, 138, .	1.2	13
173	Synthesis of silica aerogels microspheres prepared by ink jet printing and dried at ambient pressure without surface hydrophobization. <i>Materials Chemistry and Physics</i> , 2016, 172, 32-38.	2.0	13
174	Environmental assessment of facade-building systems and thermal insulation materials for different climatic conditions. <i>Journal of Cleaner Production</i> , 2016, 113, 102-113.	4.6	87
175	Lignin-Based Aerogels. , 2016, , 67-93.		15
176	Sunlight-curable boehmite/siloxane-modified methacrylic based nanocomposites as insulating coatings for stone substrates. <i>Progress in Organic Coatings</i> , 2016, 95, 107-119.	1.9	25
177	Tuning the structure and the mechanical properties of epoxy-silica sol-gel hybrid materials. <i>RSC Advances</i> , 2016, 6, 10736-10742.	1.7	9
178	Toward multi-functional PV glazing technologies in low/zero carbon buildings: Heat insulation solar glass - Latest developments and future prospects. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 60, 1286-1301.	8.2	57
179	Traditional and Innovative Materials for Energy Efficiency in Buildings. <i>Key Engineering Materials</i> , 0, 678, 14-34.	0.4	19
180	Nanocellulose Aerogels as Thermal Insulation Materials. , 2016, , 411-427.		14
181	Hydrogen bonding directed assembly of simonkolleite aerogel by a sol-gel approach. <i>Materials and Design</i> , 2016, 93, 503-508.	3.3	9
182	Synthesis of silica cryogel-glass fiber blanket by vacuum drying. <i>Ceramics International</i> , 2016, 42, 7216-7222.	2.3	28
183	Aramid fibers reinforced silica aerogel composites with low thermal conductivity and improved mechanical performance. <i>Composites Part A: Applied Science and Manufacturing</i> , 2016, 84, 316-325.	3.8	162
184	Nanogel Windows for Energy Building Efficiency. , 2016, , 41-69.		11
185	Energy saving potential of heat insulation solar glass: Key results from laboratory and in-situ testing. <i>Energy</i> , 2016, 97, 369-380.	4.5	48

#	ARTICLE	IF	CITATIONS
186	Aerogel vs. argon insulation in windows: A greenhouse gas emissions analysis. <i>Building and Environment</i> , 2016, 101, 64-76.	3.0	39
187	Anhydrite/aerogel composites for thermal insulation. <i>Materials and Structures/Materiaux Et Constructions</i> , 2016, 49, 3647-3661.	1.3	18
188	Effect of storage and curing conditions at elevated temperatures on aerogel-incorporated mortar samples based on UHPC recipe. <i>Construction and Building Materials</i> , 2016, 106, 640-649.	3.2	57
189	Modeling and thermal performance evaluation of a switchable triple glazing exhaust air window. <i>Applied Thermal Engineering</i> , 2016, 92, 8-17.	3.0	35
190	Multi-scale cellulose based new bio-aerogel composites with thermal super-insulating and tunable mechanical properties. <i>Carbohydrate Polymers</i> , 2016, 138, 335-348.	5.1	99
191	Vacuum glazing for highly insulating windows: Recent developments and future prospects. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 54, 1345-1357.	8.2	96
192	An overview of domestic energy consumption in the UK: past, present and future. <i>International Journal of Ambient Energy</i> , 2016, 37, 428-435.	1.4	6
193	Structural characterization of thermal building insulation materials using terahertz spectroscopy and terahertz pulsed imaging. <i>NDT and E International</i> , 2016, 77, 11-18.	1.7	28
194	Properties of laminated silica aerogel fibrous matting composites for footwear applications. <i>Textile Research Journal</i> , 2016, 86, 1063-1073.	1.1	16
195	Rapid fabrication of cross-linked silica aerogel by laser induced gelation. <i>Microporous and Mesoporous Materials</i> , 2016, 221, 245-252.	2.2	28
196	Lightweight steel-framed thermal bridges mitigation strategies: A parametric study. <i>Journal of Building Physics</i> , 2016, 39, 342-372.	1.2	44
197	Low-density, transparent aerogels and xerogels based on hexylene-bridged polysilsesquioxane with bendability. <i>Journal of Sol-Gel Science and Technology</i> , 2017, 81, 42-51.	1.1	32
198	Preparation, microstructure, and thermal properties of phenolic cryogel composite plates. <i>Polymer Composites</i> , 2017, 38, 2294-2300.	2.3	3
199	Silicone-Based Organic-Inorganic Hybrid Aerogels and Xerogels. <i>Chemistry - A European Journal</i> , 2017, 23, 5176-5187.	1.7	91
200	Renewable hybrid nanocatalyst from magnetite and cellulose for treatment of textile effluents. <i>Carbohydrate Polymers</i> , 2017, 163, 101-107.	5.1	35
201	Effects of air gap on insulation thickness and life cycle costs for different pipe diameters in pipeline. <i>Energy</i> , 2017, 122, 492-504.	4.5	18
202	Jute-reinforced non-woven composites as a thermal insulator and sound absorber – A review. <i>Journal of Reinforced Plastics and Composites</i> , 2017, 36, 206-213.	1.6	43
203	An Introduction to Sol-Gel Processing for Aerogels. <i>Advances in Sol-gel Derived Materials and Technologies</i> , 2017, , 1-22.	0.3	15

#	ARTICLE	IF	CITATIONS
204	A novel starch-enhanced melamine-formaldehyde aerogel with low volume shrinkage and high toughness. <i>Journal of Porous Materials</i> , 2017, 24, 1303-1307.	1.3	27
205	Experimental investigations on temperature-dependent effective thermal conductivity of nanoporous silica aerogel composite. <i>Experimental Thermal and Fluid Science</i> , 2017, 84, 67-77.	1.5	44
206	The effects of microstructure on optical and thermal properties of porous silica films. <i>Surface and Coatings Technology</i> , 2017, 320, 174-177.	2.2	5
207	Methodologies for Selection of Thermal Insulation Materials for Cost-Effective, Sustainable, and Energy-Efficient Retrofitting. , 2017, , 23-55.		2
208	Phase Change Materials for Application in Energy-Efficient Buildings. , 2017, , 57-118.		32
209	A theoretical and numerical study on the gas-contributed thermal conductivity in aerogel. <i>International Journal of Heat and Mass Transfer</i> , 2017, 108, 1982-1990.	2.5	44
210	Light distribution in air-supported pneumatic structures: Comparison of experimental and computer calculated daylight factors. <i>Building and Environment</i> , 2017, 119, 110-127.	3.0	5
211	The synthesis of silica-based aerogel from gold mine waste for thermal insulation. <i>Journal of Thermal Analysis and Calorimetry</i> , 2017, 129, 1807-1812.	2.0	12
212	Transparent polyvinylsilsesquioxane aerogels: investigations on synthetic parameters and surface modification. <i>Journal of Sol-Gel Science and Technology</i> , 2017, 82, 2-14.	1.1	8
213	Characteristics of nanoporous silica aerogel under high temperature from 950 Å°C to 1200 Å°C. <i>Materials and Design</i> , 2017, 129, 82-90.	3.3	75
214	Effects of microstructure evolution on transport properties of thermoelectric nickel-doped zinc oxide. <i>Journal of the European Ceramic Society</i> , 2017, 37, 3541-3550.	2.8	28
215	Microstructure and property characterization of flexible syntactic foam for insulation material via mold casting. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2017, 4, 169-176.	2.7	8
216	Synthesis and properties of melamine-“starch hybrid aerogels cross-linked with formaldehyde. <i>Journal of Sol-Gel Science and Technology</i> , 2017, 83, 44-52.	1.1	10
217	Energy efficiency and thermal performance of lightweight steel-framed (LSF) construction: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 78, 194-209.	8.2	92
218	Transparent Ethenylene-Bridged Polymethylsiloxane Aerogels: Mechanical Flexibility and Strength and Availability for Addition Reaction. <i>Langmuir</i> , 2017, 33, 4543-4550.	1.6	43
219	Mechanical, thermal and flammability properties of glass fiber film/silica aerogel composites. <i>Journal of Non-Crystalline Solids</i> , 2017, 457, 52-59.	1.5	87
220	Offenzellige SchwÄmme mit niedrigen Dichten als Funktionsmaterialien. <i>Angewandte Chemie</i> , 2017, 129, 15726-15745.	1.6	7
221	Environmental assessment of a nano-technological aerogel-based panel for building insulation. <i>Journal of Cleaner Production</i> , 2017, 161, 1404-1415.	4.6	41

#	ARTICLE	IF	CITATIONS
222	Thermal performance evaluation and comfort assessment of advanced aerogel as blown-in insulation for historic buildings. <i>Building and Environment</i> , 2017, 122, 258-268.	3.0	57
223	Super absorbent, light, and highly flame retardant cellulose-based aerogel crosslinked with citric acid. <i>Journal of Applied Polymer Science</i> , 2017, 134, 45315.	1.3	63
224	Free-standing PEDOT:PSS/CNT aerogels and their electrochemical performance. <i>Materials Technology</i> , 2017, 32, 622-629.	1.5	17
225	Synthesis of silica aerogel monoliths with controlled specific surface areas and pore sizes. <i>Materials Research Express</i> , 2017, 4, 075020.	0.8	10
226	Propylene oxide as a new reagent for mixed SiO ₂ -based aerogels preparation. <i>Journal of Sol-Gel Science and Technology</i> , 2017, 84, 377-381.	1.1	8
227	Low-Density Open Cellular Sponges as Functional Materials. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15520-15538.	7.2	168
228	Fast and Minimal-Solvent Production of Superinsulating Silica Aerogel Granulate. <i>Angewandte Chemie</i> , 2017, 129, 4831-4834.	1.6	14
229	Fast and Minimal-Solvent Production of Superinsulating Silica Aerogel Granulate. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 4753-4756.	7.2	99
230	Prospect of Thermal Insulation by Silica Aerogel: A Brief Review. <i>Journal of the Institution of Engineers (India): Series D</i> , 2017, 98, 297-304.	0.6	48
231	Nonequilibrium Catalyst Materials Stabilized by the Aerogel Effect: Solvent Free and Continuous Synthesis of Gamma-Alumina with Hierarchical Porosity. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 11599-11608.	4.0	8
232	High tech startup creation for energy efficient built environment. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 71, 618-629.	8.2	35
233	Thermal, mechanical, and acoustic properties of silica-aerogel/UPVC composites. <i>Journal of Applied Polymer Science</i> , 2017, 134, .	1.3	23
234	Potential energy savings from deployment of Dynamic Insulation Materials for US residential buildings. <i>Building and Environment</i> , 2017, 114, 203-218.	3.0	100
235	Thermal performance assessment of a novel liquid desiccant-based evaporative cooling system: An experimental investigation. <i>Energy and Buildings</i> , 2017, 138, 88-95.	3.1	20
236	Temperature-induced microstructural changes of fiber-reinforced silica aerogel (FRAB) and rock wool thermal insulation materials: A comparative study. <i>Energy and Buildings</i> , 2017, 138, 80-87.	3.1	46
237	Competitive high performance Aerogel-Based Composite material for the European insulation market. <i>Energy Procedia</i> , 2017, 122, 859-864.	1.8	11
238	A state-of-art review of retrofit interventions in buildings towards nearly zero energy level. <i>Energy Procedia</i> , 2017, 134, 317-326.	1.8	39
239	The benefits of using aerogel-enhanced systems in building retrofits. <i>Energy Procedia</i> , 2017, 134, 626-635.	1.8	30

#	ARTICLE	IF	CITATIONS
240	Aerobrick " An aerogel-filled insulating brick. Energy Procedia, 2017, 134, 490-498.	1.8	32
241	Air-Filled Nanopore Based High-Performance Thermal Insulation Materials. Energy Procedia, 2017, 132, 231-236.	1.8	16
242	Silica aerogel paper honeycomb composites for thermal insulations. Journal of Sol-Gel Science and Technology, 2017, 84, 486-495.	1.1	13
243	Liquid crystalline cellulose-based nematogels. Science Advances, 2017, 3, e1700981.	4.7	36
245	Bioinspired silica-based superhydrophobic materials. Applied Surface Science, 2017, 426, 1-18.	3.1	40
246	Aerogel-based materials for building applications: Influence of granule size on thermal and acoustic performance. Energy and Buildings, 2017, 152, 472-482.	3.1	100
247	Modeling and coupling effect evaluation of thermal conductivity of ternary opacifier/fiber/aerogel composites for super-thermal insulation. Materials and Design, 2017, 133, 224-236.	3.3	77
248	Facile Fabrication of Porous Conductive Thermoplastic Polyurethane Nanocomposite Films via Solution Casting. Scientific Reports, 2017, 7, 17470.	1.6	33
249	Aerogel insulation materials for industrial installation: properties and structure of new factory-made products. Journal of Sol-Gel Science and Technology, 2017, 84, 496-506.	1.1	21
250	Spectral selective and photothermal nano structured thin films for energy efficient windows. Applied Energy, 2017, 208, 83-96.	5.1	69
251	Hydrophobic silica aerogel glass-fibre composite with higher strength and thermal insulation based on methyltrimethoxysilane (MTMS) precursor. Energy and Buildings, 2017, 151, 494-500.	3.1	51
252	Facile synthesis of microfibrillated cellulose/organosilicon/polydopamine composite sponges with flame retardant properties. Cellulose, 2017, 24, 3815-3823.	2.4	55
253	Aldehyde Approach to Hydrophobic Modification of Chitosan Aerogels. Biomacromolecules, 2017, 18, 2172-2178.	2.6	57
254	Ambient-dried thermal superinsulating monolithic silica-based aerogels with short cellulosic fibers. Journal of Materials Science, 2017, 52, 2210-2221.	1.7	41
255	Study on flame retarded flexible polyurethane foam/alumina aerogel composites with improved fire safety. Chemical Engineering Journal, 2017, 311, 310-317.	6.6	82
256	Comprehensive thermal transmittance investigations carried out on opaque aerogel insulation blanket. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	1.3	27
257	A review of conventional, advanced, and smart glazing technologies and materials for improving indoor environment. Solar Energy Materials and Solar Cells, 2017, 159, 26-51.	3.0	307
258	Spray freeze-dried nanofibrillated cellulose aerogels with thermal superinsulating properties. Carbohydrate Polymers, 2017, 157, 105-113.	5.1	164

#	ARTICLE	IF	CITATIONS
259	Low thermal-conductivity and high thermal stable silica aerogel based on MTMS/Water-glass co-precursor prepared by freeze drying. <i>Materials and Design</i> , 2017, 113, 246-253.	3.3	104
260	Long-term performance of aerogel-enhanced materials. <i>Energy Procedia</i> , 2017, 132, 303-308.	1.8	23
261	A Scientometric Analysis of Aerogel Research in 1996-2015. , 2017, , .		0
262	The Effects of Anisotropic Insulations with Different Spatial Distributions on Material Properties of Mortar Specimens. <i>International Journal of Concrete Structures and Materials</i> , 2017, 11, 573-584.	1.4	5
263	Sol-Gel-Derived Silicon-Containing Hybrids. , 0, , .		6
264	A new model for exergetic optimum insulation thickness. <i>International Journal of Exergy</i> , 2017, 22, 309.	0.2	6
265	A Review on Konjac Glucomannan Gels: Microstructure and Application. <i>International Journal of Molecular Sciences</i> , 2017, 18, 2250.	1.8	104
266	Incorporation of Polymers into Calcined Clays as Improved Thermal Insulating Materials for Construction. <i>Advances in Materials Science and Engineering</i> , 2017, 2017, 1-6.	1.0	6
267	A Non-Ventilated Solar Façade Concept Based on Selective and Transparent Insulation Material Integration: An Experimental Study. <i>Energies</i> , 2017, 10, 815.	1.6	17
268	Mechanical, Thermal and Acoustic Properties of Open-pore Phenolic Multi-structured Cryogel. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 229, 012034.	0.3	3
269	High Energy-Efficient Windows with Silica Aerogel for Building Refurbishment: Experimental Characterization and Preliminary Simulations in Different Climate Conditions. <i>Buildings</i> , 2017, 7, 8.	1.4	31
271	Nano insulation materials for application in nZEB. <i>Procedia Manufacturing</i> , 2018, 22, 309-316.	1.9	12
272	Thermal conductivity measurement of thermal insulating mortars with EPS and silica aerogel by steady-state and transient methods. <i>Construction and Building Materials</i> , 2018, 172, 696-705.	3.2	66
273	Silica based aerogel synthesis from fly ash and bottom ash: The effect of synthesis parameters on the structure. <i>Main Group Chemistry</i> , 2018, 17, 63-77.	0.4	2
274	Novel interpenetrating 3D network polyaniline/phenolic aerogel with combined thermal and electrical performances. <i>Journal of Applied Polymer Science</i> , 2018, 135, 45953.	1.3	0
275	Multi-functional hydroxyapatite/polyvinyl alcohol composite aerogels with self-cleaning, superior fire resistance and low thermal conductivity. <i>Composites Science and Technology</i> , 2018, 158, 128-136.	3.8	84
276	Long-term thermal conductivity of aerogel-enhanced insulating materials under different laboratory aging conditions. <i>Energy</i> , 2018, 147, 1188-1202.	4.5	100
277	A systematic review of Prefabricated Enclosure Wall Panel Systems: Focus on technology driven for performance requirements. <i>Sustainable Cities and Society</i> , 2018, 40, 688-703.	5.1	21

#	ARTICLE	IF	CITATIONS
278	Modeling of the apparent solid thermal conductivity of aerogel. <i>International Journal of Heat and Mass Transfer</i> , 2018, 120, 724-730.	2.5	34
279	Preparation and characterization of aerogel/expanded perlite composite as building thermal insulation material. <i>Journal of Non-Crystalline Solids</i> , 2018, 482, 192-202.	1.5	65
280	Characterization of thermal insulating micro-surfacing modified by inorganic insulating material. <i>Construction and Building Materials</i> , 2018, 175, 296-306.	3.2	16
281	Superhydrophobic Silicon Nanocrystal- <i>Si</i> Silica Aerogel Hybrid Materials: Synthesis, Properties, and Sensing Application. <i>Langmuir</i> , 2018, 34, 4888-4896.	1.6	23
282	Optical, thermal, and energy performance of advanced polycarbonate systems with granular aerogel. <i>Energy and Buildings</i> , 2018, 166, 407-417.	3.1	35
283	Fast synthesis of transparent and hydrophobic silica aerogels using polyethoxydisiloxane and methyltrimethoxysilane in one-step drying process. <i>Materials Research Express</i> , 2018, 5, 045101.	0.8	1
284	Flexible transparent aerogels as window retrofitting films and optical elements with tunable birefringence. <i>Nano Energy</i> , 2018, 48, 266-274.	8.2	63
285	Design and development of winter over coat using Jute and hollow conjugated polyester non-woven flexible composite. <i>Journal of Industrial Textiles</i> , 2018, 47, 781-797.	1.1	9
286	Cellulose nanofibers from bamboo and their nanocomposites with polyvinyl alcohol: Preparation and characterization. <i>Polymer Composites</i> , 2018, 39, 2611-2619.	2.3	26
287	Evaluation of crosslinking and surface coating on the moisture resistance of freeze-dried clay aerogel. <i>Polymer Composites</i> , 2018, 39, 3810-3816.	2.3	5
288	Thermal characterization of insulating materials. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 82, 1765-1773.	8.2	29
289	Fabrication of strong and ultra-lightweight silica-based aerogel materials with tailored properties. <i>Journal of Porous Materials</i> , 2018, 25, 511-520.	1.3	25
290	Effect of different types of surfactants on the microstructure of methyltrimethoxysilane-derived silica aerogels: A combined experimental and computational approach. <i>Journal of Colloid and Interface Science</i> , 2018, 512, 64-76.	5.0	44
291	Insulation panels for active control of heat transfer in walls operated as space heating or as a thermal barrier: Numerical simulations and experiments. <i>Energy and Buildings</i> , 2018, 158, 135-146.	3.1	37
292	Hygrothermal characteristics of aerogel-enhanced insulating materials under different humidity and temperature conditions. <i>Energy and Buildings</i> , 2018, 158, 698-711.	3.1	88
293	Effect of the placement of aerogel insulation in the heat transfer properties. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 133, 321-327.	2.0	9
294	Preparation of fumed silica compacts for thermal insulation using wet processing method. <i>International Journal of Applied Ceramic Technology</i> , 2018, 15, 232-236.	1.1	8
295	Hygro-thermal properties of silica aerogel blankets dried using microwave heating for building thermal insulation. <i>Energy and Buildings</i> , 2018, 158, 14-22.	3.1	56

#	ARTICLE	IF	CITATIONS
296	A design procedure for the assessment of carbon capturing and utilization of flue gas from power plant using experimental data. <i>Chemical Engineering Research and Design</i> , 2018, 131, 393-405.	2.7	6
297	Current status, opportunities and challenges in catalytic and photocatalytic applications of aerogels: Environmental protection aspects. <i>Applied Catalysis B: Environmental</i> , 2018, 221, 530-555.	10.8	169
298	Fabrication of silica aerogel composite blankets from an aqueous silica aerogel slurry. <i>Ceramics International</i> , 2018, 44, 2204-2208.	2.3	44
299	Physical and mechanical properties of plasters incorporating aerogel granules and polypropylene monofilament fibres. <i>Construction and Building Materials</i> , 2018, 158, 472-480.	3.2	41
300	Zeolite/silica aerogel composite monoliths and microspheres. <i>Microporous and Mesoporous Materials</i> , 2018, 263, 106-112.	2.2	21
301	Mechanically Resistant and Sustainable Cellulose-Based Composite Aerogels with Excellent Flame Retardant, Sound-Absorption, and Superantwetting Ability for Advanced Engineering Materials. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 927-936.	3.2	120
302	Applications of aerogel in cement-based thermal insulation materials: an overview. <i>Magazine of Concrete Research</i> , 2018, 70, 822-837.	0.9	21
303	Aerogel-enhanced systems for building energy retrofits: Insights from a case study. <i>Energy and Buildings</i> , 2018, 159, 370-381.	3.1	88
304	Hydroxyethyl cellulose/alumina-based aerogels as lightweight insulating materials with high mechanical strength. <i>Journal of Materials Science</i> , 2018, 53, 1556-1567.	1.7	22
305	Enhanced flame retardancy of hydrophobic silica aerogels by using sodium silicate as precursor and phosphoric acid as catalyst. <i>Journal of Non-Crystalline Solids</i> , 2018, 481, 267-275.	1.5	31
306	Alkali-Activated Binder from Tungsten Mining Waste and Waste Glass. <i>Key Engineering Materials</i> , 0, 788, 45-50.	0.4	2
307	Improving anti-infrared radiation and heat insulation by potassium hexatitanate whisker-doped Al ₂ O ₃ -SiO ₂ composite xerogel. <i>Royal Society Open Science</i> , 2018, 5, 180787.	1.1	5
309	Smart Materials in Construction Technology. , 2018, , .		6
310	Definition of an experimental procedure with the hot box method for the thermal performance evaluation of inhomogeneous walls. <i>Energy and Buildings</i> , 2018, 179, 99-111.	3.1	50
311	Silica Aerogels: A Review of Molecular Dynamics Modelling and Characterization of the Structural, Thermal, and Mechanical Properties. , 2018, , 1-21.		1
312	Coupling the transient plane source method with a dynamically controlled environment to study PCM-doped building materials. <i>Energy and Buildings</i> , 2018, 180, 122-134.	3.1	11
313	Thermal and Strength Properties of Lightweight Concretes with Variable Porosity Structures. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	1.3	18
314	Mechanical reinforced fiber needle felt/silica aerogel composite with its flammability. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 88, 129-140.	1.1	29

#	ARTICLE	IF	CITATIONS
315	Dynamic heat transfer model and applicability evaluation of aerogel glazing system in various climates of China. <i>Energy</i> , 2018, 163, 1115-1124.	4.5	32
316	Evaluation of the hygrothermal properties of thermal rendering systems. <i>Building and Environment</i> , 2018, 144, 437-449.	3.0	41
317	Kinetics of Supercritical Drying of Gels. <i>Gels</i> , 2018, 4, 3.	2.1	84
318	Strength properties and thermal conductivity of concrete with the addition of expanded perlite filled with aerogel. <i>Construction and Building Materials</i> , 2018, 188, 747-757.	3.2	59
319	Novel self-reinforcing ZrO ₂ -SiO ₂ aerogels with high mechanical strength and ultralow thermal conductivity. <i>Ceramics International</i> , 2018, 44, 15440-15445.	2.3	32
320	Effect of surface hydroxyl groups on heat capacity of mesoporous silica. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	11
321	Advanced Building Energy Efficiency Systems. , 2018, , 45-115.		3
322	Energy efficiency of residential buildings in the U.S.: Improvement potential beyond IECC. <i>Building and Environment</i> , 2018, 142, 278-287.	3.0	19
323	Sustainable nanocomposites of epoxy and silica xerogel synthesized from corn stalk ash: Enhanced thermal and acoustic insulation performance. <i>Composites Part B: Engineering</i> , 2018, 150, 1-6.	5.9	42
324	Thermally insulating lightweight cement-based composites incorporating glass beads and nano-silica aerogels for sustainably energy-saving buildings. <i>Energy and Buildings</i> , 2018, 174, 97-110.	3.1	91
325	Retroreflective materials for building's façades: Experimental characterization and numerical simulations. <i>Solar Energy</i> , 2018, 171, 150-156.	2.9	30
327	2.30 Novel Building Materials. , 2018, , 980-1017.		3
328	Multi-functional composite aerogels enabled by chemical integration of graphene oxide and waterborne polyurethane via a facile and green method. <i>Composites Science and Technology</i> , 2018, 165, 175-182.	3.8	23
329	Aerogels as promising materials for environmental remediation—A broad insight into the environmental pollutants removal through adsorption and (photo)catalytic processes. , 2018, , 389-436.		8
330	Fabrication and Characterization of Multiscale PLA Structures Using Integrated Rapid Prototyping and Gas Foaming Technologies. <i>Nanomaterials</i> , 2018, 8, 575.	1.9	12
331	Effect of water vapor on the thermal resistance between amorphous silica nanoparticles. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	5
332	A novel constitutive model for the mechanical properties of silica aerogels. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	12
333	EN 998-1 performance requirements for thermal aerogel-based renders. <i>Construction and Building Materials</i> , 2018, 179, 453-460.	3.2	17

#	ARTICLE	IF	CITATIONS
334	Electrospun nanofibrous membranes embedded with aerogel for advanced thermal and transport properties. <i>Polymers for Advanced Technologies</i> , 2018, 29, 2583-2592.	1.6	32
335	Hybrid Aerogels. , 2018, , 3317-3338.		1
336	Energy investigation of glazed windows containing Nano-PCM in different seasons. <i>Energy Conversion and Management</i> , 2018, 172, 119-128.	4.4	117
337	Fluid-Integrated Glass-Glass Laminate for Sustainable Hydronic Cooling and Indoor Air Conditioning. <i>Advanced Sustainable Systems</i> , 2018, 2, 1800047.	2.7	9
338	High Infrared Blocking Cellulose Film Based on Amorphous to Anatase Transition of TiO ₂ via Atomic Layer Deposition. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 21056-21060.	4.0	15
339	Ultralight Silica Foams with a Hierarchical Pore Structure via a Surfactant-Free High Internal Phase Emulsion Process. <i>Langmuir</i> , 2018, 34, 10381-10388.	1.6	23
340	Origin of Flexibility of Organic-Inorganic Aerogels: Insights from Atomistic Simulations. <i>Journal of Physical Chemistry C</i> , 2018, 122, 20555-20563.	1.5	15
341	Self-Assembled Microporous Peptide-Polysaccharide Aerogels for Oil-Water Separation. <i>Langmuir</i> , 2018, 34, 10732-10738.	1.6	23
342	Powerful Solution to Mitigate the Temperature Variation Effect: Development of Novel Superinsulating Materials. , 2018, , 137-176.		1
343	Advanced Recycled Polyethylene Terephthalate Aerogels from Plastic Waste for Acoustic and Thermal Insulation Applications. <i>Gels</i> , 2018, 4, 43.	2.1	60
344	A novel building material with low thermal conductivity: Rapid synthesis of foam concrete reinforced silica aerogel and energy performance simulation. <i>Energy and Buildings</i> , 2018, 177, 385-393.	3.1	77
345	2.24 Insulation Materials. , 2018, , 760-795.		4
346	A Review of Transparent Insulation Material (TIM) for building energy saving and daylight comfort. <i>Applied Energy</i> , 2018, 226, 713-729.	5.1	72
347	Effects of bentonite slurry on air-void structure and properties of foamed concrete. <i>Construction and Building Materials</i> , 2018, 179, 207-219.	3.2	60
348	Thermally insulating, fire-retardant, smokeless and flexible polyvinylidene fluoride nanofibers filled with silica aerogels. <i>Chemical Engineering Journal</i> , 2018, 351, 473-481.	6.6	49
349	Theoretical Evaluation and Experimental Research on Thermal Insulation Performance of Graphitic Carbon-Doped Silica Aerogels. <i>International Journal of Nanoscience</i> , 2019, 18, 1850028.	0.4	1
350	Electrospun nanofiber composites with micro-/nano-particles for thermal insulation. <i>Advanced Composite Materials</i> , 2019, 28, 193-202.	1.0	9
351	Morphological, optical and thermal characterisation of aerogel-epoxy composites for enhanced thermal insulation. <i>Journal of Composite Materials</i> , 2019, 53, 909-923.	1.2	11

#	ARTICLE	IF	CITATIONS
352	Review of High-Temperature Thermal Insulation Materials. Journal of Thermophysics and Heat Transfer, 2019, 33, 271-284.	0.9	27
353	Facile fabrication of machinable low-density moisture-resistant silica aerogels. Journal of Porous Materials, 2019, 26, 399-407.	1.3	10
354	Numerical Study on the Thermal and Optical Performances of an Aerogel Glazing System with the Multivariable Optimization Using an Advanced Machine Learning Algorithm. Advanced Theory and Simulations, 2019, 2, 1900092.	1.3	6
355	Application and Perspectives. , 2019, , 207-237.		0
356	Laboratory and pilot scale characterization of granular aerogel glazing systems. Energy and Buildings, 2019, 202, 109349.	3.1	24
357	Nanostructure of Aerogels and Their Applications in Thermal Energy Insulation. ACS Applied Energy Materials, 2019, 2, 5319-5349.	2.5	71
358	Novel cement curing technique by using controlled release of carbon dioxide coupled with nanosilica. Construction and Building Materials, 2019, 223, 692-704.	3.2	8
359	Preparation of para-Aramid Aerogel Fiber through Physical Gelation of Aramid Dispersion Liquid and Supercritical Drying. AATCC Journal of Research, 2019, 6, 28-32.	0.3	6
360	Thermal Performance Optimization and Experimental Evaluation of Vacuum-Glazed Windows Manufactured via the In-Vacuum Method. Energies, 2019, 12, 3634.	1.6	7
361	Applications of functionalized polyethylene terephthalate aerogels from plastic bottle waste. Waste Management, 2019, 100, 296-305.	3.7	34
362	Tannin Gels and Their Carbon Derivatives: A Review. Biomolecules, 2019, 9, 587.	1.8	30
364	Polystyrene nanofibers for nonwoven porous building insulation materials. Engineering Reports, 2019, 1, e12037.	0.9	17
365	Thermal characterization of fibrous aerogel blanket. MATEC Web of Conferences, 2019, 282, 01001.	0.1	4
366	Critical Performance Aspects of Retrofitting Apartment Buildings Using a Multifunctional Façade System. Buildings, 2019, 9, 184.	1.4	2
367	Foaming of Recyclable Clays into Energy-Efficient Low-Cost Thermal Insulators. ACS Sustainable Chemistry and Engineering, 2019, 7, 15597-15606.	3.2	15
368	Exploring the Effect of Porous Structure on Thermal Conductivity in Templated Mesoporous Silica Films. Journal of Physical Chemistry C, 2019, 123, 21721-21730.	1.5	19
369	Aerogel, a high performance material for thermal insulation - A brief overview of the building applications. E3S Web of Conferences, 2019, 111, 06069.	0.2	16
370	Aerogel/epoxy thermal coatings for carbon fibre reinforced plastic substrates. Journal of Adhesion Science and Technology, 2019, 33, 579-594.	1.4	3

#	ARTICLE	IF	CITATIONS
371	Ultralow thermal conductivity in graphene-silica porous ceramics with a special saucer structure of graphene aerogels. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1574-1584.	5.2	16
372	Advanced fabrication and multi-properties of rubber aerogels from car tire waste. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 577, 702-708.	2.3	50
373	Effects of the Heat Treatment in the Properties of Fibrous Aerogel Thermal Insulation. <i>Energies</i> , 2019, 12, 2001.	1.6	9
374	Experimental Investigation of Pressure on the Thermal Conductivity of Granular Carbon Aerogels. <i>International Journal of Thermophysics</i> , 2019, 40, 1.	1.0	3
375	Passive cooling techniques for building and their applicability in different climatic zones-The state of art. <i>Energy and Buildings</i> , 2019, 198, 467-490.	3.1	157
376	Characterization of commercial aerogel-enhanced blankets obtained with supercritical drying and of a new ambient pressure drying blanket. <i>Energy and Buildings</i> , 2019, 198, 542-552.	3.1	41
377	A Novel Highly Porous Cellulosic Aerogel Regenerated by Solvent Exchange Mechanism. <i>Journal of Polymers and the Environment</i> , 2019, 27, 1801-1806.	2.4	2
378	Super-insulating, flame-retardant, and flexible poly(dimethylsiloxane) composites based on silica aerogel. <i>Composites Part A: Applied Science and Manufacturing</i> , 2019, 123, 108-113.	3.8	48
379	Synthetic Polymer Aerogels in Particulate Form. <i>Materials</i> , 2019, 12, 1543.	1.3	31
380	Calculation of optimum insulation thickness of external walls in residential buildings by using exergetic life cycle cost assessment method: Case study for Turkey. <i>Environmental Progress and Sustainable Energy</i> , 2019, 38, e13232.	1.3	9
381	Hierarchically porous SiO ₂ /polyurethane foam composites towards excellent thermal insulating, flame-retardant and smoke-suppressant performances. <i>Journal of Hazardous Materials</i> , 2019, 375, 61-69.	6.5	103
382	Ambient pressure drying of silica aerogels after hydrophobization with mono-, di- and tri-functional silanes and mixtures thereof. <i>Microporous and Mesoporous Materials</i> , 2019, 284, 289-295.	2.2	31
383	Al ₂ O ₃ aerogel coating modified TiH ₂ to enhance the mechanical properties of aluminum foam. <i>Materials Research Express</i> , 2019, 6, 076543.	0.8	2
384	Relation between Microstructure and Flexibility of Doubly Cross-Linked Organic-Inorganic Aerogels. <i>ACS Applied Polymer Materials</i> , 2019, 1, 1136-1147.	2.0	5
385	Traditional, state-of-the-art and renewable thermal building insulation materials: An overview. <i>Construction and Building Materials</i> , 2019, 214, 709-735.	3.2	318
386	Optical and visual experimental characterization of a glazing system with monolithic silica aerogel. <i>Solar Energy</i> , 2019, 183, 30-39.	2.9	50
387	Thermal bridges of metal fasteners for aerogel-enhanced blankets. <i>Energy and Buildings</i> , 2019, 185, 307-315.	3.1	32
388	Thermal Insulation Coatings in Energy Saving. , 0, , .		3

#	ARTICLE	IF	CITATIONS
389	A theoretical model for gas-contributed thermal conductivity in nanoporous aerogels. International Journal of Heat and Mass Transfer, 2019, 137, 64-73.	2.5	42
390	Aerogel-based materials for adsorbent applications in material domains. E3S Web of Conferences, 2019, 90, 01003.	0.2	11
392	Transparent insulation materials: An overview on past, present and future developments. Solar Energy, 2019, 184, 59-83.	2.9	45
393	Nano aerogel windows and glazing units for buildings' energy efficiency. , 2019, , 417-439.		3
394	Multiscale structure of super insulation nano-fumed silicas studied by SAXS, tomography and porosimetry. Acta Materialia, 2019, 168, 401-410.	3.8	16
395	Parametric Model to Analyze the Components of the Thermal Conductivity of a Cellulose-Nanofibril Aerogel. Physical Review Applied, 2019, 11, .	1.5	29
396	Aerogel-enhanced insulation for building applications. , 2019, , 395-416.		7
397	Bio-inspired polyethylene-based composite reinforced by thermoplastic polyurethane (TPU) fiber for aerogel production. AIP Conference Proceedings, 2019, , .	0.3	4
398	Thermal efficiency experimental evaluation of solar flat plate collectors when introducing convective barriers. Solar Energy, 2019, 182, 278-285.	2.9	45
399	Non-isothermal cure kinetics of aerogel/epoxy composites using differential scanning calorimetry. Polymer-Plastics Technology and Materials, 2019, 58, 1757-1765.	0.6	2
400	Double-negative-index ceramic aerogels for thermal superinsulation. Science, 2019, 363, 723-727.	6.0	429
401	Experimental and Numerical Energy Assessment of a Monolithic Aerogel Glazing Unit for Building Applications. Applied Sciences (Switzerland), 2019, 9, 5473.	1.3	13
402	Statistical approaching of sol-gel process in preparation of silica aerogel derived from geothermal silica by several acids. , 2019, , .		9
403	Computational analysis of the thermal behavior on a silica (SiO ₂) aerogel coating for applications in the construction industry. IOP Conference Series: Materials Science and Engineering, 2019, 519, 012008.	0.3	5
404	Thermally Anisotropic Composites for Improving the Energy Efficiency of Building Envelopes. Energies, 2019, 12, 3783.	1.6	12
405	Nano insulation materials exploiting the Knudsen effect. IOP Conference Series: Materials Science and Engineering, 2019, 634, 012003.	0.3	7
406	Multifunctional and Environmentally Friendly TiO ₂ –SiO ₂ Mesoporous Materials for Sustainable Green Buildings. Molecules, 2019, 24, 4226.	1.7	12
407	Aerogels – Modern Functional Materials for Chemistry Lessons?. Chemkon - Chemie Konkret, Forum Fuer Unterricht Und Didaktik, 2019, 26, 336-344.	0.2	1

#	ARTICLE	IF	CITATIONS
408	Development of Environmentally Sustainable Materials. <i>Ecowise</i> , 2019, , 1-18.	0.1	0
409	Effect of heat treatment on hydrophobic silica aerogel. <i>Journal of Hazardous Materials</i> , 2019, 362, 294-302.	6.5	157
410	Lightweight Alkali-Activated Material from Mining and Glass Waste by Chemical and Physical Foaming. <i>Journal of Materials in Civil Engineering</i> , 2019, 31, .	1.3	24
411	Fast preparation of glass fiber/silica aerogel blanket in ethanol & water solvent system. <i>Journal of Non-Crystalline Solids</i> , 2019, 505, 286-291.	1.5	30
412	A switchable hydrophilicity solvent mediated process to prepare fine silica aerogel powder as an excellent flattening agent. <i>Advanced Powder Technology</i> , 2019, 30, 565-571.	2.0	7
413	Computer-generated mesoporous materials and associated structural characterization. <i>Computational Materials Science</i> , 2019, 157, 156-167.	1.4	16
414	Preparation and properties of ultra-lightweight EPS concrete based on pre-saturated bentonite. <i>Construction and Building Materials</i> , 2019, 195, 505-514.	3.2	28
415	The influence of low-temperature surface induction on evacuation, pump-out hole sealing and thermal performance of composite edge-sealed vacuum insulated glazing. <i>Renewable Energy</i> , 2019, 135, 450-464.	4.3	30
416	Stability investigations of the thermal insulating performance of aerogel blanket. <i>Energy and Buildings</i> , 2019, 185, 103-111.	3.1	36
417	Thermal Conductivity of Polyvinylidene Fluoride Membranes for Direct Contact Membrane Distillation. <i>Environmental Engineering Science</i> , 2019, 36, 420-430.	0.8	11
418	Rigid silica xerogel/alumina fiber composites and their thermal insulation properties. <i>Journal of Porous Materials</i> , 2019, 26, 1177-1184.	1.3	13
419	Progress of binary cooperative complementary interfacial nanomaterials. <i>Nano Today</i> , 2019, 24, 48-80.	6.2	14
420	Laboratory and in-situ non-destructive methods to evaluate the thermal transmittance and behavior of walls, windows, and construction elements with innovative materials: A review. <i>Energy and Buildings</i> , 2019, 182, 88-110.	3.1	80
421	Hollow-Structured Materials for Thermal Insulation. <i>Advanced Materials</i> , 2019, 31, e1801001.	11.1	197
422	Ultralight, thermal insulating, and high-temperature-resistant mullite-based nanofibrous aerogels. <i>Chemical Engineering Journal</i> , 2019, 360, 464-472.	6.6	104
423	Numerical modeling of the gas-contributed thermal conductivity of aerogels. <i>International Journal of Heat and Mass Transfer</i> , 2019, 131, 217-225.	2.5	26
424	A material characterization and embodied energy study of novel clay-alginate composite aerogels. <i>Energy and Buildings</i> , 2019, 184, 88-98.	3.1	9
425	Recent Developments in Graphitic Carbon Nitride Based Hydrogels as Photocatalysts. <i>ChemSusChem</i> , 2019, 12, 1794-1806.	3.6	87

#	ARTICLE	IF	CITATIONS
426	Rapid synthesis and characterization of ambient pressure dried monolithic silica aerogels in ethanol/water co-solvent system. <i>Journal of Non-Crystalline Solids</i> , 2019, 503-504, 214-223.	1.5	40
427	Investigation on the energy performance of a novel semi-transparent BIPV system integrated with vacuum glazing. <i>Building Simulation</i> , 2019, 12, 29-39.	3.0	35
428	Microstructure and filtration performance of konjac glucomannan-based aerogels strengthened by wheat straw. <i>International Journal of Low-Carbon Technologies</i> , 2019, 14, 335-343.	1.2	18
429	Cellulose-based aerogels from sugarcane bagasse for oil spill-cleaning and heat insulation applications. <i>Carbohydrate Polymers</i> , 2020, 228, 115365.	5.1	153
430	Hybrid Plasmonic Aerogel Materials as Optical Superheaters with Engineered Resonances. <i>Angewandte Chemie</i> , 2020, 132, 1713-1719.	1.6	9
431	Aerogels and their applications. , 2020, , 337-399.		22
432	Microstructural evolution of mullite nanofibrous aerogels with different ice crystal growth inhibitors. <i>Ceramics International</i> , 2020, 46, 1869-1875.	2.3	16
433	Technical textiles for military applications. <i>Journal of the Textile Institute</i> , 2020, 111, 273-308.	1.0	35
434	Reducing the thermal hazard of hydrophobic silica aerogels by using dimethyldichlorosilane as modifier. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 93, 111-122.	1.1	10
435	Aerogel materials for heritage buildings: Materials, properties and case studies. <i>Journal of Cultural Heritage</i> , 2020, 42, 81-98.	1.5	58
436	High interfacial thermal resistance induced low thermal conductivity in porous SiC-SiO ₂ composites with hierarchical porosity. <i>Journal of the European Ceramic Society</i> , 2020, 40, 594-602.	2.8	50
437	Synthesis, drying process and medical application of polysaccharide-based aerogels. <i>International Journal of Biological Macromolecules</i> , 2020, 145, 1115-1128.	3.6	112
438	Advanced Materials for High-Temperature Thermal Transport. <i>Advanced Functional Materials</i> , 2020, 30, 1904815.	7.8	63
439	Hybrid Plasmonic Aerogel Materials as Optical Superheaters with Engineered Resonances. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 1696-1702.	7.2	13
440	Synthesis of hydrophobic silica aerogel and its composite using functional precursor. <i>Journal of Porous Materials</i> , 2020, 27, 295-301.	1.3	7
441	Optical and thermal performance of glazing units containing PCM in buildings: A review. <i>Construction and Building Materials</i> , 2020, 233, 117327.	3.2	142
442	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.	6.6	19
443	Advances in precursor system for silica-based aerogel production toward improved mechanical properties, customized morphology, and multifunctionality: A review. <i>Advances in Colloid and Interface Science</i> , 2020, 276, 102101.	7.0	99

#	ARTICLE	IF	CITATIONS
444	High-strength thermal insulating mullite nanofibrous porous ceramics. <i>Journal of the European Ceramic Society</i> , 2020, 40, 2090-2096.	2.8	49
445	Colorless Transparent Melamine-Formaldehyde Aerogels for Thermal Insulation. <i>ACS Applied Nano Materials</i> , 2020, 3, 49-54.	2.4	26
446	Boron nitride aerogels consisting of varied superstructures. <i>Nanoscale Advances</i> , 2020, 2, 149-155.	2.2	20
447	Elastic Aerogels of Cellulose Nanofibers@Metal-Organic Frameworks for Thermal Insulation and Fire Retardancy. <i>Nano-Micro Letters</i> , 2020, 12, 9.	14.4	104
448	Toward energy-efficient governmental buildings in Egypt: investigating the impact of nano aerogel glazing on energy performance. <i>International Journal of Low-Carbon Technologies</i> , 2020, 15, 17-24.	1.2	3
449	Techniques for characterizing the mechanical properties of aerogels. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 93, 6-27.	1.1	19
450	Machine learning-based multi-objective optimisation of an aerogel glazing system using NSGA-II study of modelling and application in the subtropical climate Hong Kong. <i>Journal of Cleaner Production</i> , 2020, 253, 119964.	4.6	17
451	Synthesis of novel MTF aerogels with adsorption performance. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 94, 582-595.	1.1	2
452	Synthesis of chitosan aerogels as promising carriers for drug delivery: A review. <i>Carbohydrate Polymers</i> , 2020, 231, 115744.	5.1	177
453	Impact of location and deadband on energy performance of nano aerogel glazing for office building in Saudi Arabia. <i>Building Research and Information</i> , 2020, 48, 645-658.	2.0	6
454	Thermal behavior of alkali-activated fly ash/slag with the addition of an aerogel as an aggregate replacement. <i>Cement and Concrete Composites</i> , 2020, 106, 103462.	4.6	33
455	A review of the challenges posed by the use of vacuum panels in external insulation finishing systems. <i>Applied Energy</i> , 2020, 257, 114028.	5.1	65
456	Hydrophobic granular silica-based aerogels obtained from ambient pressure monoliths. <i>Materialia</i> , 2020, 9, 100527.	1.3	7
457	Investigation of mechanical and thermal properties of nano SiO ₂ /hydrophobic silica aerogel co-doped concrete with thermal insulation properties. <i>Structural Concrete</i> , 2020, 21, 1123-1133.	1.5	15
458	Stimuli-responsive micro/nanoporous hairy skin for adaptive thermal insulation and infrared camouflage. <i>Materials Horizons</i> , 2020, 7, 3258-3265.	6.4	53
459	Transparent and Flexible Thermal Insulation Window Material. <i>Cell Reports Physical Science</i> , 2020, 1, 100140.	2.8	12
460	Theoretic analysis and experimental evaluation of the spectrum transmission coefficient of a multilayer photovoltaic vacuum glazing. <i>International Journal of Low-Carbon Technologies</i> , 2020, 15, 574-582.	1.2	5
461	Silica Aerogel Thermal Insulation Coating as Commodity Usage. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 811, 012009.	0.3	1

#	ARTICLE	IF	CITATIONS
462	Recycling of waste tire fibers into advanced aerogels for thermal insulation and sound absorption applications. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104279.	3.3	45
463	Modelling of heat and mass transfer through wooden buildings. <i>Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics</i> , 2020, 173, 188-201.	0.4	1
464	Biorefinery Approach for Aerogels. <i>Polymers</i> , 2020, 12, 2779.	2.0	31
465	Aerogel-Based Plasters and Energy Efficiency of Historic Buildings. Literature Review and Guidelines for Manufacturing Specimens Destined for Thermal Tests. <i>Sustainability</i> , 2020, 12, 9457.	1.6	14
466	Facile synthesis of ternary flexible silica aerogels with coarsened skeleton for oil/water separation. <i>RSC Advances</i> , 2020, 10, 42297-42304.	1.7	20
467	Thermally Insulating Nanocellulose-Based Materials. <i>Advanced Materials</i> , 2021, 33, e2001839.	11.1	153
468	Climate adaptive optimal design of an aerogel glazing system with the integration of a heuristic teaching-learning-based algorithm in machine learning-based optimization. <i>Renewable Energy</i> , 2020, 153, 375-391.	4.3	23
469	Geometric optimization of aerogel composites for high temperature thermal insulation applications. <i>Journal of Non-Crystalline Solids</i> , 2020, 547, 120306.	1.5	26
470	Flame retardant polyurethane sponge/MTMS aerogel composites with improved mechanical properties under ambient pressure drying. <i>Journal of Nanoparticle Research</i> , 2020, 22, 1.	0.8	11
471	Research and Application for <i>In Situ</i> Blend of Infrared Opacifiers Titanium Oxide in Silica Aerogel. <i>Key Engineering Materials</i> , 0, 845, 33-38.	0.4	0
472	Modern effective technologies applied for constructing external walls. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 828, 012008.	0.3	1
473	Structure characteristics and hygrothermal performance of silica aerogel composites for building thermal insulation in humid areas. <i>Energy and Buildings</i> , 2020, 228, 110452.	3.1	33
474	Polymeric hybrid aerogels and their biomedical applications. <i>Soft Matter</i> , 2020, 16, 9160-9175.	1.2	50
475	Development of a Numerical Model to Calculate Heat Transfer in a Cement-Based Material Incorporated with Expanded Perlite Filled with Aerogel. <i>International Journal of Thermophysics</i> , 2020, 41, 1.	1.0	4
476	Chitosan-Reinforced MFC/NFC Aerogel and Antibacterial Property. <i>Advances in Polymer Technology</i> , 2020, 2020, 1-9.	0.8	6
477	Optically-switchable thermally-insulating VO ₂ -aerogel hybrid film for window retrofits. <i>Applied Energy</i> , 2020, 278, 115663.	5.1	30
478	Study on pore structure and thermal conductivity of aerogel enhanced porous geopolymers. <i>Journal of Thermal Analysis and Calorimetry</i> , 2022, 147, 1061-1070.	2.0	3
479	Controlling Surface Chemical States of Halloysite Aerogel for Concrete Composites with Improved Thermal Insulation. <i>Journal of Materials in Civil Engineering</i> , 2020, 32, .	1.3	6

#	ARTICLE	IF	CITATIONS
480	Optimizing the thermal performance of window frames through aerogel-enhancements. Applied Energy, 2020, 266, 114776.	5.1	23
481	Polyester composites filled with walnut shell powder: Preparation and thermal characterization. Polymer Composites, 2020, 41, 3294-3308.	2.3	9
482	Rapid synthesis and characterization of monolithic ambient pressure dried MTMS aerogels in pure water. Journal of Porous Materials, 2020, 27, 1241-1251.	1.3	22
483	Silica aerogels with tailored chemical functionality. Materials and Design, 2020, 193, 108833.	3.3	53
484	Gaseous Iodine Sorbents: A Comparison between Ag-Loaded Aerogel and Xerogel Scaffolds. ACS Applied Materials & Interfaces, 2020, 12, 26127-26136.	4.0	38
485	Facile and novel ambient pressure drying approach to synthesis and physical characterization of cellulose-based aerogels. Journal of Porous Materials, 2020, 27, 1219-1232.	1.3	19
486	Recycling of magnesium waste into magnesium hydroxide aerogels. Journal of Environmental Chemical Engineering, 2020, 8, 104101.	3.3	21
487	Synergistic effect of a small amount of silica aerogel powder and scrap rubber addition on properties of alkali-activated slag mortars. Construction and Building Materials, 2020, 250, 118885.	3.2	14
488	One pot rapid synthesis of ultra high strength hydrophobic bulk silica aerogels. Materials Chemistry Frontiers, 2020, 4, 2418-2427.	3.2	17
489	Synergistic effects of silica aerogels/xerogels on properties of polymer composites: A review. Journal of Industrial and Engineering Chemistry, 2020, 89, 13-27.	2.9	71
490	Study on acoustic properties of multilayer impedance materials. IOP Conference Series: Earth and Environmental Science, 2020, 440, 022095.	0.2	0
491	An overview on alumina-silica-based aerogels. Advances in Colloid and Interface Science, 2020, 282, 102189.	7.0	50
492	Thermal Management by Engineering the Alignment of Nanocellulose. Advanced Materials, 2021, 33, e2001228.	11.1	43
493	Cellulose nanocrystal based multifunctional nanohybrids. Progress in Materials Science, 2020, 112, 100668.	16.0	113
494	Loading of Iron (II, III) Oxide Nanoparticles in Cryogels Based on Microfibrillar Cellulose for Heavy Metal Ion Separation. Advances in Polymer Technology, 2020, 2020, 1-8.	0.8	2
495	Temperature-invariant superelastic, fatigue resistant, and binary-network structured silica nanofibrous aerogels for thermal superinsulation. Journal of Materials Chemistry A, 2020, 8, 7775-7783.	5.2	53
496	Reducing the flammability of hydrophobic silica aerogels by tailored heat treatment. Journal of Nanoparticle Research, 2020, 22, 1.	0.8	11
497	Thermal Diffusion in Fibrous Aerogel Blankets. Energies, 2020, 13, 823.	1.6	9

#	ARTICLE	IF	CITATIONS
498	Advanced Opacified Fiber-Reinforced Silica-Based Aerogel Composites for Superinsulation of Exhaust Tubing Systems in Semi-Stationary Motors. <i>Materials</i> , 2020, 13, 2677.	1.3	5
499	Properties of gradient polyimide aerogels prepared through <sc>layerâ€byâ€layer</sc> assembly. <i>Polymer Engineering and Science</i> , 2020, 60, 2292-2300.	1.5	5
500	Application of phase change material foam composites in the built environment: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 131, 110008.	8.2	73
501	Experimental characterization of the color rendering properties of transparent monolithic aerogel. <i>Solar Energy</i> , 2020, 205, 183-191.	2.9	6
502	Modified silica xerogel derived from groundnut hull ash by alkyl-ammonium salt for epoxy nanocomposites: Synergistic effects on thermal stability and flame retardancy. <i>Thermochimica Acta</i> , 2020, 689, 178637.	1.2	13
503	Analysis and characterization of etched silica aerogels. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 94, 406-415.	1.1	3
504	Simultaneous test and visual identification of heat and moisture transport in several types of thermal insulation. <i>Energy</i> , 2020, 197, 117137.	4.5	8
505	Qualitative and quantitative optimization of thermal insulation materials: Insights from the market and energy codes. <i>Journal of Building Engineering</i> , 2020, 30, 101275.	1.6	20
506	Evaluation of Crosslinking Effect on Thermo-mechanical, Acoustic Insulation and Water Absorption Performance of Biomass-Derived Cellulose Cryogels. <i>Journal of Polymers and the Environment</i> , 2020, 28, 1180-1189.	2.4	11
507	Ultralight magnetic aerogels from Janus emulsions. <i>RSC Advances</i> , 2020, 10, 7492-7499.	1.7	8
508	PLA coating improves the performance of renewable adsorbent pads based on cellulosic aerogels from aquatic waste biomass. <i>Chemical Engineering Journal</i> , 2020, 390, 124607.	6.6	37
509	Revisiting independent versus dependent scattering regimes in suspensions or aggregates of spherical particles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020, 246, 106924.	1.1	26
510	Physical, mechanical, and microstructural characterisation of an innovative thermal insulating render incorporating silica aerogel. <i>Energy and Buildings</i> , 2020, 211, 109793.	3.1	59
511	Nanomaterialsâ€™ Influence on the Performance of Thermal Insulating Mortarsâ€™ A Statistical Analysis. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2219.	1.3	10
512	Optimization of thermal insulation performance of porous geopolymers under the guidance of thermal conductivity calculation. <i>Ceramics International</i> , 2020, 46, 16537-16547.	2.3	19
513	Controlling Thermal Conductivity in Mesoporous Silica Films Using Pore Size and Nanoscale Architecture. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3731-3737.	2.1	8
514	Microstructure and thermal characterization of aerogelâ€“graphite polyurethane spray-foam composite for high efficiency thermal energy utilization. <i>Journal of Hazardous Materials</i> , 2020, 397, 122656.	6.5	27
515	Strong, Machinable, and Insulating Chitosanâ€“Urea Aerogels: Toward Ambient Pressure Drying of Biopolymer Aerogel Monoliths. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 22037-22049.	4.0	71

#	ARTICLE	IF	CITATIONS
516	Robust Silica-Cellulose Composite Aerogels with a Nanoscale Interpenetrating Network Structure Prepared Using a Streamlined Process. <i>Polymers</i> , 2020, 12, 807.	2.0	9
517	Recycled leather cutting waste-based boards: thermal, acoustic, hygrothermal and ignitability properties. <i>Journal of Material Cycles and Waste Management</i> , 2020, 22, 1339-1351.	1.6	11
518	Effect of moisture content on tunnel fire resistance of self-compacting concrete coated with aerogel mortar. <i>Magazine of Concrete Research</i> , 2021, 73, 1071-1080.	0.9	3
519	Effects of Solvent Exchange Period and Heat Treatment on Physical and Chemical Properties of Rice Husk Derived Silica Aerogels. <i>Silicon</i> , 2021, 13, 251-257.	1.8	11
520	Aerogel glazing systems for building applications: A review. <i>Energy and Buildings</i> , 2021, 231, 110587.	3.1	72
521	Influence of the aerogel/expanded perlite composite as thermal insulation aggregate on the cement-based materials: Preparation, property, and microstructure. <i>Construction and Building Materials</i> , 2021, 273, 121728.	3.2	22
522	Metal-graphene-synergized melamine aerogel with robust elasticity and flame-retardancy for thermal-insulated-packaging industry. <i>Composites Part A: Applied Science and Manufacturing</i> , 2021, 140, 106195.	3.8	11
523	A review of silicon-based aerogel thermal insulation materials: Performance optimization through composition and microstructure. <i>Journal of Non-Crystalline Solids</i> , 2021, 553, 120517.	1.5	62
524	Rapid synthesis of dual-mesoporous silica aerogel with excellent adsorption capacity and ultra-low thermal conductivity. <i>Journal of Non-Crystalline Solids</i> , 2021, 555, 120547.	1.5	33
525	Boehmite Nanofiber- <i>Polymethylsilsesquioxane Composite Aerogels: Synthesis, Analysis, and Thermal Conductivity Control via Compression Processing</i> . <i>Bulletin of the Chemical Society of Japan</i> , 2021, 94, 70-75.	2.0	3
526	Numerical Study of Thermal Properties of a Silica Aerogel Material. <i>Journal of Heat Transfer</i> , 2021, 143, .	1.2	2
527	Self-assembly of the cationic surfactant <i>n</i> -hexadecyl-trimethylammonium chloride in methyltrimethoxysilane aqueous solution: classical and reactive molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 14486-14495.	1.3	7
528	Mechanically Strong, Scalable, Mesoporous Xerogels of Nanocellulose Featuring Light Permeability, Thermal Insulation, and Flame Self-Extinction. <i>ACS Nano</i> , 2021, 15, 1436-1444.	7.3	59
529	A direct foaming approach for carbon nanotube aerogels with ultra-low thermal conductivity and high mechanical stability. <i>Nanoscale</i> , 2021, 13, 11878-11886.	2.8	6
530	Aerogels as promising materials for antibacterial applications: a mini-review. <i>Biomaterials Science</i> , 2021, 9, 7034-7048.	2.6	15
531	Aerogels are not regulated as nanomaterials, but can be assessed by tiered testing and grouping strategies for nanomaterials. <i>Nanoscale Advances</i> , 2021, 3, 3881-3893.	2.2	5
533	Research Methods for Assessing the Thermal and Optical Performance of Building Windows. , 2021, , 1-31.		0
534	Energy-Efficiency Retrofitting Strategies for Existing Residential Building Envelope System- <i>A Case Study in China</i> . <i>Journal of Building Construction and Planning Research</i> , 2021, 09, 12-25.	0.6	0

#	ARTICLE	IF	CITATIONS
535	Synthesis of a multicomponent silica aerogel-containing nanocomposite for efficient sound absorption properties. <i>Polymers and Polymer Composites</i> , 0, , 096739112098574.	1.0	6
536	Nanoinsulation Materials for Energy Efficient Buildings. , 2021, , 2559-2585.		0
537	Multiple functional base-induced highly ordered graphene aerogels. <i>Journal of Materials Chemistry C</i> , 0, , .	2.7	5
538	Research Progress of Graphitic Nitride Hydrogels for Photocatalytic Water Splitting. <i>Hans Journal of Chemical Engineering and Technology</i> , 2021, 11, 305-314.	0.0	0
539	On the Retrofit of Existing Buildings with Aerogel Panels: Energy, Environmental and Economic Issues. <i>Energies</i> , 2021, 14, 1276.	1.6	11
540	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
541	Effective thermal performance analysis of vacuum insulation panel with metal-less film and infrared-dried core material. <i>Energy and Buildings</i> , 2021, 233, 110684.	3.1	5
542	Facile Preparation of Continuous and Porous Polyimide Aerogel Fibers for Multifunctional Applications. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 10416-10427.	4.0	64
543	Structure and performance preparation on alginate-based fibrous aerogel with double network. <i>International Journal of Polymer Analysis and Characterization</i> , 2021, 26, 218-227.	0.9	3
544	Performance of aerogel as a thermal insulation material towards a sustainable design of residential buildings for tropical climates in Nigeria. <i>Energy and Built Environment</i> , 2022, 3, 291-315.	2.9	8
546	Facile preparation for gelatin/hydroxyethyl β -D-glucopyranoside/SiO ₂ composite aerogel with good mechanical strength, heat insulation, and water resistance. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50539.	1.3	30
547	Superinsulation Materials for Energy-Efficient Train Envelopes. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 2939.	1.3	8
548	Crack- and Shrinkage-Free Ethylene-Bridged Polysilsesquioxane Film Prepared by a Hydrosilylation Reaction. <i>ACS Omega</i> , 2021, 6, 8430-8437.	1.6	10
549	Synthesis and Effective Thermal Conductivity Measurements of Hollow Mesoporous SiO ₂ Spheres for Heat-Insulating Applications. <i>Energy Technology</i> , 2021, 9, 2001048.	1.8	2
550	Pulmonary drug delivery with aerogels: engineering of alginate and alginate-hyaluronic acid microspheres. <i>Pharmaceutical Development and Technology</i> , 2021, 26, 509-521.	1.1	16
552	Rapid Preparation of Mesoporous Methylsilsesquioxane Aerogels by Microwave Heating Technology. <i>Molecules</i> , 2021, 26, 1960.	1.7	1
553	Inclusion of Hydrophobic Liquids in Silica Aerogel Microparticles in an Aqueous Process: Microencapsulation and Extra Pore Creation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 12230-12240.	4.0	7
554	Interfacial Engineering to Tailor the Properties of Multifunctional Ultralight Weight hBN-Polymer Composite Aerogels. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 13620-13628.	4.0	5

#	ARTICLE	IF	CITATIONS
555	Temperature Swing Across Silica Aerogel Glazing System Under Jordanian Climate. , 2021, , .		0
556	Insulating and Robust Ceramic Nanorod Aerogels with High-Temperature Resistance over 1400 Å°C. ACS Applied Materials & Interfaces, 2021, 13, 20548-20558.	4.0	50
557	Application of smart materials in civil engineering: A review. Materials Today: Proceedings, 2023, 81, 350-359.	0.9	9
558	Silica aerogel reinforced with cellulose nanofibers. Journal of Porous Materials, 2021, 28, 1325-1333.	1.3	8
559	On the development of a building insulation using air layers with highly reflective interfaces. Energy and Buildings, 2021, 236, 110779.	3.1	11
560	Sonochemical effect and pore structure tuning of silica xerogel by ultrasonic irradiation of semi-solid hydrogel. Ultrasonics Sonochemistry, 2021, 73, 105476.	3.8	7
562	A review on silica aerogel-based materials for acoustic applications. Journal of Non-Crystalline Solids, 2021, 562, 120770.	1.5	100
563	Changes in the Strength Properties and Phase Transition of Gypsum Modified with Microspheres, Aerogel and HEMC Polymer. Materials, 2021, 14, 3486.	1.3	11
564	Ultra-efficient adsorption of copper ions in chitosanâ€™montmorillonite composite aerogel at wastewater treatment. Cellulose, 2021, 28, 7201-7212.	2.4	28
565	Improving the flame retardance of hydrophobic silica aerogels through a facile post-doping of magnesium hydroxide. Advanced Powder Technology, 2021, 32, 1891-1901.	2.0	10
566	Study on the Adsorption Properties of Graphene Oxide/Laponite RD/Chitosan Composites. Materials, 2021, 14, 3224.	1.3	5
567	Experimental and CFD Investigation on the Application for Aerogel Insulation in Buildings. Energies, 2021, 14, 3310.	1.6	10
568	Energy performance of window with PCM frame. Sustainable Energy Technologies and Assessments, 2021, 45, 101109.	1.7	9
569	Progress in silica aerogel-containing materials for buildingsâ€™ thermal insulation. Construction and Building Materials, 2021, 286, 122815.	3.2	92
570	Finite element modeling based thermodynamic simulation of aerogel embedded nonwoven thermal insulation material. International Journal of Thermal Sciences, 2021, 164, 106898.	2.6	15
571	Smart Materials: Cementitious Mortars and PCM Mechanical and Thermal Characterization. Materials, 2021, 14, 4163.	1.3	3
572	Hygrothermal performance of a new thermal aerogel-based render under distinct climatic conditions. Energy and Buildings, 2021, 243, 111001.	3.1	21
573	Seaweed-Derived Alginateâ€™Cellulose Nanofiber Aerogel for Insulation Applications. ACS Applied Materials & Interfaces, 2021, 13, 34899-34909.	4.0	37

#	ARTICLE	IF	CITATIONS
574	Surfactant-Free Aqueous Fabrication of Macroporous Silicone Monoliths for Flexible Thermal Insulation. Bulletin of the Chemical Society of Japan, 2021, 94, 2210-2215.	2.0	4
576	Aggregation-Induced Emission-Active Gels: Fabrications, Functions, and Applications. Advanced Materials, 2021, 33, e2100021.	11.1	105
577	Thermal-energy and lighting performance of aerogel glazings with hollow silica: Field experimental study and dynamic simulations. Energy and Buildings, 2021, 243, 110999.	3.1	17
578	Deposition of low-density thick silica films from burning sol-gel derived alcogels. Heliyon, 2021, 7, e07675.	1.4	1
579	Silicone-Coated MXene/Cellulose Nanofiber Aerogel Films with Photothermal and Joule Heating Performances for Electromagnetic Interference Shielding. ACS Applied Nano Materials, 2021, 4, 7234-7243.	2.4	71
580	Aerogel Spring-Back Correlates with Strain Recovery: Effect of Silica Concentration and Aging. Advanced Engineering Materials, 2021, 23, 2100376.	1.6	13
581	Dense and strong, but superinsulating silica aerogel. Acta Materialia, 2021, 213, 116959.	3.8	42
582	One-pot synthesis of monolithic silica-cellulose aerogel applying a sustainable sodium silicate precursor. Construction and Building Materials, 2021, 293, 123289.	3.2	38
583	Hollow-Structured Bilayer System for Windowpane Insulation. Journal of Energy Engineering - ASCE, 2021, 147, 06021001.	1.0	0
584	Polymer derived ceramic aerogels. Current Opinion in Solid State and Materials Science, 2021, 25, 100936.	5.6	19
585	Multifunctional cellulosic aerogels from Posidonia oceanica waste biomass with antioxidant properties for meat preservation. International Journal of Biological Macromolecules, 2021, 185, 654-663.	3.6	13
586	Glazing for Smart Architecture. , 2022, , 187-221.		0
587	Remote optical detection of geometrical defects in aerogels and elastomers using phosphor thermometry. Optical Materials, 2021, 119, 111378.	1.7	3
588	The economics of thermal superinsulation in buildings. Energy and Buildings, 2021, 253, 111506.	3.1	21
589	Stability Relevant Properties of an SiO ₂ Aerogel-Based Rendering and Its Application on Buildings. Sustainability, 2021, 13, 10035.	1.6	5
590	Foam 3D printing for construction: A review of applications, materials, and processes. Automation in Construction, 2021, 130, 103861.	4.8	59
591	Aerogel incorporated flexible nonwoven fabric for thermal protective clothing. Fire Safety Journal, 2021, 125, 103444.	1.4	13
592	Modular aerogel brick fabrication via 3D-printed molds. Additive Manufacturing, 2021, 46, 102059.	1.7	6

#	ARTICLE	IF	CITATIONS
593	A critical review of fenestration/window system design methods for high performance buildings. <i>Energy and Buildings</i> , 2021, 248, 111184.	3.1	21
594	Elevated temperature thermal properties of fire protective boards and insulation materials for light steel frame systems. <i>Journal of Building Engineering</i> , 2021, 43, 102571.	1.6	13
595	Towards an energy efficient cement composite incorporating silica aerogel: A state of the art review. <i>Journal of Building Engineering</i> , 2021, 44, 103227.	1.6	13
596	An overview of factors influencing thermal conductivity of building insulation materials. <i>Journal of Building Engineering</i> , 2021, 44, 102604.	1.6	111
597	Highly flexible and compressible polyimide/silica aerogels with integrated double network for thermal insulation and fire-retardancy. <i>Journal of Materials Science and Technology</i> , 2022, 105, 194-202.	5.6	60
598	Facile preparation of a phenyl-reinforced flexible silica aerogel with excellent thermal stability and fire resistance. <i>Materials Chemistry Frontiers</i> , 2021, 5, 4214-4224.	3.2	17
599	Aerogel and its composites: fabrication and properties. , 2021, , 1-17.		1
600	Preparation of the novel B ₄ C/SiC composite aerogel with high compressive strength and low thermal conductivity. <i>Journal of Porous Materials</i> , 2021, 28, 703-710.	1.3	16
601	Nanostructured Black Aluminum Prepared by Laser Direct Writing as a High-Performance Plasmonic Absorber for Photothermal/Electric Conversion. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 4305-4315.	4.0	29
602	Hierarchical Assembly of Surface Modified Silk Fibroin Biomass into Micro- and Milli-Metric Hybrid Aerogels with Core-Shell, Janus, and Composite Configurations for Rapid Removal of Water Pollutants. <i>Advanced Materials Interfaces</i> , 2021, 8, 2001892.	1.9	16
603	Development of Renewable Biomass-Derived Carbonaceous Aerogel/Mannitol Phase-Change Composites for High Thermal-Energy-Release Efficiency and Shape Stabilization. <i>ACS Applied Energy Materials</i> , 2021, 4, 1714-1730.	2.5	42
604	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
605	Hybrid Aerogels. , 2016, , 1-22.		2
606	Nanotech Based Vacuum Insulation Panels for Building Applications. , 2016, , 167-214.		4
607	Moisture Robustness During Retrofitting of Timber Frame Walls with Vacuum Insulation Panels: Experimental and Theoretical Studies. <i>Building Pathology and Rehabilitation</i> , 2013, , 183-210.	0.1	3
609	Preparation of magnetic MnFe ₂ O ₄ -Cellulose aerogel composite and its kinetics and thermodynamics of Cu(II) adsorption. <i>Cellulose</i> , 2018, 25, 735-751.	2.4	54
610	Advanced insulating materials. , 2016, , 127-177.		2
611	Polymer-derived Si ₃ N ₄ nanofelts for flexible, high temperature, lightweight and easy-manufacturable super-thermal insulators. <i>Applied Materials Today</i> , 2020, 20, 100648.	2.3	21

#	ARTICLE	IF	CITATIONS
612	Adsorption of cationic dyes from aqueous solution using hydrophilic silica aerogel via ambient pressure drying. Chinese Journal of Chemical Engineering, 2020, 28, 2467-2473.	1.7	22
613	On the interaction of infrared radiation and nanocellular polymers: First experimental determination of the extinction coefficient. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 600, 124937.	2.3	15
614	Thermal insulated and mechanical enhanced silica aerogel nanocomposite with in-situ growth of mullite whisker on the surface of aluminum silicate fiber. Composites Part A: Applied Science and Manufacturing, 2020, 136, 105968.	3.8	29
615	Aerogel insulation in building energy retrofit. Performance testing and cost analysis on a case study in Rome. Energy Reports, 2020, 6, 56-61.	2.5	15
616	Infrared reflective wall paint in buildings: Energy saving potentials and thermal comfort. Energy and Buildings, 2020, 224, 110212.	3.1	22
617	Preparation and properties of anti-infrared transparent thermal-insulating film based on polymethyl methacrylate. Energy, 2020, 194, 116848.	4.5	7
618	A high density 3-aminopropyltriethoxysilane grafted pumice-derived silica aerogel as an efficient adsorbent for ibuprofen: Characterization and optimization of the adsorption data using response surface methodology. Environmental Technology and Innovation, 2020, 18, 100642.	3.0	40
619	A comparative study of petroleum coke and silica aerogel inclusion on mechanical, pore structure, thermal conductivity and microstructure properties of hybrid mortars. Journal of Building Engineering, 2020, 31, 101478.	1.6	9
621	Thermophysiological Comfort Analysis of Aerogel Nanoparticle Incorporated Fabric for Fire Fighter's Protective Clothing. Chemical and Materials Engineering, 2014, 2, 37-43.	0.7	53
622	Application of Nanotechnology Based Thermal Insulation Materials in Building Construction. Acta Technica Jaurinensis, 2016, 9, 29.	0.6	9
623	Energy-related conditions and envelope properties for sustainable buildings. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2016, 64, 697-707.	0.8	3
624	Engineering mesoporous silica for superior optical and thermal properties. MRS Energy & Sustainability, 2020, 7, 1.	1.3	11
625	PREDICTION OF THERMAL CONDUCTIVITY OF FIBER/AEROGEL COMPOSITES FOR OPTIMAL THERMAL INSULATION. Journal of Porous Media, 2015, 18, 971-984.	1.0	27
626	Design, Development and Thermal Performance Analysis of Ultra-Low Heat Loss Triple Vacuum Glazing. , 2017, , .		2
627	Advanced Fabrication and Applications of Cellulose Acetate Aerogels from Cigarette Butts. Materials Transactions, 2020, 61, 1550-1554.	0.4	10
628	Sustainable timber use in residential construction: perception versus reality. , 2014, , .		4
629	Study on Properties of Coal Gangue Derived SiO ₂ Aerogel and Composite Mortar. , 2018, , .		1
630	Flexible and Transparent Silica Aerogels: An Overview. Journal of the Korean Ceramic Society, 2017, 54, 184-199.	1.1	83

#	ARTICLE	IF	CITATIONS
631	Adhesion of Silica Particles on Thin Polymer Films Model of Flax Cell Wall. Materials Sciences and Applications, 2014, 05, 953-965.	0.3	2
632	Recent Research Trends for Green Building Thermal Insulation Materials. Clean Technology, 2012, 18, 14-21.	0.1	6
633	Integrated Deep Renovation of Existing Buildings with Prefabricated Shell Exoskeleton. Sustainability, 2021, 13, 11287.	1.6	19
634	Mechanically Strong, Low Thermal Conductivity and Improved Thermal Stability Polyvinyl Alcohol-Graphene-Nanocellulose Aerogel. Gels, 2021, 7, 170.	2.1	12
636	A Study on Properties of Thermal Insulation Board Prepared by Porous Silica Aerogel. Transactions of the Korean Institute of Electrical Engineers, 2012, 61, 1362-1367.	0.1	1
637	Evaluation of Organic-Inorganic Hybrid Insulation Material Using Inorganic Filler and Polyurethane. Korean Journal of Materials Research, 2012, 22, 604-608.	0.1	1
638	Evaluation of an Organic-Inorganic Hybrid Insulation Material using an Inorganic Filler and Polyurethane with a Foaming Condition. Journal of the Korean Ceramic Society, 2012, 49, 654-658.	1.1	1
640	Technology Assessment of Insulation Material for Home Construction. Innovation, Technology and Knowledge Management, 2015, , 417-454.	0.4	0
641	Properties, applications and thermal investigation of aerogels. Scientific Letters of Rzeszow University of Technology - Mechanics, 2017, , 95-106.	0.2	0
642	Fabrication and Characterization of Porous Silica Monolith by Sintering Silica Nanoparticles. Journal of Minerals and Materials Characterization and Engineering, 2017, 05, 107-117.	0.1	6
643	Advanced Composites for Civil Engineering Infrastructures. Advances in Chemical and Materials Engineering Book Series, 2018, , 212-248.	0.2	2
644	Ön-Yaat Sektöründe Kullanılan Yalıtım Malzemelerinin Isı ve Ses Yalıtımından Değerlendirilmesi. Journal of Polytechnic, 0, , .	0.4	2
645	Ultrason Destekli Sol-Jel Yöntemi ile Kumdan Aerogel Sentezi, Karakterizasyonu ve Termal Yalıtım Sıvı ve Sıvı Üretiminde Değerlendirilmesi. Journal of the Faculty of Engineering and Architecture of Gazi University, 2018, 2018, .	0.3	0
646	Recent trends in superinsulation materials for building - aerogel-enhanced products. Materiały Budowlane, 2019, 1, 28-31.	0.0	0
647	In-situ synthesis of ZrC@ZrO ₂ core-shell high temperature thermal insulation nanopowders by precipitation method. Journal of Ceramic Processing Research, 2019, 20, 90-94.	0.4	0
648	Theoretical background of ideal glazing based on adaptive thermal-optical parameters. Selected Scientific Papers: Journal of Civil Engineering, 2019, 14, 115-126.	0.1	0
649	Introduction to Building Envelope. Green Energy and Technology, 2020, , 29-65.	0.4	1
650	Simultaneous Test of Heat and Moisture Transfer in Aerogel Blankets. Environmental Science and Engineering, 2020, , 1001-1009.	0.1	0

#	ARTICLE	IF	CITATIONS
651	Research on Obtaining Silica Xerogels from Nepheline and Study of some of their Physical and Chemical Properties. <i>Materials Science Forum</i> , 0, 989, 121-126.	0.3	2
652	Research into mechanical properties of an ablative composite on a polymer matrix base with aerogel particles. <i>Composite Structures</i> , 2022, 280, 114855.	3.1	13
653	Numerical modeling of effective thermal conductivity of hollow silica nanosphere packings. <i>International Journal of Heat and Mass Transfer</i> , 2022, 182, 122032.	2.5	5
654	Lightweight thermal insulating coating mortars with aerogel, EPS, and vermiculite for energy conservation in buildings. <i>Cement and Concrete Composites</i> , 2022, 125, 104283.	4.6	21
655	Surface modification of core-shell structured ZIF-67@Cobalt coordination compound to improve the fire safety of biomass aerogel insulation materials. <i>Chemical Engineering Journal</i> , 2022, 430, 132809.	6.6	41
656	Foams and their applications. <i>Supercritical Fluid Science and Technology</i> , 2021, 9, 1-20.	0.5	3
657	Thermal insulation fibers with a Kevlar aerogel core and a porous Nomex shell. <i>RSC Advances</i> , 2021, 11, 34828-34835.	1.7	12
658	Nanoinsulation Materials for Energy Efficient Buildings. , 2020, , 1-28.		1
659	Applications of Sol-Gel Processing. , 2020, , 597-685.		3
661	Impact of natural and artificial ageing on the properties of multilayer external wall thermal insulation systems. <i>Construction and Building Materials</i> , 2022, 317, 125834.	3.2	14
662	Knowledge gaps regarding the hygrothermal and long-term performance of aerogel-based coating mortars. <i>Construction and Building Materials</i> , 2022, 314, 125602.	3.2	12
663	Experimental study of using Aerogel insulation for residential buildings. <i>Advances in Building Energy Research</i> , 2022, 16, 569-588.	1.1	4
664	Dependent scattering effects in aggregates with touching or overlapping non-absorbing spherical particles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2022, 278, 108018.	1.1	5
665	Thermal Gelation for Synthesis of Surface-Modified Silica Aerogel Powders. <i>Gels</i> , 2021, 7, 242.	2.1	9
666	Facile preparation of mechanically strong polyvinyl alcohol/MTMS aerogel composites with improved thermal stability. <i>Journal of Nanoparticle Research</i> , 2021, 23, 1.	0.8	6
667	Elastic modulus prediction based on thermal conductivity for silica aerogels and fiber reinforced composites. <i>Ceramics International</i> , 2022, 48, 6691-6697.	2.3	5
668	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
669	Artificial neural network-based smart aerogel glazing in low-energy buildings: A state-of-the-art review. <i>IScience</i> , 2021, 24, 103420.	1.9	17

#	ARTICLE	IF	CITATIONS
670	Å-the Dynamic Thermal Properties of Aerogel-Incorporated Concretes. SSRN Electronic Journal, 0, ,	0.4	0
671	Nanocellular foaming of poly (methyl methacrylate) with chlorodifluoromethane (HCFC-22)/CO2 binary mixtures as a model blowing agent. Journal of Supercritical Fluids, 2022, 181, 105502.	1.6	2
672	A review on multifunctional aerogel fibers: processing, fabrication, functionalization, and applications. Materials Today Chemistry, 2022, 23, 100736.	1.7	27
673	Advanced thermal regulating materials and systems for energy saving and thermal comfort in buildings. Materials Today Energy, 2022, 24, 100925.	2.5	14
674	THE ROLE OF PROTECTIVE VARNISHES IN THE TREATMENT OF INITIAL CARIES. Contemporary Materials, 2016, 7, .	0.0	3
676	Facile preparation of a phenolic aerogel with excellent flexibility for thermal insulation. European Polymer Journal, 2022, 163, 110905.	2.6	21
677	Advanced fenestrationâ€™ technologies, performance and building integration. , 2022, , 117-154.		0
678	Thermal Conductivity of Phenolic Foams. Gels Horizons: From Science To Smart Materials, 2022, , 155-174.	0.3	1
679	Structural and Surface Properties of Silicon Dioxides Obtained by Extraction from Sulfuric Acid Solutions of Nepheline Decomposition. Materials Science Forum, 0, 1052, 116-121.	0.3	0
680	The impact of pore structure parameters on the thermal conductivity of porous building blocks. Construction and Building Materials, 2022, 324, 126681.	3.2	6
681	A review on the energy retrofit policies and improvements of the UK existing buildings, challenges and benefits. Renewable and Sustainable Energy Reviews, 2022, 159, 112161.	8.2	30
682	Chemical compatibility of hollow ceramic cenospheres as thermal insulation for high-temperature thermal energy storage applications with molten nitrate salt. Solar Energy Materials and Solar Cells, 2022, 238, 111597.	3.0	6
683	Thermal insulation of buildings through classical materials and nanomaterials. , 2022, , 277-303.		1
684	Physico-mechanical characterization and thermal property evaluation of polyester composites filled with walnut shell powder. Polymers and Polymer Composites, 2022, 30, 096739112210778.	1.0	7
685	Improvement of the Thermal Insulation Performance of Silica Aerogel by Proper Heat Treatment: Microporous Structures Changes and Pyrolysis Mechanism. Gels, 2022, 8, 141.	2.1	7
686	Robust SiO2â€™Al2O3/Agarose Composite Aerogel Beads with Outstanding Thermal Insulation Based on Coal Gangue. Gels, 2022, 8, 165.	2.1	8
687	Reducing the Cooling Loads of Buildings Using Shading Devices: A Case Study in Darwin. Sustainability, 2022, 14, 3775.	1.6	7
688	Aerogels as alternatives for thermal insulation in buildings â€™ A comparative teeny review. Materials Today: Proceedings, 2022, 62, 5371-5377.	0.9	11

#	ARTICLE	IF	CITATIONS
689	A highly flexible form-stable silicone-octadecane PCM composite for heat harvesting. <i>Materials Today Advances</i> , 2022, 14, 100227.	2.5	20
690	Preparation of monolithic amorphous silica aerogel through promising valorization of silicomanganese slag. <i>Journal of Non-Crystalline Solids</i> , 2022, 586, 121561.	1.5	4
692	Assessment on thermal safety of aluminum hydroxide doping hydrophobic silica aerogels. <i>Journal of Nanoparticle Research</i> , 2022, 24, 1.	0.8	4
694	Preparation and Properties of Highly Elastic, Lightweight, and Thermally Insulating SiO ₂ Fibrous Porous Materials. <i>Materials</i> , 2022, 15, 3069.	1.3	2
695	Semi-Rigid Polyurethane Foam and Polymethylsilsesquioxane Aerogel Composite for Thermal Insulation and Sound Absorption. <i>Macromolecular Research</i> , 2022, 30, 245-253.	1.0	4
696	Aerogel-based composites for electromagnetic interface shielding applications. <i>Composite Interfaces</i> , 2022, 29, 1483-1503.	1.3	2
697	The dynamic thermal properties of aerogel-incorporated concretes. <i>Construction and Building Materials</i> , 2022, 340, 127706.	3.2	5
699	Short History of Thermal Insulation and Radiation Control Technologies Used in Architecture. <i>Green Energy and Technology</i> , 2022, , 1-35.	0.4	5
700	Hierarchically and wood-like cyclodextrin aerogels with enhanced thermal insulation and wide spectrum acoustic absorption. <i>Chemical Engineering Journal</i> , 2022, 446, 137280.	6.6	7
701	Silica-Based Aerogel Composites Reinforced with Reticulated Polyurethane Foams: Thermal and Mechanical Properties. <i>Gels</i> , 2022, 8, 392.	2.1	7
702	Thermal Conductivity of Nanoporous Materials: Where Is the Limit?. <i>Polymers</i> , 2022, 14, 2556.	2.0	15
703	Effect of SiO ₂ Aerogel on the Properties of Inorganic Cementing Materials. <i>KSCE Journal of Civil Engineering</i> , 2022, 26, 3216-3225.	0.9	6
704	Critical review on the thermal conductivity modelling of silica aerogel composites. <i>Journal of Building Engineering</i> , 2022, 57, 104814.	1.6	13
705	Superhydrophobic tough hierarchical porous thermal insulation composites prepared by in situ formation of silica aerogel in collagen fiber matrix. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	1.3	6
706	Surfactant-free oil-in-oil emulsion-templating of polyimide aerogel foams. <i>International Polymer Processing</i> , 2022, 37, 427-441.	0.3	2
707	Superhydrophobic hybrid silica-cellulose aerogel for enhanced thermal, acoustic, and oil absorption characteristics. <i>Journal of Materials Science</i> , 2022, 57, 13385-13402.	1.7	10
708	Robust, lightweight gelatin composite aerogel with outstanding thermal insulation. <i>Journal of Materials Science</i> , 2022, 57, 14835-14847.	1.7	4
709	Vacuum insulation arrays as damage-resilient thermal superinsulation materials for energy saving. <i>Joule</i> , 2022, 6, 2358-2371.	11.7	10

#	ARTICLE	IF	CITATIONS
710	Flexible and shape-configurable PI composite aerogel films with tunable dielectric properties. Composites Communications, 2022, 34, 101274.	3.3	16
711	Facile synthesis of mechanically flexible and super-hydrophobic silicone aerogels with tunable pore structure for efficient oil-water separation. Materials Today Chemistry, 2022, 26, 101068.	1.7	13
712	Investigation of high temperature thermal insulation performance of fiber-reinforced silica aerogel composites. International Journal of Thermal Sciences, 2023, 183, 107827.	2.6	15
713	Structural fire behaviour of aluminium alloy structures: Review and outlook. Engineering Structures, 2022, 268, 114746.	2.6	20
714	Simultaneous reconstruction of temperature-dependent optical and thermophysical parameters of insulation material by the GA-SQP/SQP technique. Infrared Physics and Technology, 2022, 126, 104332.	1.3	1
715	Thermal Conductance of a Hollow-Core Vacuum Insulated Panel. SSRN Electronic Journal, 0, , .	0.4	0
716	Replacement of cementitious material by using agricultural waste. AIP Conference Proceedings, 2022, , .	0.3	0
717	Adaptive Ir- and Water-Gating Textile Based on Shape-Memory Fibers. SSRN Electronic Journal, 0, , .	0.4	0
718	Measurement of the Kinetics and Thermodynamics of the Thermal Degradation for a Flame Retardant Polyurethane-Based Aerogel. Energies, 2022, 15, 6982.	1.6	2
719	The Role and Applications of Aerogels in Textiles. Advances in Materials Science and Engineering, 2022, 1-22.	1.0	7
720	A simple and efficient method for the preparation of SiO ₂ /PI/AF aerogel composite fabrics and their thermal insulation performance. Ceramics International, 2023, 49, 210-215.	2.3	10
721	Sustainable Reuse of Waste Tire Textile Fibers (WTF) as Reinforcements. Polymers, 2022, 14, 3933.	2.0	5
722	Multiple assembly strategies for silica aerogel-fiber combinations – A review. Materials and Design, 2022, 223, 111228.	3.3	25
723	STUDY OF THE THERMAL AND ENERGY PERFORMANCE OF A TRANSLUCENT AEROGEL GLAZING SYSTEM. Journal of Green Building, 2022, 17, 3-31.	0.4	0
724	Reliability Analysis and Economic Evaluation of Thermal Reflective Insulators. Energies, 2022, 15, 7238.	1.6	0
725	The dramatic influence of gelation solvent choice on the structure and mechanical properties of resorcinol-formaldehyde aerogels. Journal of Porous Materials, 0, , .	1.3	0
726	Adsorption of Oil by 3-(Triethoxysilyl) Propyl Isocyanate-Modified Cellulose Nanocrystals. Processes, 2022, 10, 2154.	1.3	4
727	Aerogels Meet Phase Change Materials: Fundamentals, Advances, and Beyond. ACS Nano, 2022, 16, 15586-15626.	7.3	53

#	ARTICLE	IF	CITATIONS
728	Nanotechnology in Residential Building Materials for Better Fire Protection and Life Safety Outcomes. <i>Fire</i> , 2022, 5, 174.	1.2	4
729	Preparation and characterization of hydrophilic methylsilsesquioxane aerogels through adjusting the water/ethanol ratio. <i>Journal of Porous Materials</i> , 0, , .	1.3	0
730	Insulating foamed lightweight cementitious composite with co-addition of micro-sized aerogel and hydrogen peroxide. <i>Construction and Building Materials</i> , 2022, 360, 129485.	3.2	5
731	Mass transfer kinetics inside bio-(aero)gels during solvent exchange and supercritical drying: On the relevance of advection, gel-porosity and a peculiarity regarding the tortuosity. <i>Journal of Supercritical Fluids</i> , 2022, 191, 105762.	1.6	1
732	Compensation strategy for constructing high-performance aerogels using acrylamide-assisted vacuum drying and their use as water-induced electrical generators. <i>Chemical Engineering Journal</i> , 2023, 452, 139685.	6.6	6
733	Development Status and Application Prospect of Aerogels. <i>Journal of Engineering Studies</i> , 2017, 09, 558-567.	0.0	0
734	Silane modified MXene/polybenzazole nanocomposite aerogels with exceptional surface hydrophobicity, flame retardance and thermal insulation. <i>Composites Communications</i> , 2023, 37, 101402.	3.3	48
735	Preparation and Properties of Highly Transparent SiO ₂ Aerogels for Thermal Insulation. <i>Gels</i> , 2022, 8, 744.	2.1	6
736	Study of physical and mechanical properties of aerogel-modified expanded perlite aggregate and clay (AEP/C) board. <i>Construction and Building Materials</i> , 2022, 361, 129602.	3.2	3
737	Acoustic Properties of Aerogels: Current Status and Prospects. <i>Advanced Engineering Materials</i> , 2023, 25, .	1.6	14
738	Plant bio-inspired laminar cellulose-based foam with flame retardant, thermal insulation and excellent mechanical properties. <i>Journal of Materials Chemistry A</i> , 2023, 11, 1138-1147.	5.2	8
739	Development of reduced thermal conductivity ductile cement-based composite material by using silica aerogel and silane. <i>Journal of Building Engineering</i> , 2023, 65, 105698.	1.6	6
740	Get the light & keep the warmth - A highly insulating, translucent aerogel glass brick for building envelopes. <i>Journal of Building Engineering</i> , 2023, 64, 105600.	1.6	6
741	Recent advances and perspectives of tannin-based adsorbents for wastewater pollutants elimination: A review. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2023, 19, 100763.	1.7	2
742	Insight into pyrolysis of hydrophobic silica aerogels: Kinetics, reaction mechanism and effect on the aerogels. <i>Chinese Journal of Chemical Engineering</i> , 2023, 58, 266-281.	1.7	3
743	Adaptive IR- and Water-Gating Textiles Based on Shape Memory Fibers. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 55217-55226.	4.0	7
744	Feasibility for the preparation of aerogels with celluloses extracted mildly from waste palm leaves. <i>Nordic Pulp and Paper Research Journal</i> , 2023, 38, 197-207.	0.3	1
745	Investigating Alumina-Silicate Bauxite and Phenol-Formaldehyde Resin Embedded TiH ₂ as Foaming Agents for Producing A356 Foam. <i>Metals</i> , 2022, 12, 2105.	1.0	0

#	ARTICLE	IF	CITATIONS
746	Uranium Removal from Aqueous Solutions by Aerogel-Based Adsorbents—A Critical Review. <i>Nanomaterials</i> , 2023, 13, 363.	1.9	7
747	Thermal, Acoustic, and Hygrothermal Properties of Recycled Bovine Leather Cutting Waste-Based Panels with Different Compositions. <i>Sustainability</i> , 2023, 15, 1779.	1.6	1
748	A novel strategy for the construction of silk fibroin-SiO ₂ composite aerogel with enhanced mechanical property and thermal insulation performance. <i>Frontiers of Chemical Science and Engineering</i> , 2023, 17, 288-297.	2.3	1
749	Study of Energy Saving Using Silica Aerogel Insulation in a Residential Building. <i>Gels</i> , 2023, 9, 86.	2.1	6
750	A “ceramer”™ aerogel with unique bicontinuous inorganic–organic structure enabling super-resilience, hydrophobicity, and thermal insulation. <i>Materials Today Nano</i> , 2023, 22, 100306.	2.3	2
751	An Analytical Assessment and Retrofit Using Nanomaterials of Rural Houses in Heat Wave-Prone Region in India. <i>Lecture Notes in Civil Engineering</i> , 2023, , 177-191.	0.3	0
752	Emerging 3D printed thermal insulating materials for sustainable approach: A review and a way forward. <i>Polymers for Advanced Technologies</i> , 2023, 34, 1425-1434.	1.6	2
753	Construction of a multifunctional polysaccharide-based aerogel for highly efficient fluorescence detection and removal of formaldehyde. <i>Sensors and Actuators B: Chemical</i> , 2023, 380, 133391.	4.0	6
754	Machine learning-assisted prediction of heat fluxes through thermally anisotropic building envelopes. <i>Building and Environment</i> , 2023, 234, 110157.	3.0	5
755	Synergistic effect of fibres on the physical, mechanical, and microstructural properties of aerogel-based thermal insulating renders. <i>Cement and Concrete Composites</i> , 2023, 139, 105045.	4.6	6
756	Glazing systems with thin monolithic aerogel: Optical, thermal, and color rendering performance. <i>Energy and Buildings</i> , 2023, 288, 113009.	3.1	3
757	A review of the state-of-the-art on thermal insulation performance of polymeric foams. <i>Thermal Science and Engineering Progress</i> , 2023, 41, 101808.	1.3	11
758	Study on heat transfer characteristics of cement-based honeycomb structures based on infrared imaging. <i>Journal of Building Engineering</i> , 2023, 68, 106134.	1.6	2
759	The effect of surfactant type and concentration on the pore structure of alumina aerogels. <i>Journal of Non-Crystalline Solids</i> , 2023, 610, 122325.	1.5	1
760	Thermal conduction model of asymmetric structural aramid nanofiber aerogel membranes based on fractal theory. <i>International Journal of Heat and Mass Transfer</i> , 2023, 208, 124086.	2.5	2
761	Near real-time prediction of thermophysical parameters and time-dependent boundary heat flux of participating medium. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2023, 302, 108583.	1.1	0
762	Optical and color rendering long-term performance of monolithic aerogel after laboratory accelerated aging: Development of a method and preliminary experimental results. <i>Solar Energy</i> , 2023, 253, 515-526.	2.9	5
763	Cu/CeO ₂ and Cu/Gd-Substituted CeO ₂ Aerogels as Active, Selective, and Stable COPROX Catalysts. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 2853-2860.	3.2	2

#	ARTICLE	IF	CITATIONS
764	Study on the Influence of the Preparation Method of Konjac Glucomannan-Silica Aerogels on the Microstructure, Thermal Insulation, and Flame-Retardant Properties. <i>Molecules</i> , 2023, 28, 1691.	1.7	2
765	Long-Term Performance of Monolithic Silica Aerogel with Different Hydrophobicities: Physical and Color Rendering Properties after an Accelerated Aging Process. <i>Gels</i> , 2023, 9, 210.	2.1	1
766	Highly transparent silanized cellulose aerogels for boosting energy efficiency of glazing in buildings. <i>Nature Energy</i> , 2023, 8, 381-396.	19.8	34
767	Thermophysical Parameters and Hygrothermal Simulation of Aerogel-Based Fibre-Enhanced Thermal Insulating Renders Applied on Exterior Walls. <i>Energies</i> , 2023, 16, 3048.	1.6	3
768	Smart materials – A state-of-the-art-review. <i>Materials Today: Proceedings</i> , 2023, , .	0.9	1
769	Development of superhydrophobic hybrid silica-cellulose aerogel as promising thermal insulation and sound absorption. <i>International Journal of Materials Research</i> , 2023, 114, 405-417.	0.1	2
771	Energy, Thermal, and Economic Benefits of Aerogel Glazing Systems for Educational Buildings in Hot Arid Climates. <i>Sustainability</i> , 2023, 15, 6332.	1.6	1
772	Monolithic chitosan-silica composite aerogel with comprehensive performances prepared by SBG-FD method. <i>Ceramics International</i> , 2023, 49, 21947-21956.	2.3	4
773	Eco-Friendly Fabrication of Highly Stable Silica Aerogel Microspheres with Core-Shell Structure. <i>Polymers</i> , 2023, 15, 1882.	2.0	2
774	Experimental Analysis of Thermo-Technical Parameters of Windows Glazing in the Pavilion Laboratory. <i>Buildings</i> , 2023, 13, 1026.	1.4	0
775	The perspectives and trends of THz technology in material research for future communication - A comprehensive review. <i>Physica Scripta</i> , 0, , .	1.2	0
776	Improvement of the thermal stability of silicone-based aerogels without deteriorating their flexibility via the incorporation of well-dispersed carbon nanotubes. <i>Journal of Sol-Gel Science and Technology</i> , 0, , .	1.1	0
777	Multifunctional textile based on titanium xerogel: performance optimization through composition and microstructure. <i>Journal of Sol-Gel Science and Technology</i> , 0, , .	1.1	0
780	Synthesis and characterization of silica aerogel from corn husk waste via ambient pressure drying. <i>AIP Conference Proceedings</i> , 2023, , .	0.3	0
786	Adsorption properties of silica aerogel-based materials. <i>RSC Advances</i> , 2023, 13, 18207-18216.	1.7	5
788	Synthesis and characterization of cellulose aerogel from Bagasse. <i>AIP Conference Proceedings</i> , 2023, , .	0.3	0
789	Evaluating Water-Based Trombe Walls as a Source of Heated Water for Building Applications. , 2023, , 61-90.		0
803	Potential of Anisotropic Cellulose Aerogels. <i>Springer Handbooks</i> , 2023, , 727-745.	0.3	0

#	ARTICLE	IF	CITATIONS
809	Environmental Applications for Aerogels. Springer Handbooks, 2023, , 1383-1398.	0.3	0
810	Aerogel-Inspired Materials Derived from Industrial Waste. Springer Handbooks, 2023, , 1211-1237.	0.3	0
811	Silica Aerogels. Springer Handbooks, 2023, , 309-334.	0.3	0
813	Hydrophobic Silica Aerogels. Springer Handbooks, 2023, , 335-365.	0.3	1
818	Smart Façades: Technological Innovations in Dynamic and Advanced Glazed Building Skins for Energy Saving. , 0, , .		0
823	Functionalization of Cellulose-Based Materials. Advanced Structured Materials, 2023, , 89-104.	0.3	0
828	Properties, Preparation, Applications and Handling of Aerogels. Smart Innovation, Systems and Technologies, 2024, , 529-540.	0.5	0