Traditional, state-of-the-art and future thermal buildin solutions – Properties, requirements and possibilities

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Citation Report

#	Article	IF	CITATIONS
1	Preparation and Properties of a Novel Nonflammable Thermal Insulation Material. Advanced Materials Research, 2012, 450-451, 1504-1512.	0.3	4
2	Comprehensive characterization of thermophysical properties in solids using thermal impedance. Journal of Applied Physics, 2012, 112, .	2.5	3
3	PROCESSED STRAW AS EFFECTIVE THERMAL INSULATION FOR BUILDING ENVELOPE CONSTRUCTIONS. Engineering Structures and Technologies, 2012, 4, 96-103.	0.1	11
4	Sustainable refurbishment in building technology. Smart and Sustainable Built Environment, 2012, 1, 241-252.	4.0	21
5	Theoretical investigation on thermal insulation performance of closed cavity containing a hollow cylinder. Energy and Buildings, 2012, 54, 131-140.	6.7	1
6	Predicted and in situ performance of a solar air collector incorporating a translucent granular aerogel cover. Energy and Buildings, 2012, 49, 173-187.	6.7	41
7	Accelerated climate ageing of building materials, components and structures in the laboratory. Journal of Materials Science, 2012, 47, 6475-6496.	3.7	104
8	Analyses on performances of heat and multilayer reflection insulators. Journal of Central South University, 2012, 19, 1645-1656.	3.0	6
9	Vacuum insulation properties of phenolic foam. International Journal of Heat and Mass Transfer, 2012, 55, 5343-5349.	4.8	46
10	Combined heat transfer in multi-layered radiation shields for vacuum insulation panels: Theoretical/numerical analyses and experiment. Applied Energy, 2012, 94, 295-302.	10.1	20
11	Energy efficiency in building installations using thermal insulating materials in northeast Brazil. Energy and Buildings, 2012, 47, 35-43.	6.7	17
12	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.	6.2	430
13	Sintering Behavior of Expanded Perlite Thermal Insulation Board: Modeling and Experiments. Industrial & Engineering Chemistry Research, 2013, 52, 10244-10249.	3.7	9
14	Passive alternatives to mechanical air conditioning of building: AÂreview. Building and Environment, 2013, 66, 54-64.	6.9	137
15	Insulation corkboard for sustainable energy and environmental protection. Ciência & Tecnologia Dos Materiais, 2013, 25, 38-41.	0.5	12
16	The effect of drying condition of glassfibre core material on the thermal conductivity of vacuum insulation panel. Materials & Design, 2013, 50, 1030-1037.	5.1	25
17	Increasing Energy Efficiency of the Translucent Enclosure Walls of a Building. Procedia Engineering, 2013, 57, 869-875.	1.2	1
18	The challenge of removing snow downfall on photovoltaic solar cell roofs in order to maximize solar energy efficiency—Research opportunities for t <u>he future. Energy and Buildings, 2013, 67, 334-351.</u>	6.7	83

#	Article	IF	Citations
19	A new house wall system for residential buildings. Energy and Buildings, 2013, 67, 403-418.	6.7	27
21	The variation of thermal conductivity of fibrous insulation materials under different levels of moisture content. Construction and Building Materials, 2013, 43, 533-544.	7.2	134
22	The future of construction materials research and the seventh UN Millennium Development Goal: A few insights. Construction and Building Materials, 2013, 40, 729-737.	7.2	108
23	Solar radiation glazing factors for window panes, glass structures and electrochromic windows in buildings—Measurement and calculation. Solar Energy Materials and Solar Cells, 2013, 116, 291-323.	6.2	151
24	Determination of Optimum Drying Condition of VIP Core Material by Wet Method. Drying Technology, 2013, 31, 1084-1090.	3.1	10
25	Self-cleaning glazing products: A state-of-the-art review and future research pathways. Solar Energy Materials and Solar Cells, 2013, 109, 126-141.	6.2	157
26	Optimization of passive solar design strategies: A review. Renewable and Sustainable Energy Reviews, 2013, 25, 177-196.	16.4	187
27	Study on performance of energy-efficient retrofitting measures on commercial building external walls in cooling-dominant cities. Applied Energy, 2013, 103, 97-108.	10.1	101
28	Key performance indicators (KPIs) for evaluation of energy conservation in buildings. , 2013, , .		7
29	Preparation of Styrene-Acrylate Emulsion (SAE) Latex by Recycling Waste Expandable Polystyrene Foam. Advanced Materials Research, 2013, 700, 199-203.	0.3	1
30	High performance thermal insulation materials for buildings. , 2013, , 188-206.		8
32	Buildings. , 2015, , 671-738.		13
33	Theoretical and Experimental Analysis of Moisture-Dependent Thermal Conductivity of Lightweight Ceramic Bricks. International Journal of Thermophysics, 2014, 35, 1912-1921.	2.1	11
34	Novel Honeycomb Glassfiber Mat as the Core of Vacuum Insulation Panel. Advanced Materials Research, 0, 900, 247-250.	0.3	1
35	Life cycle assessment (LCA) of building thermal insulation materials. , 2014, , 267-286.		11
36	A multi-objective evolutionary optimization of fuzzy controller for energy conservation in air conditioning systems. International Journal of Energy Research, 2014, 38, 847-859.	4.5	7
37	Flexible Aerogels from Hyperbranched Polyurethanes: Probing the Role of Molecular Rigidity with Poly(Urethane Acrylates) Versus Poly(Urethane Norbornenes). Chemistry of Materials, 2014, 26, 6979-6993.	6.7	65
38	Analysis of Material Solutions of Exterior Walls with Contact Thermal Insulation System. Key Engineering Materials, 2014, 635, 165-168.	0.4	1

#	Article	IF	CITATIONS
39	Robustness classification of materials, assemblies and buildings. Journal of Building Physics, 2014, 37, 213-245.	2.4	21
40	System Approach for Building Energy Conservation. Energy Procedia, 2014, 62, 666-675.	1.8	8
41	Air-conditioning energy consumption due to green roofs with different building thermal insulation. Applied Energy, 2014, 128, 49-59.	10.1	100
42	Advanced thermal insulation and absorption properties of recycled cellulose aerogels. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 445, 128-134.	4.7	217
43	Novel sustainable hemp-based composites for application in the building industry: Physical, thermal and mechanical characterization. Energy and Buildings, 2014, 77, 219-226.	6.7	142
44	Toward aerogel based thermal superinsulation in buildings: A comprehensive review. Renewable and Sustainable Energy Reviews, 2014, 34, 273-299.	16.4	541
45	Assessment of the economic performance of vacuum insulation panels for housing projects. Energy and Buildings, 2014, 70, 45-51.	6.7	26
46	Eco-efficient construction and building materials research under the EU Framework Programme Horizon 2020. Construction and Building Materials, 2014, 51, 151-162.	7.2	180
47	Vacuum insulation panel products: A state-of-the-art review and future research pathways. Applied Energy, 2014, 116, 355-375.	10.1	187
48	Aerogel-incorporated concrete: An experimental study. Construction and Building Materials, 2014, 52, 130-136.	7.2	179
49	Vacuum insulated panels for sustainable buildings: a review of research and applications. International Journal of Energy Research, 2014, 38, 1-19.	4.5	54
50	Structure of vacuum insulation panel in building system. Energy and Buildings, 2014, 85, 644-653.	6.7	38
51	Insulating and Strength Properties of an Aerogel-Incorporated Mortar Based an UHPC Formulations. Key Engineering Materials, 0, 629-630, 43-48.	0.4	16
52	Structure, energy and cost efficiency evaluation of three different lightweight construction systems used in low-rise residential buildings. Energy and Buildings, 2014, 84, 727-739.	6.7	28
53	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.	10.3	176
54	A study of the thermal conductivity of granular silica materials for VIPs at different levels of gaseous pressure and external loads. Energy and Buildings, 2014, 85, 199-211.	6.7	16
55	The influence of different electricity-to-emissions conversion factors on the choice of insulation materials. Energy and Buildings, 2014, 85, 362-373.	6.7	16
56	Correlation study between flammability and the width of organic thermal insulation materials for building exterior walls. Energy and Buildings, 2014, 82, 243-249.	6.7	73

#	Article	IF	CITATIONS
57	Comparative environmental life cycle assessment of thermal insulation materials of buildings. Energy and Buildings, 2014, 82, 466-481.	6.7	192
58	Experimental and numerical study of heat transfer across insulation wall of a refrigerated integral panel van. Applied Thermal Engineering, 2014, 73, 196-204.	6.0	58
59	Thermal properties of the composite material clay/granular cork. Construction and Building Materials, 2014, 70, 183-190.	7.2	59
60	Nano Insulation Materials: Synthesis and Life Cycle Assessment. Procedia CIRP, 2014, 15, 490-495.	1.9	36
61	Thermographic analysis of polyurethane foams integrated with phase change materials designed for dynamic thermal insulation in refrigerated transport. Applied Thermal Engineering, 2014, 70, 201-210.	6.0	57
62	Environmental impacts and thermal insulation performance of innovative composite solutions for building applications. Construction and Building Materials, 2014, 55, 406-414.	7.2	111
63	Effect of pressure holding time of extraction process on thermal conductivity of glassfiber VIPs. Journal of Materials Processing Technology, 2014, 214, 539-543.	6.3	15
64	Pinus pinaster tannin/furanic foams: Part II. Physical properties. Industrial Crops and Products, 2014, 61, 531-536.	5.2	25
65	Integration of life cycle assessment in the design of hollow silica nanospheres for thermal insulation applications. Building and Environment, 2014, 80, 115-124.	6.9	23
66	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.	6.7	67
67	An energy retrofitting methodology of Mediterranean historical buildings. Management of Environmental Quality, 2015, 26, 984-997.	4.3	9
68	Numerical Simulation of Thermal Comfort Performance in a Room with Different Insulating Materials Using Computational Fluid Dynamics . Key Engineering Materials, 0, 650, 29-37.	0.4	1
69	Energy Efficiency and Sustainability Attributes of the Solar Decathlon Projects. , 2015, , .		3
72	Preparation of the Monolith of Hierarchical Macroâ€∤Mesoporous Calcium Silicate Ultrathin Nanosheets with Low Thermal Conductivity by Means of Ambientâ€Pressure Drying. Chemistry - an Asian Journal, 2015, 10, 1394-1401.	3.3	6
73	Morphology of Burned Ultra-low Density Fiberboards. BioResources, 2015, 10, .	1.0	0
74	Energy and Environmental Evaluation of Non-Transparent Constructions of Building Envelope for Wooden Houses. Energies, 2015, 8, 11047-11075.	3.1	20
75	Polymer/Carbon-Based Hybrid Aerogels: Preparation, Properties and Applications. Materials, 2015, 8, 6806-6848.	2.9	163
76	Near-Field Thermal Radiation: Recent Progress and Outlook. Nanoscale and Microscale Thermophysical Engineering, 2015, 19, 98-126.	2.6	116

#	Article	IF	CITATIONS
77	The development of a monolithic aerogel glazed window for an energy retrofitting project. Applied Energy, 2015, 154, 603-615.	10.1	135
79	Silica Aerogels: A Multifunctional Building Material. , 2015, , 35-41.		4
80	Thermal Insulation Products and Applications - Future Road Maps. Energy Procedia, 2015, 78, 309-314.	1.8	9
81	An optimal maintenance plan for building envelope insulation materials after retrofitting. , 2015, , .		2
82	Thermal Inertia for Composite Materials White Cement-cork, Cement Mortar-cork, and Plaster-cork. Energy Procedia, 2015, 74, 991-999.	1.8	12
83	Development of Glazing Systems with Silica Aerogel. Energy Procedia, 2015, 78, 394-399.	1.8	25
84	Nanocellular polymer foams as promising high performance thermal insulation materials. European Polymer Journal, 2015, 65, 33-45.	5.4	120
85	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.	6.7	419
86	Experimental investigations of aerogel-incorporated ultra-high performance concrete. Construction and Building Materials, 2015, 77, 307-316.	7.2	122
87	Dense nanopowder composites for thermal insulation. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 439-442.	1.8	8
88	Policies and Programs for Sustainable Energy Innovations. Innovation, Technology and Knowledge Management, 2015, , .	0.8	1
89	Factors affecting the in situ measurement accuracy of the wall heat transfer coefficient using the heat flow meter method. Energy and Buildings, 2015, 86, 754-765.	6.7	95
90	Preparation and characterization of granular silica aerogel/polyisocyanurate rigid foam composites. Construction and Building Materials, 2015, 93, 309-316.	7.2	54
91	Energy performance analysis of variable thermal resistance envelopes in residential buildings. Energy and Buildings, 2015, 103, 317-325.	6.7	105
92	Porous, Water-Resistant Multifilament Yarn Spun from Gelatin. Biomacromolecules, 2015, 16, 1997-2005.	5.4	15
93	Traditional fired-clay bricks versus large and highly perforated fired-clay bricks masonry. , 2015, , 63-81.		2
94	A sustainability assessment of advanced materials for novel housing solutions. Building and Environment, 2015, 92, 182-191.	6.9	38
95	Configured cavity-core matrix for vacuum insulation panel: Concept, preparation and thermophysical properties. Energy and Buildings, 2015, 97, 98-106.	6.7	13

# 96	ARTICLE Development of Nano Insulation Materials for Building Constructions. , 2015, , 429-434.	IF	CITATIONS
97	Nanotechnology in Construction. , 2015, , .		27
98	Thermal Insulation Monolith of Aluminum Tobermorite Nanosheets Prepared from Fly Ash. ACS Sustainable Chemistry and Engineering, 2015, 3, 2866-2873.	6.7	27
99	Effect of facade components on energy efficiency in office buildings. Applied Energy, 2015, 158, 422-432.	10.1	73
100	Integration of form-stable paraffin/nanosilica phase change material composites into vacuum insulation panels for thermal energy storage. Applied Energy, 2015, 159, 601-609.	10.1	43
101	Preparation of Modified Urea-Formaldehyde/Phosphate Foamed Thermal Insulation Material. Advanced Materials Research, 0, 1120-1121, 523-530.	0.3	2
102	Experimental study on the physical–mechanical durability of innovative hemp-based composites for the building industry. Energy and Buildings, 2015, 104, 316-322.	6.7	26
103	Paraffin/expanded vermiculite composite phase change material as aggregate for developing lightweight thermal energy storage cement-based composites. Applied Energy, 2015, 160, 358-367.	10.1	162
104	Thermal Characterization of Materials based on Clay and Granular: Cork or Expanded Perlite. Energy Procedia, 2015, 74, 1150-1161.	1.8	28
105	Chitosan Aerogels: Transparent, Flexible Thermal Insulators. Chemistry of Materials, 2015, 27, 7569-7572.	6.7	160
106	A comparative study of the environmental impact of Swedish residential buildings with vacuum insulation panels. Energy and Buildings, 2015, 109, 183-194.	6.7	49
107	Polysaccharidic binders for the conception of an insulating agro-composite. Composites Part A: Applied Science and Manufacturing, 2015, 78, 152-159.	7.6	6
108	Towards a sustainable use of primary boron. Approach to a sustainable use of primary resources. Resources, Conservation and Recycling, 2015, 103, 9-18.	10.8	13
110	Numerical modeling and optimization of an insulation system for underground thermal energy storage. Applied Thermal Engineering, 2015, 91, 687-693.	6.0	9
112	Applications of Terahertz Spectroscopy in the Field of Construction and Building Materials. Applied Spectroscopy Reviews, 2015, 50, 279-303.	6.7	41
113	Development and performance evaluation of a new thermal insulation material from rice straw using high frequency hot-pressing. Energy and Buildings, 2015, 87, 116-122.	6.7	152
114	Thermal barrier coatings based on alumina microparticles. Progress in Organic Coatings, 2015, 78, 124-132.	3.9	16
115	Thermally insulating and fire-retardant lightweight anisotropic foams based on nanocellulose and graphene oxide. Nature Nanotechnology, 2015, 10, 277-283.	31.5	1,103

	Сітатіо	n Report	
#	Article	IF	CITATIONS
116	Design and multi-physical properties of a new insulating concrete using sunflower stem aggregates and eco-friendly binders. Materials and Structures/Materiaux Et Constructions, 2015, 48, 1815-1829.	3.1	34
117	Balancing Function and Environment toward Sustainable Design: A Building Insulation Case Study. Journal of Sustainable Development, 2016, 9, 207.	0.3	0
118	Unconventional Insulation Materials. , 0, , .		9
119	Modeling and Optimization of the Thermal Performance of a Wood-Cement Block in a Low-Energy House Construction. Energies, 2016, 9, 677.	3.1	11
120	Flexural and Thermal Properties of Novel Energy Conservation Slotted Reinforced Concrete Beams. Advances in Materials Science and Engineering, 2016, 2016, 1-14.	1.8	1
121	Nano-based thermal insulation for energy-efficient buildings. , 2016, , 129-181.		19
122	Building Integrated Photovoltaics: A Concise Description of the Current State of the Art and Possible Research Pathways. Energies, 2016, 9, 21.	3.1	70
123	Building insulating materials. , 2016, , 107-125.		1
124	The roles of thermal insulation and heat storage in the energy performance of the wall materials: a simulation study. Scientific Reports, 2016, 6, 24181.	3.3	39
125	Optimizing the thermal effectiveness of an insulation wrap with internal folded polypropylene film for the transportation of frozen food. International Journal of Refrigeration, 2016, 67, 42-53.	3.4	9
126	Insulation materials for the building sector: A review and comparative analysis. Renewable and Sustainable Energy Reviews, 2016, 62, 988-1011.	16.4	615
127	Energy retrofit of the Krsan Castle: From sustainable to responsible design—A case study. Energy and Buildings, 2016, 122, 23-33.	6.7	20
128	Determination of Thermal Conductivity of Closed-Cell Insulation Materials That Depend on Temperature and Density. Arabian Journal for Science and Engineering, 2016, 41, 4337-4346.	1.1	39
129	Effect of nano vacuum insulation panel and nanogel glazing on the energy performance of office building. Applied Energy, 2016, 173, 141-151.	10.1	39
130	Thermal and mechanical properties of gypsum–cement foam concrete: effects of surfactant. European Journal of Environmental and Civil Engineering, 0, , 1-20.	2.1	16
131	Hydrophobic treatment of wood fibrous thermal insulator by octadecyltrichlorosilane and its influence on hygric properties and resistance against moulds. Composites Part B: Engineering, 2016, 106, 285-293.	12.0	42
132	Optimization of the formulation for the synthesis of bio-based foams. European Polymer Journal, 2016, 84, 577-588.	5.4	8
133	A benchmarking approach to the progress of green materials and systems' use in the UAE construction industry. World Journal of Science Technology and Sustainable Development, 2016, 13, 315-327.	2.0	2

#	Article	IF	CITATIONS
134	Evaluating solar irradiance over facades in high building cities, based on LiDAR technology. Applied Energy, 2016, 183, 133-147.	10.1	39
135	Design and experimental investigation of a stretched parabolic linear Fresnel reflector collecting system. Energy Conversion and Management, 2016, 126, 89-98.	9.2	55
137	Energy and economic analysis and feasibility of retrofit actions in Italian residential historical buildings. Energy and Buildings, 2016, 128, 649-659.	6.7	71
138	Calcined clays as binder for thermal insulating and structural aerogel incorporated mortar. Cement and Concrete Composites, 2016, 72, 213-221.	10.7	42
139	Effects of Nanoporosity on the Mechanical Properties and Applications of Aerogels in Composite Structures. , 2016, , 97-126.		0
140	A method for the steady-state thermal simulation of district heating systems and model parameters calibration. Energy Conversion and Management, 2016, 120, 294-305.	9.2	59
141	The Effect of Fiber, Opacifier Ratios and Compression Pressure on the Thermal Conductivity of Fumed Silica Based Vacuum Insulation Panels. Arabian Journal for Science and Engineering, 2016, 41, 4263-4272.	1.1	6
142	Preparation and characterization of capric-myristic-stearic acid eutectic mixture/modified expanded vermiculite composite as a form-stable phase change material. Applied Energy, 2016, 178, 616-623.	10.1	90
143	Environmental assessment of façade-building systems and thermal insulation materials for different climatic conditions. Journal of Cleaner Production, 2016, 113, 102-113.	9.3	87
144	Technical and economical assessment of energy-saving roof and wall construction in Thailand. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2016, 39, 1-11.	1.1	58
145	Sunlight-curable boehmite/siloxane-modified methacrylic based nanocomposites as insulating coatings for stone substrates. Progress in Organic Coatings, 2016, 95, 107-119.	3.9	25
146	Environmental implications of the use of agglomerated cork as thermal insulation in buildings. Journal of Cleaner Production, 2016, 126, 97-107.	9.3	58
147	Traditional and Innovative Materials for Energy Efficiency in Buildings. Key Engineering Materials, 0, 678, 14-34.	0.4	19
148	Nanocellulose Aerogels as Thermal Insulation Materials. , 2016, , 411-427.		14
149	Innovative mineral fiber insulation panels for buildings: Thermal and acoustic characterization. Applied Energy, 2016, 169, 421-432.	10.1	89
150	Introduction to Nano- and Biotech-Based Materials for Energy Building Efficiency. , 2016, , 1-16.		3
151	Experimental investigation of the fire resistance of multi-layer drywall systems incorporating Vacuum Insulation Panels and Phase Change Materials. Fire Safety Journal, 2016, 81, 8-16.	3.1	21
152	Improved Thermal Insulation for Contemporary Automotive Roof Structures Based on a Computational Fluid Dynamics Heat Flux Approach. Heat Transfer Engineering, 2016, 37, 1418-1426.	1.9	2

#	Article	IF	CITATIONS
153	Coupled thermal-hydrological-mechanical behavior of rock mass surrounding a high-temperature thermal energy storage cavern at shallow depth. International Journal of Rock Mechanics and Minings Sciences, 2016, 83, 149-161.	5.8	26
154	Prospects of energy conservation and management in buildings – The Saudi Arabian scenario versus global trends. Renewable and Sustainable Energy Reviews, 2016, 58, 1647-1663.	16.4	62
155	Mechanical and thermal performance of concrete and mortar cellular materials containing plastic waste. Construction and Building Materials, 2016, 104, 298-310.	7.2	92
156	The role of climatic-design-operational parameters on combined PV/T collector performance: A critical review. Renewable and Sustainable Energy Reviews, 2016, 57, 602-647.	16.4	91
157	Effect of storage and curing conditions at elevated temperatures on aerogel-incorporated mortar samples based on UHPC recipe. Construction and Building Materials, 2016, 106, 640-649.	7.2	57
158	The potential of lightweight low-energy houses with hybrid adaptable thermal storage: Comparing the performance of promising concepts. Energy and Buildings, 2016, 110, 79-93.	6.7	37
159	Structural characterization of thermal building insulation materials using terahertz spectroscopy and terahertz pulsed imaging. NDT and E International, 2016, 77, 11-18.	3.7	28
160	Aerogels and Foamed Nanostructured Polymer Blends. , 2016, , 75-99.		7
161	Experimental and numerical characterization of innovative cardboard based panels: Thermal and acoustic performance analysis and life cycle assessment. Building and Environment, 2016, 95, 145-159.	6.9	61
162	The Effectiveness of Horizontal Barriers in Preventing Fire Spread on Vertical Insulation Panels Made of Polystyrene Foams. Fire Technology, 2016, 52, 649-662.	3.0	14
163	A new prefabricated external thermal insulation composite board with ceramic finishing for buildings retrofitting. Materials and Structures/Materiaux Et Constructions, 2016, 49, 1527-1542.	3.1	12
164	Blowing agent free generation of nanoporous poly(methylmethacrylate) materials. Colloid and Polymer Science, 2017, 295, 379-389.	2.1	4
165	Silver nanoparticles as low-emissivity coating materials. Translational Materials Research, 2017, 4, 015001.	1.2	16
166	Experimental study of the thermal conductivity of polyurethane foams. Applied Thermal Engineering, 2017, 115, 528-538.	6.0	142
167	Investigation of the moisture induced degradation of the thermal properties of aerogel blankets: Measurements, calculations, simulations. Energy and Buildings, 2017, 139, 506-516.	6.7	62
168	Synthesis and characterization of silica aerogel reinforced rigid polyurethane foam for thermal insulation application. Journal of Non-Crystalline Solids, 2017, 461, 1-11.	3.1	102
169	Energy efficiency in the Romanian residential building stock: A literature review. Renewable and Sustainable Energy Reviews, 2017, 74, 349-363.	16.4	47
170	Exploring the potential of resorcinol-formaldehyde xerogels as thermal insulators. Microporous and Mesoporous Materials, 2017, 244, 50-54.	4.4	24

#	Article	IF	CITATIONS
171	A review on insulation materials for energy conservation in buildings. Renewable and Sustainable Energy Reviews, 2017, 73, 1352-1365.	16.4	485
172	Methodologies for Selection of Thermal Insulation Materials for Cost-Effective, Sustainable, and Energy-Efficient Retrofitting. , 2017, , 23-55.		2
173	Phase Change Materials for Application in Energy-Efficient Buildings. , 2017, , 57-118.		32
174	Cost-Effective Energy Retrofitting of Buildings in Spain. , 2017, , 515-551.		0
175	Large scale experimental study on the fire hazard of buildings' U-shape façade wall geometry. Journal of Civil Engineering and Management, 2017, 23, 455-463.	3.5	7
176	Effect of the thermal insulation layer location on wall dynamic thermal response rate under the air-conditioning intermittent operation. Case Studies in Thermal Engineering, 2017, 10, 79-85.	5.7	27
177	Using lightweight cement composite and photocatalytic coating to reduce cooling energy consumption of buildings. Construction and Building Materials, 2017, 145, 555-564.	7.2	31
178	Thermal conductivity calculation in anisotropic crystals by molecular dynamics: Application to <i>α</i> â^'Fe2O3. Journal of Chemical Physics, 2017, 146, 054505.	3.0	12
179	Improvement of thermal insulation performance of silica aerogels by Al2O3 powders doping. Ceramics International, 2017, 43, 10799-10804.	4.8	31
180	Microstructure and property characterization of flexible syntactic foam for insulation material via mold casting. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 169-176.	4.9	8
181	Effectiveness of vertical barriers in preventing lateral flame spread over exposed EPS insulation wall. Fire Safety Journal, 2017, 91, 155-164.	3.1	16
182	Energy efficiency and thermal performance of lightweight steel-framed (LSF) construction: A review. Renewable and Sustainable Energy Reviews, 2017, 78, 194-209.	16.4	92
183	The influence of thermal treatment on the microstructure and thermal insulation performance of silica aerogels. Journal of Non-Crystalline Solids, 2017, 470, 178-183.	3.1	27
184	Experimental determination of the effective thermal conductivity of Vacuum Insulation Panels at fire temperatures. Fire and Materials, 2017, 41, 738-749.	2.0	1
185	SELECTION OF THE INSULATION MATERIALS FOR REFURBISHMENT PURPOSES. Engineering Structures and Technologies, 2017, 9, 104-115.	0.1	2
186	Carbon footprint of thermal insulation materials in building envelopes. Energy Efficiency, 2017, 10, 1511-1528.	2.8	37
187	A general strategy for improving the thermal insulation performance of aerogels by multiple impregnation. Scripta Materialia, 2017, 139, 5-8.	5.2	15
188	Environmental assessment of a nano-technological aerogel-based panel for building insulation. Journal of Cleaner Production, 2017, 161, 1404-1415.	9.3	41

		CITATION REPORT		
#	Article		IF	CITATIONS
189	Thermal performance of scrap tire blocks as roof insulator. Energy and Buildings, 2017,	149, 384-390.	6.7	20
190	Phase change materials and carbon nanostructures for thermal energy storage: A litera Renewable and Sustainable Energy Reviews, 2017, 79, 1212-1228.	ture review.	16.4	161
191	High thermal insulation and compressive strength polypropylene foams fabricated by h foam injection molding and mold opening of nano-fibrillar composites. Materials and Do 1-11.	igh-pressure esign, 2017, 131,	7.0	161
192	Mechanically robust and shape-memory hybrid aerogels for super-insulating application Materials Chemistry A, 2017, 5, 15048-15055.	s. Journal of	10.3	29
193	The impact of the temperature dependent thermal conductivity of insulating materials building envelope performance. Energy and Buildings, 2017, 144, 262-275.	on the effective	6.7	127
194	Environmental performance of expanded cork slab and granules through life cycle asses Journal of Cleaner Production, 2017, 145, 294-302.	ssment.	9.3	25
195	Flyweight 3D Graphene Scaffolds with Microinterface Barrier-Derived Tunable Thermal I Flame Retardancy. ACS Applied Materials & Interfaces, 2017, 9, 14232-14241.	nsulation and	8.0	67
197	Characterization and engineering application of a novel ceramic composite insulation n Composites Part B: Engineering, 2017, 111, 143-147.	naterial.	12.0	39
198	The development history and prospects of biomass-based insulation materials for buildi Renewable and Sustainable Energy Reviews, 2017, 69, 912-932.	ngs.	16.4	174
199	An innovative structural and energy retrofitting system for URM walls using textile rein mortars combined with thermal insulation: Mechanical and fire behavior. Construction Materials, 2017, 133, 1-13.	forced and Building	7.2	77
200	Assessing and understanding the interaction between mechanical and thermal properti for developing a structural and insulating material. Construction and Building Materials 353-364.	es in concrete , 2017, 132,	7.2	18
201	High tech startup creation for energy efficient built environment. Renewable and Susta Reviews, 2017, 71, 618-629.	inable Energy	16.4	35
202	An overview of energy retrofit actions feasibility on Italian historical buildings. Energy, 2 991-1000.	2017, 137,	8.8	72
203	Enhancements of thermal insulation and mechanical property of silica aerogel monolith graphene oxide. Materials Chemistry and Physics, 2017, 187, 183-190.	s by mixing	4.0	83
204	Potential energy savings from deployment of Dynamic Insulation Materials for US resid buildings. Building and Environment, 2017, 114, 203-218.	ential	6.9	100
205	Temperature-induced microstructural changes of fiber-reinforced silica aerogel (FRAB) a wool thermal insulation materials: A comparative study. Energy and Buildings, 2017, 13	nd rock 8, 80-87.	6.7	46
206	Reversible transition between isotropic and anisotropic thermal transport in elastic poly foams. Materials Horizons, 2017, 4, 236-241.	/urethane	12.2	24
207	Energy in buildings—Policy, materials and solutions. MRS Energy & Sustainability, 201	7, 4, 1.	3.0	19

#	Article	IF	CITATIONS
208	Marshmallow-like silicone gels as flexible thermal insulators and liquid nitrogen retention materials and their application in containers for cryopreserved embryos. Applied Materials Today, 2017, 9, 560-565.	4.3	12
209	The benefits of using aerogel-enhanced systems in building retrofits. Energy Procedia, 2017, 134, 626-635.	1.8	30
210	The impact of temperature dependency of the building insulation thermal conductivity in the Canadian climate. Energy Procedia, 2017, 132, 237-242.	1.8	20
211	Air-Filled Nanopore Based High-Performance Thermal Insulation Materials. Energy Procedia, 2017, 132, 231-236.	1.8	16
212	Translucent, hydrophobic, and mechanically tough aerogels constructed from trimethylsilylated chitosan nanofibers. Nanoscale, 2017, 9, 12311-12315.	5.6	51
213	Low-density and structure-tunable microcellular PMMA foams with improved thermal-insulation and compressive mechanical properties. European Polymer Journal, 2017, 95, 382-393.	5.4	136
214	Thermophysical investigations of nanotechnological insulation materials. AIP Conference Proceedings, 2017, , .	0.4	5
215	Thermal performance and service life of vacuum insulation panels with aerogel composite cores. Energy and Buildings, 2017, 154, 606-617.	6.7	96
216	Lightweight and Ultrastrong Polymer Foams with Unusually Superior Flame Retardancy. ACS Applied Materials & Interfaces, 2017, 9, 26392-26399.	8.0	66
217	Alternative low cost based core systems for vacuum insulation panels. Ciência & Tecnologia Dos Materiais, 2017, 29, e151-e156.	0.5	3
218	A cork–silica xerogel nanocomposite with unique properties. Journal of Sol-Gel Science and Technology, 2017, 83, 567-573.	2.4	5
219	Synthesis and characterization of flame retardant rigid polyurethane foam based on a reactive flame retardant containing phosphazene and cyclophosphonate. Polymer Degradation and Stability, 2017, 144, 62-69.	5.8	89
220	Comparative study of hygrothermal properties of five thermal insulation materials. Case Studies in Thermal Engineering, 2017, 10, 628-640.	5.7	35
221	Superlight, Mechanically Flexible, Thermally Superinsulating, and Antifrosting Anisotropic Nanocomposite Foam Based on Hierarchical Graphene Oxide Assembly. ACS Applied Materials & Interfaces, 2017, 9, 44010-44017.	8.0	60
222	Thermal conductivity analysis and applications of nanocellulose materials. Science and Technology of Advanced Materials, 2017, 18, 877-892.	6.1	87
223	Ambient-dried thermal superinsulating monolithic silica-based aerogels with short cellulosic fibers. Journal of Materials Science, 2017, 52, 2210-2221.	3.7	41
224	Building renovation adopts mass customization. Journal of Intelligent Information Systems, 2017, 49, 119-146.	3.9	9
225	A nZEB housing structure derived from end of life containers: Energy, lighting and life cycle assessment. Building Simulation, 2017, 10, 165-181.	5.6	19

#	Article	IF	CITATIONS
226	Novel aqueous spongy foams made of three-dimensionally dispersed wood-fiber: entrapment and stabilization with NFC/MFC within capillary foams. Cellulose, 2017, 24, 241-251.	4.9	21
227	Comprehensive thermal transmittance investigations carried out on opaque aerogel insulation blanket. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	3.1	27
228	Experimental Analysis of Transparent Insulation Based on Poly-carbonate Multi-Wall Systems: Thermal and Optical Performance. Energy Procedia, 2017, 132, 502-507.	1.8	7
229	Long-term performance of aerogel-enhanced materials. Energy Procedia, 2017, 132, 303-308.	1.8	23
230	Qualitative Experimental research on thermal response of interior finishing material under air-conditioning intermittent running. Procedia Engineering, 2017, 205, 410-414.	1.2	3
232	A new model for exergetic optimum insulation thickness. International Journal of Exergy, 2017, 22, 309.	0.4	6
233	Cardboard-Based Packaging Materials as Renewable Thermal Insulation of Buildings: Thermal and Life-Cycle Performance. Journal of Renewable Materials, 2017, 5, 84-93.	2.2	14
234	Green composites for the built environment. , 2017, , 123-148.		2
235	Aerogels for Optofluidic Waveguides. Micromachines, 2017, 8, 98.	2.9	14
236	Experimental Evaluation of Thermal Performance and Durability of Thermally-Enhanced Concretes. Applied Sciences (Switzerland), 2017, 7, 811.	2.5	10
237	Form Follows Environment: Biomimetic Approaches to Building Envelope Design for Environmental Adaptation. Buildings, 2017, 7, 40.	3.1	56
238	Assessment Method for Combined Structural and Energy Retrofitting in Masonry Buildings. Buildings, 2017, 7, 71.	3.1	32
239	The Techno-Economics of Small-Scale Residential Heating in Low Carbon Futures. Energies, 2017, 10, 1915.	3.1	10
240	Energy and Sustainable Strategies in the Renovation of Existing Buildings: An Italian Case Study. Sustainability, 2017, 9, 1472.	3.2	15
241	A Comparative Study of Energy Performance of Fumed Silica Vacuum Insulation Panels in an Apartment Building. Energies, 2017, 10, 2000.	3.1	12
242	Thermal Insulation of Thermal Storage Containers. , 2017, , 219-222.		2
243	Insulation Material for a Model House in Zaouiat Sidi Abdessalam. , 2017, , .		5
244	A Non-Ventilated Solar Façade Concept Based on Selective and Transparent Insulation Material Integration: An Experimental Study. Energies, 2017, 10, 815.	3.1	17

#	Article	IF	CITATIONS
245	Application of some Solar Passive Concepts to Create more Energy Efficient Studio Apartment. , 2017, , .		0
246	Experimental investigation on the influencing factors of preparing porous fly ash-based geopolymer for insulation material. Energy and Buildings, 2018, 168, 9-18.	6.7	57
247	Fireâ€Retardant and Thermally Insulating Phenolicâ€Silica Aerogels. Angewandte Chemie - International Edition, 2018, 57, 4538-4542.	13.8	266
248	A sensitivity analysis of a cost optimality study on the energy retrofit of a single-family reference building in Portugal. Energy Efficiency, 2018, 11, 1411-1432.	2.8	11
249	Anisotropic, lightweight, strong, and super thermally insulating nanowood with naturally aligned nanocellulose. Science Advances, 2018, 4, eaar3724.	10.3	336
250	Fireâ€Retardant and Thermally Insulating Phenolicâ€Silica Aerogels. Angewandte Chemie, 2018, 130, 4628-4632.	2.0	173
252	Nano-fibrillated cellulose-hydroxyapatite based composite foams with excellent fire resistance. Carbohydrate Polymers, 2018, 195, 71-78.	10.2	99
253	Larch (Larix decidua) bark insulation board: interactions of particle orientation, physical–mechanical and thermal properties. European Journal of Wood and Wood Products, 2018, 76, 489-498.	2.9	10
254	Porous materials in building energy technologies—A review of the applications, modelling and experiments. Renewable and Sustainable Energy Reviews, 2018, 91, 229-247.	16.4	131
255	Benzotriazole-based conjugated microporous polymers as efficient flame retardants with better thermal insulation properties. Journal of Materials Chemistry A, 2018, 6, 8633-8642.	10.3	51
256	Concurrent seismic and energy retrofitting of RC and masonry building envelopes using inorganic textile-based composites combined with insulation materials: A new concept. Composites Part B: Engineering, 2018, 148, 166-179.	12.0	95
257	Multi-functional hydroxyapatite/polyvinyl alcohol composite aerogels with self-cleaning, superior fire resistance and low thermal conductivity. Composites Science and Technology, 2018, 158, 128-136.	7.8	84
258	Heat insulating, fire retardant and flexible inorganic nanocomposite paper. Materials and Design, 2018, 144, 281-289.	7.0	33
259	Long-term thermal conductivity of aerogel-enhanced insulating materials under different laboratory aging conditions. Energy, 2018, 147, 1188-1202.	8.8	100
260	A new approach to determine insulation material and thickness from a life-cycle perspective. Proceedings of Institution of Civil Engineers: Energy, 2018, 171, 171-181.	0.6	5
261	Highly Compressible, Anisotropic Aerogel with Aligned Cellulose Nanofibers. ACS Nano, 2018, 12, 140-147.	14.6	364
262	Sodium alginate adhesives as binders in wood fibers/textile waste fibers biocomposites for building insulation. Carbohydrate Polymers, 2018, 184, 1-8.	10.2	79
263	Climate change mitigation: resilience indicators for roof solutions. International Journal of Disaster Resilience in the Built Environment, 2018, 9, 4-17.	1.2	3

#	Article	IF	CITATIONS
264	Thermal conductivity of hygroscopic foams based on cellulose nanofibrils and a nonionic polyoxamer. Cellulose, 2018, 25, 1117-1126.	4.9	35
265	Fabrication and mechanism of poly(butylene succinate) urethane ionomer microcellular foams with high thermal insulation and compressive feature. European Polymer Journal, 2018, 99, 250-258.	5.4	47
266	The thermophysical behaviour of cork supports doped with an innovative thermal insulation and protective coating: A numerical analysis based on in situ experimental data. Energy and Buildings, 2018, 159, 508-528.	6.7	17
267	Characterization of thermal insulating micro-surfacing modified by inorganic insulating material. Construction and Building Materials, 2018, 175, 296-306.	7.2	16
268	The combined effect of heat and moisture transfer dependent thermal conductivity of polystyrene insulation material: Impact on building energy performance. Energy and Buildings, 2018, 169, 228-235.	6.7	96
269	Nanotechnology Considerations for Poultry and Livestock Production Systems – A Review. Annals of Animal Science, 2018, 18, 319-334.	1.6	40
270	Novel Rigid Polyisocyanurate Foams from Synthesized Biobased Polyester Polyol with Enhanced Properties. ACS Sustainable Chemistry and Engineering, 2018, 6, 6577-6589.	6.7	22
271	Hollow silica nanospheres as thermal insulation materials for construction: Impact of their morphologies as a function of synthesis pathways and starting materials. Construction and Building Materials, 2018, 166, 72-80.	7.2	21
272	Evaluation of silica aerogel-reinforced polyurethane foams for footwear applications. Journal of Materials Science, 2018, 53, 9463-9472.	3.7	20
273	Thermal management of standby battery for outdoor base station based on the semiconductor thermoelectric device and phase change materials. Applied Thermal Engineering, 2018, 137, 203-217.	6.0	64
274	Exploring design principles of biological and living building envelopes: what can we learn from plant cell walls?. Intelligent Buildings International, 2018, 10, 78-102.	2.3	24
275	Impact of solar energy on the energy balance of attic rooms in high latitude countries. Applied Thermal Engineering, 2018, 136, 548-559.	6.0	13
276	Development of polymeric heat insulators based on emirati red shale filler: Thermal and physical properties. Polymer Composites, 2018, 39, E1463.	4.6	16
277	Preparation and characterization of capric-palmitic-stearic acid ternary eutectic mixture/expanded vermiculite composites as form-stabilized thermal energy storage materials. Journal of Materials Science and Technology, 2018, 34, 379-386.	10.7	54
278	Thermal characterization of insulating materials. Renewable and Sustainable Energy Reviews, 2018, 82, 1765-1773.	16.4	29
279	A review on energy conscious designs of building façades in hot and humid climates: Lessons for (and) Tj ETQq1	1,0.7843 16.4	14 _f gBT /O
280	The effect of passive measures on thermal comfort and energy conservation. A case study of the hot summer and cold winter climate in the Yangtze River region. Journal of Building Engineering, 2018, 15, 298-310.	3.4	115
281	Ultralight and Low Thermal Conductivity Polyimide–Polyhedral Oligomeric Silsesquioxanes Aerogels. Macromolecular Materials and Engineering, 2018, 303, 1700403.	3.6	25

#	Article	IF	CITATIONS
282	Development of high thermal insulation and compressive strength BPP foams using mold-opening foam injection molding with in-situ fibrillated PTFE fibers. European Polymer Journal, 2018, 98, 1-10.	5.4	117
283	Continuous ultrasoundâ€essisted fabrication of lightweight polypropylene foam with low thermal conductivity and excellent sound insulation properties. Polymer Engineering and Science, 2018, 58, 1678-1684.	3.1	11
284	Thermal conductivity of insulations approached from a new aspect. Journal of Thermal Analysis and Calorimetry, 2018, 133, 329-335.	3.6	18
285	Comparative analysis on thermal performance of different wall insulation forms under the air-conditioning intermittent operation in summer. Applied Thermal Engineering, 2018, 130, 429-438.	6.0	43
286	Aerogel-enhanced systems for building energy retrofits: Insights from a case study. Energy and Buildings, 2018, 159, 370-381.	6.7	88
287	Hydroxyethyl cellulose/alumina-based aerogels as lightweight insulating materials with high mechanical strength. Journal of Materials Science, 2018, 53, 1556-1567.	3.7	22
288	Coupling controlled environmental forcing and transient plane source method: An innovative thermal characterization procedure for building insulation materials. Applied Thermal Engineering, 2018, 130, 254-263.	6.0	11
289	Fire-resistant, ultralight, superelastic and thermally insulated polybenzazole aerogels. Journal of Materials Chemistry A, 2018, 6, 20769-20777.	10.3	49
290	Production of insulating panel from pruning remains: an economic and environmental analysis. Energy Procedia, 2018, 147, 145-153.	1.8	6
291	A review of the properties of recycled and waste materials for energy refurbishment of existing buildings towards the requirements of NZEB. Energy Procedia, 2018, 148, 868-875.	1.8	27
292	Solar energy impact on space heating and cooling needs in moderate climate. IOP Conference Series: Materials Science and Engineering, 2018, 415, 012008.	0.6	2
294	Development and Validation of Numerical Models for Evaluation of Foam-Vacuum Insulation Panel Composite Boards, Including Edge Effects. Energies, 2018, 11, 2228.	3.1	11
295	Cellulose Aerogels for Thermal Insulation in Buildings: Trends and Challenges. Coatings, 2018, 8, 345.	2.6	64
296	Largeâ€Size Transparent Wood for Energyâ€Saving Building Applications. ChemSusChem, 2018, 11, 4086-4093.	6.8	80
297	Polyurethane Foams: Past, Present, and Future. Materials, 2018, 11, 1841.	2.9	463
298	Silica Aerogels: A Review of Molecular Dynamics Modelling and Characterization of the Structural, Thermal, and Mechanical Properties. , 2018, , 1-21.		1
299	Thermal insulating plates produced on the basis of vegetable agricultural waste. Energy and Buildings, 2018, 180, 72-82.	6.7	50
300	Feasibility of the use of mineral wool fibres recovered from CDW for the reinforcement of conglomerates by study of their porosity. Construction and Building Materials, 2018, 191, 460-468.	7.2	33

#	Article	IF	CITATIONS
301	Stimuliâ€Responsive Polyurethane Dispersions – Aqueous Autoâ€Dispersion. Israel Journal of Chemistry, 2018, 58, 1338-1346.	2.3	6
302	Foam materials with controllable pore structure prepared from nanofibrillated cellulose with addition of alcohols. Industrial Crops and Products, 2018, 125, 314-322.	5.2	12
303	Inherently flame-retardant rigid polyurethane foams with excellent thermal insulation and mechanical properties. Polymer, 2018, 153, 616-625.	3.8	113
304	A review on optimization methods applied in energy-efficient building geometry and envelope design. Renewable and Sustainable Energy Reviews, 2018, 92, 897-920.	16.4	258
305	Advanced Building Energy Efficiency Systems. , 2018, , 45-115.		3
306	Sustainable nanocomposites of epoxy and silica xerogel synthesized from corn stalk ash: Enhanced thermal and acoustic insulation performance. Composites Part B: Engineering, 2018, 150, 1-6.	12.0	42
307	Innovative composite on the basis of an aerogel mat with an epoxy resin modified with PET waste and PCM. E3S Web of Conferences, 2018, 44, 00031.	0.5	7
308	Thermally insulating lightweight cement-based composites incorporating glass beads and nano-silica aerogels for sustainably energy-saving buildings. Energy and Buildings, 2018, 174, 97-110.	6.7	91
310	Disturbance observer and ageing estimation for a temperature controlled food transporter. , 2018, , .		1
311	Innovative Structural and Energy Retrofitting System for Masonry Walls Using Textile Reinforced Mortars Combined with Thermal Insulation: In-Plane Mechanical Behavior. Journal of Composites for Construction, 2018, 22, .	3.2	33
312	Correlation between the Thermo-physical Properties and Core Material Structure of Vacuum Insulation Panel: Role of Fiber Types. Fibers and Polymers, 2018, 19, 1032-1038.	2.1	7
313	Photo-crosslinkable polyurethanes reinforced with coumarin modified silica nanoparticles for photo-responsive coatings. Progress in Organic Coatings, 2018, 123, 63-74.	3.9	26
314	Fabrication and Characterization of Multiscale PLA Structures Using Integrated Rapid Prototyping and Gas Foaming Technologies. Nanomaterials, 2018, 8, 575.	4.1	12
315	Iceâ€Templated Poly(vinyl alcohol): Enhanced Strength and Low Thermal Conductivity. Macromolecular Materials and Engineering, 2018, 303, 1800198.	3.6	6
316	Development and thermal performance verification of composite insulation boards containing foam-encapsulated vacuum insulation panels. Applied Energy, 2018, 228, 1159-1172.	10.1	44
317	Thermal conductivity of concrete – A review. Journal of Building Engineering, 2018, 20, 81-93.	3.4	403
318	Modeling the Effect of Infrared Opacifiers on Coupled Conduction-Radiation Heat Transfer in Expanded Polystyrene. Journal of Heat Transfer, 2018, 140, .	2.1	2
319	Model predictive temperature control and ageing estimation for an insulated cool box. Applied Thermal Engineering, 2018, 144, 269-277.	6.0	6

#	Article	IF	Citations
320	Optimization of the wall thermal insulation characteristics based on the intermittent heating operation. Case Studies in Construction Materials, 2018, 9, e00188.	1.7	18
322	Qualitative analysis of promising materials and technologies for the design and evaluation of Climate Adaptive Opaque Façades. Building and Environment, 2018, 144, 482-501.	6.9	38
323	2.24 Insulation Materials. , 2018, , 760-795.		4
324	Effects of bentonite slurry on air-void structure and properties of foamed concrete. Construction and Building Materials, 2018, 179, 207-219.	7.2	60
325	Noble-gas-infused neoprene closed-cell foams achieving ultra-low thermal conductivity fabrics. RSC Advances, 2018, 8, 21389-21398.	3.6	12
326	Life cycle assessment (LCA) of double-skin façade (DSF) system with fiber-reinforced concrete for sustainable and energy-efficient buildings in the tropics. Building and Environment, 2018, 142, 327-341.	6.9	48
327	Efficient Structural Sandwich Wall Panels Devoid of Thermal Bridges. Lecture Notes in Civil Engineering, 2019, , 59-67.	0.4	1
328	Review of High-Temperature Thermal Insulation Materials. Journal of Thermophysics and Heat Transfer, 2019, 33, 271-284.	1.6	27
329	Passive cooling systems in livestock buildings towards energy saving: A critical review. Energy and Buildings, 2019, 202, 109368.	6.7	31
330	Composite material for thermal insulation based on moss raw material. Construction and Building Materials, 2019, 228, 116699.	7.2	39
331	On the use of phase change materials applied on cork-coconut-cork panels. Journal of Thermal Analysis and Calorimetry, 2019, 138, 4061-4090.	3.6	11
332	Cloud-based Low-cost Energy Monitoring System through Internet of Things. , 2019, , .		5
333	Experimental and Numerical Examination of Naturally-Aged Foam-VIP Composites. Energies, 2019, 12, 2539.	3.1	2
334	Study on the influence of enclosed vertical channels on downward flame spread over XPS thermal insulation materials. Case Studies in Thermal Engineering, 2019, 14, 100486.	5.7	8
335	Microcellular foaming behaviors of chain extended poly (butylene succinate)/polyhedral oligomeric silsesquioxane composite induced by isothermal crystallization. Polymer Degradation and Stability, 2019, 167, 228-240.	5.8	39
336	Preparation of Thermosetting/Thermoplastic Polyimide Foam with Pleated Cellular Structure via In Situ Simultaneous Orthogonal Polymerization. ACS Applied Polymer Materials, 2019, 1, 2430-2440.	4.4	18
337	Physical Properties of Straw Bales as a Construction Material: A Review. Sustainability, 2019, 11, 3388.	3.2	35
338	Improvement of performance of foam perlite thermal insulation material by the design of a triple-hierarchical porous structure. Energy and Buildings, 2019, 200, 21-30.	6.7	20

#	Article	IF	CITATIONS
340	Ionic liquid-based monolithic porous polymers as efficient flame retardant and thermal insulation materials. Polymer, 2019, 185, 121947.	3.8	13
342	Preparation and properties of polystyrene/silica fibres flexible thermal insulation materials by centrifugal spinning. Polymer, 2019, 185, 121964.	3.8	25
343	Polystyrene nanofibers for nonwoven porous building insulation materials. Engineering Reports, 2019, 1, e12037.	1.7	17
344	Critical Performance Aspects of Retrofitting Apartment Buildings Using a Multifunctional Façade System. Buildings, 2019, 9, 184.	3.1	2
345	Preparation and Characterization of Novel Plaster with Improved Thermal Energy Storage Performance. Energies, 2019, 12, 3318.	3.1	13
346	Flexible and Washable CNT-Embedded PAN Nonwoven Fabrics for Solar-Enabled Evaporation and Desalination of Seawater. ACS Applied Materials & Interfaces, 2019, 11, 35005-35014.	8.0	175
347	Evaluating the environmental and economic sustainability of energy efficiency measures in buildings. IOP Conference Series: Earth and Environmental Science, 2019, 257, 012028.	0.3	2
348	Monolithic nanoporous polymers bearing POSS moiety as efficient flame retardant and thermal insulation materials. Reactive and Functional Polymers, 2019, 143, 104345.	4.1	14
349	Energy efficiency and impact carbon of a multilayer material composed of ecological additives Energy Procedia, 2019, 157, 419-427.	1.8	9
350	Thermal characterization of a new multilayer building material based on clay, cork and cement mortar. Energy Procedia, 2019, 157, 480-491.	1.8	20
351	Whole building retrofit using vacuum insulation panels and energy performance analysis. Energy and Buildings, 2019, 203, 109430.	6.7	28
352	Experimental study on the impact of facade design on indoor thermal environment in tropical residential buildings. Building and Environment, 2019, 166, 106418.	6.9	28
353	Composites with Excellent Insulation and High Adaptability for Lightweight Envelopes. Energies, 2019, 12, 53.	3.1	7
354	Numerical and experimental study on the thermal performance of aerogel insulating panels for building energy efficiency. Renewable Energy, 2019, 138, 445-457.	8.9	60
355	Ultralight and Flexible Monolithic Polymer Aerogel with Extraordinary Thermal Insulation by A Facile Ambient Process. Advanced Materials Interfaces, 2019, 6, 1900314.	3.7	29
356	Thermomechanical behavior and thermal stability of polyurethane rigid nanocomposite foams containing binary nanoparticle mixtures. Polymer Testing, 2019, 77, 105930.	4.8	27
357	Halving energy demand from buildings: The impact of low consumption practices. Technological Forecasting and Social Change, 2019, 146, 253-266.	11.6	46
358	A dynamic thermal response on thermal conductivity at different temperature and moisture levels of EPS insulation. Case Studies in Thermal Engineering, 2019, 14, 100481.	5.7	25

#	Article	IF	CITATIONS
359	Microcellular morphology evolution of polystyrene/thermoplastic polyurethane blends in the presence of supercritical CO ₂ . Frontiers in Forests and Global Change, 2019, 38, 68-85.	1.1	10
360	Biomimetic Carbon Tube Aerogel Enables Super-Elasticity and Thermal Insulation. CheM, 2019, 5, 1871-1882.	11.7	136
361	Thermal conductivity of amorphous silica nanoparticles. Journal of Nanoparticle Research, 2019, 21, 1.	1.9	17
362	Critical Analysis of in situ Performance of Glass Fiber Core VIPs in Extreme Cold Climate. Frontiers in Energy Research, 2019, 7, .	2.3	8
363	Effects of the Heat Treatment in the Properties of Fibrous Aerogel Thermal Insulation. Energies, 2019, 12, 2001.	3.1	9
364	Carbon-Filled Organic Phase-Change Materials for Thermal Energy Storage: A Review. Molecules, 2019, 24, 2055.	3.8	45
365	Preparation of low density organosilica monoliths containing hollow silica nanospheres as thermal insulation materials. Materials Letters, 2019, 250, 151-154.	2.6	12
366	Thermo-economic analysis of building energy retrofits using VIP - Vacuum Insulation Panels. Energy and Buildings, 2019, 196, 269-279.	6.7	40
367	Superelastic, Anticorrosive, and Flame-Resistant Nitrogen-Containing Resorcinol Formaldehyde/Graphene Oxide Composite Aerogels. ACS Sustainable Chemistry and Engineering, 2019, 7, 10873-10879.	6.7	20
368	Vacuum insulation panels in construction solutions for energy efficient retrofitting of buildings. Two case studies in Spain and Sweden. Energy and Buildings, 2019, 197, 131-139.	6.7	27
369	Preparation, characterization and thermal degradation behavior of rigid polyurethane foam using a malic acid based polyols. Industrial Crops and Products, 2019, 136, 121-128.	5.2	50
370	Thermal and Mechanical Properties of SiO2 Aerogel–Incorporated Geopolymer Insulation Materials. Journal of Materials in Civil Engineering, 2019, 31, .	2.9	7
371	Influence of NiTi alloy phase change heat-storage particles on thermophysical parameters, phase change heat-storage thermoregulation effect, and pavement performance of asphalt mixture. Renewable Energy, 2019, 141, 431-443.	8.9	34
372	Hierarchically porous SiO2/polyurethane foam composites towards excellent thermal insulating, flame-retardant and smoke-suppressant performances. Journal of Hazardous Materials, 2019, 375, 61-69.	12.4	103
373	Assessing the Potentiality of Animal Fat Based-Bio Phase Change Materials (PCM) for Building Applications: An Innovative Multipurpose Thermal Investigation. Energies, 2019, 12, 1111.	3.1	25
374	Sustainable thermal insulation biocomposites from rice husk, wheat husk, wood fibers and textile waste fibers: Elaboration and performances evaluation. Industrial Crops and Products, 2019, 135, 238-245.	5.2	160
375	Photothermal Clothing for Thermally Preserving Pipeline Transportation of Crude Oil. Advanced Functional Materials, 2019, 29, 1900703.	14.9	46
376	Tailoring the thermal and mechanical properties of lightweight cement-based composites by macro and micro fillers. Cement and Concrete Composites, 2019, 102, 169-184.	10.7	26

#	Article	IF	CITATIONS
377	Traditional, state-of-the-art and renewable thermal building insulation materials: An overview. Construction and Building Materials, 2019, 214, 709-735.	7.2	318
378	Chemical and Mineralogical Studies of Magmatic Rocks of Uzbekistan for Obtaining Heat-Insulating Materials. Glass and Ceramics (English Translation of Steklo I Keramika), 2019, 75, 491-495.	0.6	20
379	Thermal bridges of metal fasteners for aerogel-enhanced blankets. Energy and Buildings, 2019, 185, 307-315.	6.7	32
380	Structural and thermal retrofitting of masonry walls: An integrated cost-analysis approach for the Italian context. Building and Environment, 2019, 155, 127-136.	6.9	36
381	Perspectives on industrialized transportable solar powered zero energy buildings. Renewable and Sustainable Energy Reviews, 2019, 108, 112-124.	16.4	27
383	Demonstration of self-healing barrier films for vacuum insulation panels. Vacuum, 2019, 164, 132-139.	3.5	8
384	Resilient Si ₃ N ₄ Nanobelt Aerogel as Fire-Resistant and Electromagnetic Wave-Transparent Thermal Insulator. ACS Applied Materials & Interfaces, 2019, 11, 15795-15803.	8.0	138
386	Quantitative analysis of the influence of subfreezing temperature on the mechanical properties of steam-cured concrete. Construction and Building Materials, 2019, 206, 504-511.	7.2	22
387	A novel inorganic thermal insulation material utilizing perlite tailings. Energy and Buildings, 2019, 190, 25-33.	6.7	45
388	Threshold cell diameter for high thermal insulation of water-blown rigid polyurethane foams. Journal of Industrial and Engineering Chemistry, 2019, 73, 344-350.	5.8	40
389	Aerogel-enhanced insulation for building applications. , 2019, , 395-416.		7
390	Using algorithms to designate pre-fabricated wall materials: A case study with two implementation methods. Case Studies in Construction Materials, 2019, 10, e00220.	1.7	1
391	Fabrication of boron nitride nanosheet/polymer composites with tunable thermal insulating properties. New Journal of Chemistry, 2019, 43, 4878-4885.	2.8	13
392	"Stiff–Soft―Binary Synergistic Aerogels with Superflexibility and High Thermal Insulation Performance. Advanced Functional Materials, 2019, 29, 1806407.	14.9	111
393	Experimental and Numerical Energy Assessment of a Monolithic Aerogel Glazing Unit for Building Applications. Applied Sciences (Switzerland), 2019, 9, 5473.	2.5	13
394	Cradle to Cradle®—Parquet for Generations: Respect Natural Resources and Offers Preservation for the Future. Environmental Footprints and Eco-design of Products and Processes, 2019, , 83-106.	1.1	1
395	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.	0.6	5
396	Behavior of multilayer materials when exposed to open flame. Materials Today: Proceedings, 2019, 19, 1073-1080.	1.8	0

# 397	ARTICLE Silica aerogel composites with embedded fibres: a review on their preparation, properties and applications. Journal of Materials Chemistry A, 2019, 7, 22768-22802.	IF 10.3	Citations 208
398	Nano insulation materials exploiting the Knudsen effect. IOP Conference Series: Materials Science and Engineering, 2019, 634, 012003.	0.6	7
399	Yearly Energy Performance Assessment of Employing Expanded Polystyrene with Variable Temperature and Moisture–Thermal Conductivity Relationship. Materials, 2019, 12, 3000.	2.9	9
400	Effect of various curing methods and addition of silica aerogel on mortar properties. Gradevinar, 2019, 71, 651-661.	0.2	7
401	Modelling the Strength of Cellulose Nanofiber-Filled Rigid Low-Density PU Foams. Key Engineering Materials, 0, 827, 159-164.	0.4	4
402	A Taguchi approach for optimizing the mixture design of cold-bonded PCM aggregates. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2019, , 1-21.	2.3	1
403	Lightweight, mechanically flexible and thermally superinsulating rGO/polyimide nanocomposite foam with an anisotropic microstructure. Nanoscale Advances, 2019, 1, 4895-4903.	4.6	27
404	Electrochemical Getters: A Novel Approach toward Improved Thermal Insulation. Journal of the Electrochemical Society, 2019, 166, B1701-B1706.	2.9	1
405	Development of Environmentally Sustainable Materials. Ecowise, 2019, , 1-18.	0.1	0
406	Flexible and coatable insulating silica aerogel/polyurethane composites via soft segment control. Composites Science and Technology, 2019, 171, 244-251.	7.8	35
407	Fire damage of RC slab structure of a shopping center. Engineering Failure Analysis, 2019, 97, 53-60.	4.0	17
408	A review and evaluation of thermal insulation materials and methods for thermal energy storage systems. Renewable and Sustainable Energy Reviews, 2019, 103, 71-84.	16.4	181
409	Low-density PMMA/MAM nanocellular polymers using low MAM contents: Production and characterization. Polymer, 2019, 163, 115-124.	3.8	26
410	Advanced Polymers for Reduced Energy Consumption in Architecture. Macromolecular Rapid Communications, 2019, 40, 1800597.	3.9	4
411	Silica aerogel derived from rice husk: an aggregate replacer for lightweight and thermally insulating cement-based composites. Construction and Building Materials, 2019, 195, 312-322.	7.2	57
412	Building Envelope. , 2019, , 295-439.		6
413	Exceptional flame-retardant cellulosic foams modified with phosphorus-hybridized graphene nanosheets. Cellulose, 2019, 26, 1247-1260.	4.9	27
414	Preparation and properties of ultra-lightweight EPS concrete based on pre-saturated bentonite. Construction and Building Materials, 2019, 195, 505-514.	7.2	28

#	Article	IF	CITATIONS
415	A transparent insulation façade enhanced with a selective absorber: A cooling energy load and validated building energy performance prediction model. Energy and Buildings, 2019, 183, 266-282.	6.7	21
416	Stability investigations of the thermal insulating performance of aerogel blanket. Energy and Buildings, 2019, 185, 103-111.	6.7	36
417	A novel multilayer sandwich fabric-based composite material for infrared stealth and super thermal insulation protection. Composite Structures, 2019, 212, 58-65.	5.8	59
418	High voltage resistance ceramic coating fabricated on titanium alloy for insulation shielding application. Ceramics International, 2019, 45, 1909-1917.	4.8	11
419	Multi-objective optimization of heat transfer mechanisms of microcellular polymeric foams from thermal-insulation point of view. Thermal Science and Engineering Progress, 2019, 9, 21-29.	2.7	59
420	A material characterization and embodied energy study of novel clay-alginate composite aerogels. Energy and Buildings, 2019, 184, 88-98.	6.7	9
421	Mathematical Model Using Soft Computing Techniques for Different Thermal Insulation Materials. Journal of Intelligent Systems, 2019, 28, 821-833.	1.6	0
422	Porous polyurethane-polystyrene composites produced in a co-expansion process. Arabian Journal of Chemistry, 2020, 13, 37-44.	4.9	5
423	Flame-retardant agent and fire-retardant fabrics reinforced the polyurethane foam: Combustion resistance and mechanical properties. Journal of Sandwich Structures and Materials, 2020, 22, 2408-2420.	3.5	1
424	Modeling Microstructure Effect on Thermal Conductivity of Aerogel-Based Vacuum Insulation Panels. Heat Transfer Engineering, 2020, 41, 882-895.	1.9	8
425	Environmental Life Cycle Analysis of Earthen Building Materials. , 2020, , 63-68.		11
426	Characterization of Wood, Cork and Their Composites for Building Insulation. , 2020, , 44-59.		6
427	A 3D model to predict the influence of nanoscale pores or reduced gas pressures on the effective thermal conductivity of cellular porous building materials. Journal of Building Physics, 2020, 43, 277-300.	2.4	7
428	Effect of R-values changes in the baseline codes: Embodied energy and environmental life cycle impacts of building envelopes. Energy Reports, 2020, 6, 554-560.	5.1	11
429	Thermal Transport in 3D Nanostructures. Advanced Functional Materials, 2020, 30, 1903841.	14.9	83
430	A strong, flame-retardant, and thermally insulating wood laminate. Chemical Engineering Journal, 2020, 383, 123109.	12.7	69
431	Layer-by-layer modified low density cellulose fiber networks: A sustainable and fireproof alternative to petroleum based foams. Carbohydrate Polymers, 2020, 230, 115616.	10.2	21
432	Review of precast concrete sandwich panels and their innovations. Construction and Building Materials, 2020, 233, 117145.	7.2	85

#	Article	IF	CITATIONS
433	Advanced Materials for Highâ€Temperature Thermal Transport. Advanced Functional Materials, 2020, 30, 1904815.	14.9	63
434	Super-low thermal conductivity fibrous nanocomposite membrane of hollow silica/polyacrylonitrile. Composites Science and Technology, 2020, 188, 107992.	7.8	21
435	Potential energy savings and mitigation of emissions by insulation for residential buildings in Mexico. Energy and Buildings, 2020, 209, 109698.	6.7	23
436	Highly expanded, highly insulating polypropylene/polybutylene-terephthalate composite foams manufactured by nano-fibrillation technology. Materials and Design, 2020, 188, 108450.	7.0	39
437	Elastic Aerogels of Cellulose Nanofibers@Metal–Organic Frameworks for Thermal Insulation and Fire Retardancy. Nano-Micro Letters, 2020, 12, 9.	27.0	104
438	Microstructural design and thermal characterization of composite diatomite-vermiculite paraffin-based form-stable PCM for cementitious mortars. Construction and Building Materials, 2020, 232, 117167.	7.2	36
439	Retrofitting with different building materials: Life-cycle primary energy implications. Energy, 2020, 192, 116648.	8.8	31
440	Studies on active thermal insulation technology based on heat sink principle. Applied Thermal Engineering, 2020, 167, 114758.	6.0	2
441	A review of the challenges posed by the use of vacuum panels in external insulation finishing systems. Applied Energy, 2020, 257, 114028.	10.1	65
442	Investigation of mechanical and thermal properties of nano SiO ₂ /hydrophobic silica aerogel coâ€doped concrete with thermal insulation properties. Structural Concrete, 2020, 21, 1123-1133.	3.1	15
443	Thermophysical heat storage for cooling, heating, and power generation: A review. Applied Thermal Engineering, 2020, 166, 114728.	6.0	46
444	Composition of cooling load formed by non-transparent envelopes of a common office building under air-conditioning intermittent operation. Journal of Building Physics, 2020, 43, 528-544.	2.4	6
445	Green and High-Expansion PLLA/PDLA Foams with Excellent Thermal Insulation and Enhanced Compressive Properties. Industrial & Engineering Chemistry Research, 2020, 59, 19244-19251.	3.7	27
446	Polyimide-Based Foams: Fabrication and Multifunctional Applications. ACS Applied Materials & Interfaces, 2020, 12, 48246-48258.	8.0	61
447	Enhancing the mechanical and thermal properties of aerated geopolymer concrete using porous lightweight aggregates. Construction and Building Materials, 2020, 264, 120713.	7.2	48
448	Experimental and numerical study on the thermal performance of polycarbonate panels. Journal of Building Engineering, 2020, 32, 101715.	3.4	4
449	Stimuli-responsive micro/nanoporous hairy skin for adaptive thermal insulation and infrared camouflage. Materials Horizons, 2020, 7, 3258-3265.	12.2	53
450	Residual gas analysis in vacuum insulation panel (VIP) with glass fiber core and investigation of getter for VIP. Building and Environment, 2020, 186, 107337.	6.9	12

#	Article	IF	CITATIONS
451	Feasibility study of an off-grid container unit for industrial construction. Sustainable Cities and Society, 2020, 61, 102335.	10.4	7
452	Silica Aerogel Thermal Insulation Coating as Commodity Usage. IOP Conference Series: Materials Science and Engineering, 2020, 811, 012009.	0.6	1
453	Computational simulation of the temperature distribution of aerogel–based coated and uncoated multi–layer panels for thermal insulation. IOP Conference Series: Materials Science and Engineering, 2020, 844, 012070.	0.6	2
454	Comparative analysis of building insulation material properties and performance. Renewable and Sustainable Energy Reviews, 2020, 131, 110038.	16.4	180
455	Ultralight and robust aerogels based on nanochitin towards water-resistant thermal insulators. Carbohydrate Polymers, 2020, 248, 116755.	10.2	28
456	Exceeding the Applicability Limit of Aerogel Super Insulation Materials in Different Environmental Conditions. Applied Sciences (Switzerland), 2020, 10, 7824.	2.5	2
457	Thermally Insulating Nanocelluloseâ€Based Materials. Advanced Materials, 2021, 33, e2001839.	21.0	153
458	Effectiveness of VIPs and PCMs on the energy performance and thermal comfort in buildings. , 2020, , .		2
459	Thermal Conductivity of Silica-aerogel (SA) and Autoclave Aerated Concrete (AAC) Composites. E3S Web of Conferences, 2020, 172, 21007.	0.5	6
460	Experimental study of the thermal performance of a building wall with vacuum insulation panels and extruded polystyrene foams. Applied Thermal Engineering, 2020, 180, 115801.	6.0	29
461	Eco-Friendly Thermal Insulation Structures Based on Natural and Biodegradable Materials for Environmentally Durable Development. Solid State Phenomena, 0, 305, 97-102.	0.3	1
462	Preparation and Characterization of a Type of Green Vacuum Insulation Panel Prepared with Straw Core Material. Materials, 2020, 13, 4604.	2.9	5
463	Ultrastrong, Superelastic, and Lamellar Multiarch Structured ZrO ₂ –Al ₂ O ₃ Nanofibrous Aerogels with High-Temperature Resistance over 1300 °C. ACS Nano, 2020, 14, 15616-15625.	14.6	131
464	An experimental investigation and fractal modeling on the effective thermal conductivity of novel autoclaved aerated concrete (AAC)-based composites with silica aerogels (SA). Applied Thermal Engineering, 2020, 179, 115770.	6.0	23
465	A prospective Study on the Evolution of Airtightness in 41 low energy Dwellings. E3S Web of Conferences, 2020, 172, 05005.	0.5	4
466	The integration of selected technology to energy activated ETICS - theoretical approach. E3S Web of Conferences, 2020, 172, 21004.	0.5	2
467	Anti-flammability, mechanical and thermal properties of bio-based rigid polyurethane foams with the addition of flame retardants. RSC Advances, 2020, 10, 32156-32161.	3.6	21
468	Piezoelectric pressure sensors based on GO-modified P(VDF-TrFE) fibers for vacuum applications. Journal of Materials Science: Materials in Electronics, 2020, 31, 18627-18639.	2.2	14

		CITATION RE	PORT	
#	Article		IF	Citations
469	Hollow Silica Particles: Recent Progress and Future Perspectives. Nanomaterials, 2020, 10	, 1599.	4.1	46
470	Elytra-Mimetic Aligned Composites with Air–Water-Responsive Self-Healing and Self-Gro Capability. ACS Nano, 2020, 14, 12546-12557.	wing	14.6	15
471	Optimising Embodied Energy and Thermal Performance of Thermal Insulation in Building E an Automated Building Information Modelling (BIM) Tool. Buildings, 2020, 10, 218.	nvelopes via	3.1	17
472	Design and Fabrication of Partially Foamed Grid Structure Using Additive Manufacturing a State Foaming. Processes, 2020, 8, 1594.	nd Solid	2.8	10
473	Multifunctional polyurethane foams with thermal energy storage/release capability. Journa Thermal Analysis and Calorimetry, 2022, 147, 297-313.	ll of	3.6	7
474	Study on pore structure and thermal conductivity of aerogel enhanced porous geopolyme of Thermal Analysis and Calorimetry, 2022, 147, 1061-1070.	rs. Journal	3.6	3
475	Modeling of an Aerogel-Based "Thermal Break―for Super-Insulated Window Frames. I 10, 60.	3uildings, 2020,	3.1	7
476	Inorganic thermal insulation material prepared from pitchstone. Journal of Building Engine 2020, 32, 101745.	ering,	3.4	5
477	Integrated multifunctional macrostructures for electromagnetic wave absorption and shie Journal of Materials Chemistry A, 2020, 8, 24368-24387.	lding.	10.3	145
478	Correlation Between Ultrasonic Pulse Velocity and Thermal Conductivity of Cement-Based Composites. Journal of Nondestructive Evaluation, 2020, 39, 1.		2.4	9
479	Controlling Surface Chemical States of Halloysite Aerogel for Concrete Composites with In Thermal Insulation. Journal of Materials in Civil Engineering, 2020, 32, .	nproved	2.9	6
480	Recent Developments in Thermally Insulating Materials Based on Geopolymers—a Review Mining, Metallurgy and Exploration, 2020, 37, 995-1014.	v Article.	0.8	10
481	Energy performance of existing residential buildings in Europe: A novel approach combinir with seismic retrofitting. Energy and Buildings, 2020, 223, 110024.	ıg energy	6.7	99
482	Emerging Bioinspired Artificial Woods. Advanced Materials, 2021, 33, e2001086.		21.0	54
483	3D graphene and boron nitride structures for nanocomposites with tailored thermal conductor recent advances and perspectives. Functional Composites and Structures, 2020, 2, 02200	uctivities:)1.	3.4	21
484	Evaluation of the performance for a dynamic insulation system suitable for switchable buil envelope. Energy and Buildings, 2020, 222, 110025.	ding	6.7	35
485	Cost-effectiveness of environmental impact abatement measures in a European pig produ Agricultural Systems, 2020, 182, 102843.	ction system.	6.1	15
486	Sustainable polypropylene nanocomposite for lightweight and low thermal conductivity a Procedia Manufacturing, 2020, 43, 567-575.	pplication.	1.9	2

#	Article	IF	Citations
487	A carbon nanotube approach for efficient thermally insulating material with high mechanical stability and fire-retardancy. RSC Advances, 2020, 10, 21772-21780.	3.6	4
488	Solvents, CO2 and biopolymers: Structure formation in chitosan aerogel. Carbohydrate Polymers, 2020, 247, 116680.	10.2	17
489	A dimensional stable hydrogel-born foam with enhanced mechanical and thermal insulation and fire-retarding properties via fast microwave foaming. Chemical Engineering Journal, 2020, 399, 125781.	12.7	27
490	Hybrid Structures Made of Polyurethane/Graphene Nanocomposite Foams Embedded within Aluminum Open-Cell Foam. Metals, 2020, 10, 768.	2.3	22
491	Three-Dimensional Graphene Hybrid SiO2 Hierarchical Dual-Network Aerogel with Low Thermal Conductivity and High Elasticity. Coatings, 2020, 10, 455.	2.6	9
492	Wood-based resins and other bio-based binders for the production of mineral wool. Holzforschung, 2020, 74, 539-550.	1.9	8
493	A Stochastic Approach to LCA of Internal Insulation Solutions for Historic Buildings. Sustainability, 2020, 12, 1535.	3.2	18
494	Flexible and Robust Biomaterial Microstructured Colored Textiles for Personal Thermoregulation. ACS Applied Materials & Interfaces, 2020, 12, 19015-19022.	8.0	97
495	Construction and characterization of versatile flexible composite nanofibrous aerogels based on thermoplastic polymeric nanofibers. Journal of Materials Science, 2020, 55, 8155-8169.	3.7	7
496	Thermal Diffusion in Fibrous Aerogel Blankets. Energies, 2020, 13, 823.	3.1	9
497	Formation of novel "coral reef-like―structures for polycarbonate microcellular foam via asphalt-based microporous organic polymers and supercritical CO2. European Polymer Journal, 2020, 134, 109780.	5.4	8
498	Change in Conductive–Radiative Heat Transfer Mechanism Forced by Graphite Microfiller in Expanded Polystyrene Thermal Insulation—Experimental and Simulated Investigations. Materials, 2020, 13, 2626.	2.9	7
499	Application of phase change material foam composites in the built environment: A critical review. Renewable and Sustainable Energy Reviews, 2020, 131, 110008.	16.4	73
500	Anisotropic and hierarchical SiC@SiO ₂ nanowire aerogel with exceptional stiffness and stability for thermal superinsulation. Science Advances, 2020, 6, eaay6689.	10.3	164
501	A review of approaches to low-carbon transition of high-rise residential buildings in China. Renewable and Sustainable Energy Reviews, 2020, 131, 109990.	16.4	38
502	Valorization of agro-industry residues in the building and environmental sector: A review. Waste Management and Research, 2020, 38, 487-513.	3.9	48
503	Research and selection of methods for operational control of diffusion coefficient in block products made of capillary-porous materials. Journal of Physics: Conference Series, 2020, 1441, 012052.	0.4	0
504	Multi-scale simulation study on the hygrothermal behavior of closed-cell thermal insulation. Energy, 2020, 196, 117142.	8.8	4

#	Article	IF	CITATIONS
505	Characterisation of a multilayer external wall thermal insulation system. Application in a Mediterranean climate. Journal of Building Engineering, 2020, 30, 101265.	3.4	22
506	Qualitative and quantitative optimization of thermal insulation materials: Insights from the market and energy codes. Journal of Building Engineering, 2020, 30, 101275.	3.4	20
507	Biomimetic structural cellulose nanofiber aerogels with exceptional mechanical, flame-retardant and thermal-insulating properties. Chemical Engineering Journal, 2020, 389, 124449.	12.7	163
508	Heat and air transport in differently compacted fibre materials. Journal of Industrial Textiles, 2020, , 152808371990038.	2.4	1
509	Palm oil-based bio-PCM for energy efficient building applications: Multipurpose thermal investigation and life cycle assessment. Journal of Energy Storage, 2020, 28, 101129.	8.1	56
510	Strong silica-nanocellulose anisotropic composite foams combine low thermal conductivity and low moisture uptake. Cellulose, 2020, 27, 10825-10836.	4.9	20
511	Solar energy potential of urban buildings in 10 cities of China. Energy, 2020, 196, 117038.	8.8	72
512	Directional Freezeâ€Casting: A Bioinspired Method to Assemble Multifunctional Aligned Porous Structures for Advanced Applications. Advanced Engineering Materials, 2020, 22, 2000033.	3.5	100
513	TEOS and Na2SiO3 as silica sources: study of synthesis and characterization of hollow silica nanospheres as nano thermal insulation materials. Applied Nanoscience (Switzerland), 2020, 10, 1833-1844.	3.1	8
514	Optimization on non-transparent envelopes of the typical office rooms with air-conditioning under intermittent operation. Solar Energy, 2020, 201, 798-809.	6.1	16
515	High Functionality Bio-Polyols from Tall Oil and Rigid Polyurethane Foams Formulated Solely Using Bio-Polyols. Materials, 2020, 13, 1985.	2.9	35
516	Monolithic resorcinol–formaldehyde alcogels and their corresponding nitrogen-doped activated carbons. Journal of Sol-Gel Science and Technology, 2020, 95, 719-732.	2.4	11
517	Development of flowable ultra-lightweight concrete using expanded glass aggregate, silica aerogel, and prefabricated plastic bubbles. Journal of Building Engineering, 2020, 31, 101399.	3.4	40
518	Construction of ultraâ€stable perovskite–polymer fibre membranes by electrospinning technology and its application to lightâ€emitting diodes. Polymer International, 2021, 70, 90-95.	3.1	6
519	Enhancing building energy performance by effectively using phase change material and dynamic insulation in walls. Applied Energy, 2021, 283, 116306.	10.1	88
520	Development of cost effective ultra-lightweight cellulose-based sound absorbing material over silica sol/natural fiber blended substrate. Carbohydrate Polymers, 2021, 255, 117369.	10.2	12
521	Thermal insulation coatings based on microporous particles from Pickering emulsion polymerization. Progress in Organic Coatings, 2021, 151, 106023.	3.9	9
522	Humidity-Dependent Thermal Boundary Conductance Controls Heat Transport of Super-Insulating Nanofibrillar Foams. Matter, 2021, 4, 276-289.	10.0	20

#	Article	IF	CITATIONS
523	Experimental evaluation of cooling characteristic, airflow distribution and mass transfer in a cold store. Journal of Food Process Engineering, 2021, 44, e13609.	2.9	6
524	Metal-graphene-synergized melamine aerogel with robust elasticity and flame-retardancy for thermal-insulated-packaging industry. Composites Part A: Applied Science and Manufacturing, 2021, 140, 106195.	7.6	11
525	Synthesis and synergistic flameâ€retardant effects of rigid polyurethane foams used reactive <scp>DOPO</scp> â€based polyols combination with expandable graphite. Journal of Applied Polymer Science, 2021, 138, 50223.	2.6	14
526	Molecular dynamics simulations of energy accommodation between gases and polymers for ultra-low thermal conductivity insulation. International Journal of Heat and Mass Transfer, 2021, 164, 120459.	4.8	14
527	Alkali-extracted tree bark for efficient bio-based thermal insulation. Construction and Building Materials, 2021, 271, 121577.	7.2	18
528	Failure mechanism of geopolymer composite lightweight sandwich panel under flexural and edgewise compressive loads. Construction and Building Materials, 2021, 270, 121496.	7.2	8
529	Nanowires: Synthesis and Energy/Environmental Applications. Energy and Environmental Materials, 2021, 4, 544-561.	12.8	21
530	Current Practices in Energy Retrofit of Buildings. Springer Tracts in Civil Engineering, 2021, , 1-41.	0.5	1
531	Nacre-Inspired Sustainable Coatings with Remarkable Fire-Retardant and Energy-Saving Cooling Performance. , 2021, 3, 243-248.		33
533	A direct foaming approach for carbon nanotube aerogels with ultra-low thermal conductivity and high mechanical stability. Nanoscale, 2021, 13, 11878-11886.	5.6	6
534	Ethylene-bridged polysilsesquioxane/hollow silica particle hybrid film for thermal insulation material. RSC Advances, 2021, 11, 24968-24975.	3.6	10
536	Fabrication and application of macroscopic nanowire aerogels. Nanoscale, 2021, 13, 7430-7446.	5.6	8
537	Thirteen scarce resources analyzed. , 2021, , 147-380.		1
538	Performance of aerogel as a thermal insulation material towards a sustainable design of residential buildings for tropical climates in Nigeria. Energy and Built Environment, 2022, 3, 291-315.	5.9	8
539	Properties of a New Insulation Material Glass Bubble in Geopolymer Concrete. Materials, 2021, 14, 809.	2.9	23
540	Thermal properties of calcium sulfoaluminate cement-based mortars incorporated with expanded perlite cured at cold temperatures. Construction and Building Materials, 2021, 274, 122082.	7.2	20
541	Can vacuum insulation panels be cost-effective when applied in building façades?. Building and Environment, 2021, 191, 107602.	6.9	12
542	Crack- and Shrinkage-Free Ethylene-Bridged Polysilsesquioxane Film Prepared by a Hydrosilylation Reaction. ACS Omega, 2021, 6, 8430-8437.	3.5	10

#	Article	IF	Citations
543	Mechanical and Physical Characterisation of Typha domingensis-Based Thermal Insulation Boards for Developing Areas such as Nigeria. Waste and Biomass Valorization, 2021, 12, 5795-5806.	3.4	1
544	The influence of <scp>nanoâ€silica</scp> on the thermal conductivity of polyurethane foam. Journal of Applied Polymer Science, 2021, 138, 50715.	2.6	10
545	Delignified Wood from Understanding the Hierarchically Aligned Cellulosic Structures to Creating Novel Functional Materials: A Review. Advanced Sustainable Systems, 2021, 5, 2000251.	5.3	70
546	Natural cork agglomerate enabled mechanically robust rigid polyurethane foams with outstanding viscoelastic damping properties. Polymer, 2021, 217, 123437.	3.8	12
547	Recent Developments in Nanocellulose-Based Aerogels in Thermal Applications: A Review. ACS Nano, 2021, 15, 3849-3874.	14.6	122
548	Conversion of End-of-Life Household Materials into Building Insulating Low-Cost Solutions for the Development of Vulnerable Contexts: Review and Outlook towards a Circular and Sustainable Economy. Sustainability, 2021, 13, 4397.	3.2	9
549	Mechanical evolutionary behavior of steam•ured concrete under the coupling effect of flexural fatigue and minus temperature. Structural Concrete, 0, , .	3.1	0
550	Modulation of Interfacial Thermal Transport between Fumed Silica Nanoparticles by Surface Chemical Functionalization for Advanced Thermal Insulation. ACS Applied Materials & Interfaces, 2021, 13, 17404-17411.	8.0	12
551	Preparing Multifunctional High-Performance Cross-Linked Polybenzoxazole Aerogels from Polybenzoxazine. ACS Applied Polymer Materials, 2021, 3, 2352-2362.	4.4	24
552	Characterization of Thermal Inertia and Footprint Carbon of Clay-Wool, Clay-Cork, and Clay-Plastic Composites. Key Engineering Materials, 0, 886, 213-227.	0.4	0
553	Flame retardant rigid polyurethane foam composites based on microencapsulated ammonium polyphosphate and microencapsulated expanded graphite. Journal of Macromolecular Science - Pure and Applied Chemistry, 2021, 58, 659-668.	2.2	11
554	Synthesis and characterization of phosphorus-based flame retardant containing rigid polyurethane foam. Journal of Thermal Analysis and Calorimetry, 2022, 147, 4119-4129.	3.6	19
555	An inorganic thermal insulation material with good performance prepared from obsidian. Magazine of Concrete Research, 2022, 74, 354-363.	2.0	0
557	Highly compressible, heat-insulating and self-extinguishing cellulose nanofiber/aramid nanofiber nanocomposite foams. Carbohydrate Polymers, 2021, 261, 117837.	10.2	48
558	Experimental verification of thermal properties of the aerogel blanket. Case Studies in Thermal Engineering, 2021, 25, 100966.	5.7	31
559	Hollow Silica Particles: A Novel Strategy for Cost Reduction. Nanomaterials, 2021, 11, 1627.	4.1	5
560	Present Status and Future Prospects of Jute in Nanotechnology: A Review. Chemical Record, 2021, 21, 1631-1665.	5.8	97
561	Experimental and CFD Investigation on the Application for Aerogel Insulation in Buildings. Energies, 2021, 14, 3310.	3.1	10

ARTICLE IF CITATIONS # Scarce mineral resources: Extraction, consumption and limits of sustainability. Resources, 562 10.8 51 Conservation and Recycling, 2021, 169, 105511. Tourist accommodation, climate change and mitigation: An assessment for Austria. Journal of Outdoor Recreation and Tourism, 2021, 34, 100367. Influence of agricultural fibers size on mechanical and insulating properties of innovative 564 7.2 14 chitosan-based insulators. Construction and Building Materials, 2021, 287, 123071. Finite element modeling based thermodynamic simulation of aerogel embedded nonwoven thermal 565 4.9 insulation material. International Journal of Thermal Sciences, 2021, 164, 106898. Measuring thermophysical properties of building insulation materials using transient plane heat 566 6.7 17 source method. Energy and Buildings, 2021, 240, 110891. Impact of façade design on indoor air temperatures and cooling loads in residential buildings in the tropical climate. Energy and Buildings, 2021, 243, 110972. 6.7 Novel Technologies to Enhance Energy Performance and Indoor Environmental Quality of Buildings. 568 3.1 2 Buildings, 2021, 11, 303. Temperature-Responsive Intumescent Chemistry toward Fire Resistance and Super Thermal Insulation 6.7 under Extremely Harsh Conditions. Chemistry of Materials, 2021, 33, 6018-6028. Thermal conductivity of untreated and chemically treated poplar bark and wood. Holzforschung, 570 1.9 8 2021, 75, 1125-1135. Fire performance of piperazine phytate modified rigid polyurethane foam composites. Polymers for 571 3.2 Advanced Technologies, 2021, 32, 4531-4546. Critical Review of Polymeric Building Envelope Materials: Degradation, Durability and Service Life 572 3.115 Prediction. Buildings, 2021, 11, 299. Investigation of transient heat transfer in multi-scale PCM composites using a semi-analytical model. 4.8 International Journal of Heat and Mass Transfer, 2021, 175, 121389. Strategies for Preparing Continuous Ultraflexible and Ultrastrong Poly(Vinyl Alcohol) Aerogel 574 Fibers with Excellent Thermal Insulation. Macromolecular Materials and Engineering, 2021, 306, 3.6 20 2100399. Experimental and Numerical Analyses of Thermal Storage Tile-Bricks for Efficient Thermal Management of Buildings. Buildings, 2021, 11, 357. 3.1 Strategies for Structural and Energy Improvement in Mid-Rise Unreinforced Masonry Apartment 576 3.2 4 Buildings. A Case Study in Mestre (Northeast Italy). Sustainability, 2021, 13, 8819. Melt Electrospinning of PET and Composite PET-Aerogel Fibers: An Experimental and Modeling Study. Materials, 2021, 14, 4699. Effect of density, phonon scattering and nanoporosity on the thermal conductivity of anisotropic 578 3.3 7 cellulose nanocrystal foams. Scientific Reports, 2021, 11, 18685. Cost Control and Project Cost Analysis of Intelligent Building under Internet of Things. Mobile 579 Information Systems, 2021, 2021, 1-12.

#	Article	IF	CITATIONS
580	Heating temperature effect on the hygroscopicity of expanded vermiculite. Ceramics International, 2021, 47, 25373-25380.	4.8	16
581	Introductory Chapter: Flame Retardant and Thermally Insulating Polymers. , 0, , .		3
582	Fabrication of Anisotropic Polyphosphazene/Bio-based Poly(urethane-acrylate) composite foams with High Thermal Insulation and Flame Retardancy. Polymer, 2021, 231, 124108.	3.8	12
583	The economics of thermal superinsulation in buildings. Energy and Buildings, 2021, 253, 111506.	6.7	21
584	Experimental study on improving the properties of rock wool and glass wool by silica aerogel. Energy and Buildings, 2021, 247, 111146.	6.7	11
585	Hygrothermal performance of a new aerogel-based insulating render through weathering: Impact on building energy efficiency. Building and Environment, 2021, 202, 108004.	6.9	13
586	Foam 3D printing for construction: A review of applications, materials, and processes. Automation in Construction, 2021, 130, 103861.	9.8	59
587	Innovative fire and water insulation foam using recycled plastic bags and expanded polystyrene (EPS). Construction and Building Materials, 2021, 305, 124785.	7.2	13
588	Slim curtain wall spandrel integrated with vacuum insulation panel: A state-of-the-art review and future opportunities. Journal of Building Engineering, 2021, 42, 102445.	3.4	7
589	Development of transparent composites using wheat straw fibers for light-transmitting building applications. Industrial Crops and Products, 2021, 170, 113685.	5.2	26
590	Numerical study of the feasibility of coupling vacuum isolation panels with phase change material for enhanced energy-efficient buildings. Energy and Buildings, 2021, 251, 111369.	6.7	2
591	Thermal conductivity of biobased insulation building materials measured by hot disk: Possibilities and recommendation. Journal of Building Engineering, 2021, 43, 102858.	3.4	10
592	Date palm wood waste-based composites for green thermal insulation boards. Journal of Building Engineering, 2021, 43, 103224.	3.4	15
593	Identifying practical sustainable retrofit measures for existing high-rise residential buildings in various climate zones through an integrated energy-cost model. Renewable and Sustainable Energy Reviews, 2021, 151, 111578.	16.4	24
594	An overview of factors influencing thermal conductivity of building insulation materials. Journal of Building Engineering, 2021, 44, 102604.	3.4	111
595	Conversion of food waste-derived lipid to bio-based polyurethane foam. Case Studies in Chemical and Environmental Engineering, 2021, 4, 100131.	6.1	9
596	Highly flexible and compressible polyimide/silica aerogels with integrated double network for thermal insulation and fire-retardancy. Journal of Materials Science and Technology, 2022, 105, 194-202.	10.7	60
597	Nanomaterials for Latent Thermal Energy Storage. , 2021, , 2661-2679.		0

#	Article	IF	CITATIONS
598	Understanding Thermal Insulation in Porous, Particulate Materials. Advanced Functional Materials, 2017, 27, 1702256.	14.9	74
599	Structural and Thermal Retrofitting of Masonry Walls: The Case of a School in Vittoria (RG). Lecture Notes in Computer Science, 2020, , 309-320.	1.3	1
600	Nanotech Based Vacuum Insulation Panels for Building Applications. , 2016, , 167-214.		4
601	Silica Aerogels: A Review of Molecular Dynamics Modelling and Characterization of the Structural, Thermal, and Mechanical Properties. , 2020, , 1575-1595.		7
602	Moisture Robustness During Retrofitting of Timber Frame Walls with Vacuum Insulation Panels: Experimental and Theoretical Studies. Building Pathology and Rehabilitation, 2013, , 183-210.	0.2	3
603	A Review on Thermo-mechanical Behaviour of CFRP-Concrete Composites at Elevated Temperature and Available Insulation Systems. Lecture Notes in Civil Engineering, 2021, , 533-541.	0.4	6
604	Laboratory Tests of High-Performance Thermal Insulations. Smart Innovation, Systems and Technologies, 2020, , 73-82.	0.6	8
605	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.	4.7	15
606	Thermal insulation using biodegradable poly(lactic acid)/date pit composites. Construction and Building Materials, 2020, 261, 120533.	7.2	30
607	Evaluating the impact of operating energy reduction measures on embodied energy. Energy and Buildings, 2020, 226, 110340.	6.7	29
608	Optically Transparent Bamboo with High Strength and Low Thermal Conductivity. ACS Applied Materials & Interfaces, 2021, 13, 1662-1669.	8.0	68
609	Sclerotization-Inspired Aminoquinone Cross-Linking of Thermally Insulating and Moisture-Resilient Biobased Foams. ACS Sustainable Chemistry and Engineering, 2020, 8, 17408-17416.	6.7	11
610	Evaluation of Dynamic Insulation Systems for Residential Buildings in Barcelona, Spain. ASME Journal of Engineering for Sustainable Buildings and Cities, 2020, 1, .	0.9	4
611	Thermal Exchange of Glass Micro-Fibers Measured by the 3ï‰ Technique. Journal of Heat Transfer, 2020, 142, .	2.1	7
612	Simultaneous changes of temperature and moisture of thermal conductivity of EPS insulation material and its impact on building energy performance. International Journal of Smart Grid and Clean Energy, 2019, , 217-225.	0.4	2
613	Simulaciones ambientales para la selección de materiales en diseño de alojamientos temporales en climas tropicales Revista De Arquitectura, 2014, 16, 96-104.	0.2	1
614	Effect of the air motion on the heat transport behaviour of wall structures. International Review of Applied Sciences and Engineering, 2017, 8, 67-73.	0.4	8
615	Engineering mesoporous silica for superior optical and thermal properties. MRS Energy & Sustainability, 2020, 7, 1.	3.0	11

#	Article	IF	CITATIONS
616	Advanced Fabrication and Applications of Cellulose Acetate Aerogels from Cigarette Butts. Materials Transactions, 2020, 61, 1550-1554.	1.2	10
617	Effect of silica aerogel on the thermal conductivity of cement paste for the construction of concrete buildings in sustainable cities. WIT Transactions on the Built Environment, 2014, , .	0.0	21
618	Numerical and Experimental Evaluation of the Drying Behaviour of Medium Density Expanded Cork Boards used as an External Coating. International Journal of Sustainable Development and Planning, 2017, 12, 315-325.	0.7	5
619	Sustainable and energy-efficient rehabilitation of the former hospital of San Salvatore in L'Aquila. WIT Transactions on the Built Environment, 2015, , .	0.0	1
620	Thermo-physical characteristics of acrylic-based building external isolation panels produced from different geological materials. Production Engineering Archives, 2018, 21, 12-19.	2.4	1
621	A Comparison Study for the Thermal and Physical Properties between "Al-Mangabi―and the Available Building Materials for the External Walls in Jeddah. International Journal of Engineering Research and Technology, 2020, 13, 1319.	0.3	1
622	Comparison of Material Compositions of Exterior Wall in term of Environmental and Energy Performance. , 2014, , .		1
623	Life cycle assessment of regional brick manufacture. Materiales De Construccion, 2016, 66, e085.	0.7	6
624	The Evaluation of Energy Saving using Ultrathin Heat Insulation in Railway Electrification Substation. Transactions of the Korean Institute of Electrical Engineers, 2015, 64, 171-175.	0.1	3
625	Recent Research Trends for Green Building Thermal Insulation Materials. Clean Technology, 2012, 18, 14-21.	0.1	6
626	Thermal management materials for energy-efficient and sustainable future buildings. Chemical Communications, 2021, 57, 12236-12253.	4.1	19
627	Comparison of nanoclay/polyvinyl alcohol aerogels scale production: Life Cycle Assessment. Chemical Engineering Research and Design, 2021, 176, 243-253.	5.6	1
628	Life cycle cost assessment and multi-criteria decision analysis of environment-friendly building insulation materials - A review. Energy and Buildings, 2022, 254, 111582.	6.7	51
629	Lightweight and multiscale needle quartz fiber felt reinforced siliconoxycarbide modified phenolic aerogel nanocomposite with enhanced mechanical, insulative and flame-resistant properties. Composites Science and Technology, 2022, 217, 109100.	7.8	38
630	Ultra-light poly(lactic acid)/SiO2 aerogel composite foam: A fully biodegradable and full life-cycle sustainable insulation material. International Journal of Biological Macromolecules, 2021, 192, 1029-1039.	7.5	17
633	A New Framework and Core Elements. Green Energy and Technology, 2015, , 179-203.	0.6	0
634	Technology Assessment of Insulation Material for Home Construction. Innovation, Technology and Knowledge Management, 2015, , 417-454.	0.8	0
635	Calculation of Humidity of Autoclave Cellular Composites Under Service Conditions. , 2015, , .		0

#	Article	IF	CITATIONS
636	Layout Synthesis for Symmetrical Facades. IFIP Advances in Information and Communication Technology, 2015, , 293-306.	0.7	0
637	Building Thermal Renovation Overview. Lecture Notes in Computer Science, 2015, , 379-385.	1.3	Ο
638	Pomiar wÅ,aÅ›ciwoÅ›ci cieplnych materiaÅ,ów budowlanych przy zastosowaniu różnej aparatury pomiarowej – analiza wyników. Journal of Civil Engineering, Environment and Architecture, 2015, XXXII, 603-610.	0.0	1
639	Bio-Based Polyurethane Foams for Heat-Insulating Applications. , 2016, , 357-373.		3
640	Reviewing the Learning Process through Creative Puzzle Solving. Creative Education, 2017, 08, 2009-2035.	0.4	4
641	Moisture condition of building materials in different operating conditions. , 2017, , .		ο
642	VOC Emissions from Spray Foam Insulation Under Different Application Conditions. , 2017, , 278-290.		0
643	İnşaat Sektöründe Kullanılan Yalıtım Malzemelerinin Isı ve Ses Yalıtımı Açısından Değe Journal of Polytechnic, 0, , .	erlendirilm 0.7	ieși.
644	MICROBIAL DIVERSITY AND PHYLOGENETIC STUDIES OF SOME MICROBES OBTAINED FROM UNEXPLORED CAVES OF SAUDI ARABIA. Journal of Experimental Biology and Agricultural Sciences, 2018, 6, 342-651.	0.4	0
645	Framework for an integrated system for enhancing the energy efficiency and structural performance of buildings. , 2018, , .		0
647	Dıştan yalıtım uygulamalarında farklı duvar modelleri için optimum yalıtım kalınlıklarının ekonomik analizler. DÜMF Mühendislik Dergisi, 2019, 10, 275-288.	belirlenm 0.2	eşi ve
648	Novel Techniques for Saving Energy Consumption in Air Conditioning Systems. , 0, , .		Ο
649	Influence of Carding and Pressing on Hygrothermal Properties and Fire Reaction of Hemp Fiber Nonwoven Mats. Advances in Sciences and Engineering, 2019, 11, 78-89.	0.1	0
650	Nanomaterials for Latent Thermal Energy Storage. , 2020, , 1-19.		2
651	MULTISCALE APPROACH OF THE EQUIVALENT THERMAL CONDUCTIVITY OF MODIFIED FOAM-FILLED AND NON-FILLED HOLLOW BRICK AND A BRICK WALL. Journal of Thermal Engineering, 0, , 190-203.	1.6	1
652	Numerical modeling of effective thermal conductivity of hollow silica nanosphere packings. International Journal of Heat and Mass Transfer, 2022, 182, 122032.	4.8	5
653	Foams and their applications. Supercritical Fluid Science and Technology, 2021, 9, 1-20.	0.5	3
654	Applications of Sol-Gel Processing. , 2020, , 597-685.		3

#	Article	IF	CITATIONS
655	imagery and abstraction trend of Chinese contemporary oil painting. Linguistics and Culture Review, 2021, 5, 454-471.	0.3	8
656	Acoustical and thermal characterization of sustainable materials derived from vegetable, agricultural, and animal fibers. Applied Acoustics, 2022, 187, 108520.	3.3	32
657	Experimental study of using Aerogel insulation for residential buildings. Advances in Building Energy Research, 2022, 16, 569-588.	2.3	4
658	Highly Stretchable, Crack-Insensitive and Compressible Ceramic Aerogel. ACS Nano, 2021, 15, 18354-18362.	14.6	55
659	Multi-Criteria Decision-Making Method for Sustainable Energy-Saving Retrofit Façade Solutions. Sustainability, 2021, 13, 13168.	3.2	6
660	The impact of temperature and relative humidity dependent thermal conductivity of insulation materials on heat transfer through the building envelope. Journal of Building Engineering, 2022, 46, 103700.	3.4	18
661	Sustainability of biomass-based insulation materials in buildings: Current status in France, end-of-life projections and energy recovery potentials. Renewable and Sustainable Energy Reviews, 2022, 156, 111962.	16.4	65
662	Improving thermal performance of existing uninsulated R.C. domes through passive cooling measures using polyurethane foam in double skin layer in hot climate Case Studies in Construction Materials, 2022, 16, e00866.	1.7	0
663	Innovation and development of vacuum insulation panels in China: A state-of-the-art review. Journal of Building Engineering, 2022, 48, 103937.	3.4	6
664	THE ROLE OF PROTECTIVE VARNISHES IN THE TREATMENT OF INITIAL CARIES. Contemporary Materials, 2016, 7, .	0.1	3
665	Acoustic and thermal performance of polypropylene nonwoven fabrics for insulation in buildings. Journal of Building Engineering, 2022, 50, 104125.	3.4	13
666	Low density rigid polyurethane foam incorporated with renewable polyol as sustainable thermal insulation material. Journal of Cellular Plastics, 2022, 58, 485-503.	2.4	8
667	A simple and efficient method for preparing covalent organic framework aerogels with ultra-light and super-elastic. Microporous and Mesoporous Materials, 2022, 331, 111623.	4.4	11
668	Simplification and Improvement of the Efficiency of Testing Thermophysical Properties of Facade Composite Materials. Key Engineering Materials, 0, 906, 77-83.	0.4	0
669	Superinsulating BNNS/PVA Composite Aerogels with High Solar Reflectance for Energy-Efficient Buildings. Nano-Micro Letters, 2022, 14, 54.	27.0	36
671	Sugarcane bagasse waste fibers as novel thermal insulation and sound-absorbing materials for application in sustainable buildings. Building and Environment, 2022, 211, 108753.	6.9	63
672	Morphological differentiation for the environmental adaptation of biomimetic buildings: Skins, surfaces, and structures. , 2022, , 439-466.		0
673	Thermal insulation of buildings through classical materials and nanomaterials. , 2022, , 277-303.		1

#	Article	IF	CITATIONS
674	Life Cycle Environmental Sustainability and Energy Assessment of Timber Wall Construction: A Comprehensive Overview. Sustainability, 2022, 14, 4161.	3.2	14
675	Thermal and Mechanical Characterisation of Sandwich Core Materials for Climatic Chamber Shells Subjected to High Temperatures. Energies, 2022, 15, 2089.	3.1	1
676	Proton Donor-Regulated Mechanically Robust Aramid Nanofiber Aerogel Membranes for High-Temperature Thermal Insulation. ACS Nano, 2022, 16, 5984-5993.	14.6	67
677	Structure–Thermal Property Relationships of Polysilsesquioxanes for Thermal Insulation Materials. ACS Applied Polymer Materials, 2022, 4, 2851-2859.	4.4	7
678	Limited interdisciplinary knowledge transfer as a missing link for sustainable building retrofits in the residential sector. Journal of Cleaner Production, 2022, 343, 131079.	9.3	10
679	Research Development in Silica Aerogel Incorporated Cementitious Composites—A Review. Polymers, 2022, 14, 1456.	4.5	13
680	Optimization of the thermal conductivity test for building insulation materials under multifactor impact. Construction and Building Materials, 2022, 332, 127380.	7.2	19
681	Directly foamed geopolymers: A review of recent studies. Cement and Concrete Composites, 2022, 130, 104530.	10.7	25
682	Effect of mixing conditions on the density, morphology, thermal and mechanical properties of mineral foam. Journal of Building Engineering, 2022, 52, 104410.	3.4	4
683	Thermal performance analysis of building construction with insulated walls in summer days and nights. Journal of Central South University, 2021, 28, 3613-3625.	3.0	3
684	Reducing construction costs by optimizing fencing structures on the example of block-modular buildings. Construction and Geotechnics, 2021, 12, 64-78.	0.3	0
685	Passive solar house prototype design with a new bio-based material for a semi-arid climate. Materials for Renewable and Sustainable Energy, 2022, 11, 1-15.	3.6	2
686	Fabrication of cellulose-based aerogel for thermal and acoustic insulation applications. IOP Conference Series: Earth and Environmental Science, 2021, 947, 012030.	0.3	2
687	Coloured low-emissivity films for building envelopes for year-round energy savings. Nature Sustainability, 2022, 5, 339-347.	23.7	80
688	Multiscale Thermal Investigations of Graphite Doped Polystyrene Thermal Insulation. Polymers, 2022, 14, 1606.	4.5	8
690	Interactions between Seismic Safety and Energy Efficiency for Masonry Infill Walls: A Shift of the Paradigm. Energies, 2022, 15, 3269.	3.1	5
691	Organic–Inorganic Hybrid Thermal Insulation Materials Prepared via Hydrosilylation of Polysilsesquioxane Having Hydrosilyl Groups and Triallylisocyanurate. ACS Applied Polymer Materials, 2022, 4, 3726-3733.	4.4	5
692	Nanostructurally Controllable Strong Wood Aerogel toward Efficient Thermal Insulation. ACS Applied Materials & amp; Interfaces, 2022, 14, 24697-24707.	8.0	34

#	Article	IF	CITATIONS
693	A lightweight thermally insulating and moisture-stable composite made of hollow silica particles. RSC Advances, 2022, 12, 15373-15377.	3.6	5
694	Mechanically flexible polyimide foams with different chain structures for high temperature thermal insulation purposes. Materials Today Physics, 2022, 26, 100720.	6.0	9
696	A Stiff, Tough, and Thermally Insulating Air- and Ice-Templated Plant-Based Foam. Biomacromolecules, 2022, 23, 2595-2602.	5.4	6
697	Water-Induced Self-Assembly and <i>In Situ</i> Mineralization within Plant Phenolic Glycol-Gel toward Ultrastrong and Multifunctional Thermal Insulating Aerogels. ACS Nano, 2022, 16, 9062-9076.	14.6	38
698	Innovative seismic and energy retrofitting of wall envelopes using prefabricated textile-reinforced concrete panels with an embedded capillary tube system. Engineering Structures, 2022, 265, 114453.	5.3	19
699	Dynamic insulation systems of building envelopes: A review. Energy and Buildings, 2022, 270, 112268.	6.7	33
700	Development of a Novel Experimental Facility to Assess Heating Systems' Behaviour in Buildings. Energies, 2022, 15, 4615.	3.1	0
701	Synergistic effect of silica aerogels and hollow glass microspheres on microstructure and thermal properties of rigid polyurethane foam. Journal of Non-Crystalline Solids, 2022, 592, 121753.	3.1	14
702	Hybrid thermal management strategy with PCM and insulation materials for pulsed-power source controller in extreme oil-well thermal environment. Applied Thermal Engineering, 2022, 214, 118864.	6.0	13
703	Nanomaterials for construction building products designed to withstand natural disasters. , 2022, , 19-42.		2
704	Fabrication and Characterization of Nanostructured Rock Wool as a Novel Material for Efficient Water-Splitting Application. Nanomaterials, 2022, 12, 2169.	4.1	4
705	Improving the Insulating Capacity of Polyurethane Foams through Polyurethane Aerogel Inclusion: From Insulation to Superinsulation. Nanomaterials, 2022, 12, 2232.	4.1	8
706	Thermal and mechanical properties of concrete containing porcelain ceramic tile waste as fine and coarse aggregates. Magazine of Concrete Research, 0, , 1-33.	2.0	5
707	Super-Insulating Transparent Polyisocyanurate-Polyurethane Aerogels: Analysis of Thermal Conductivity and Mechanical Properties. Nanomaterials, 2022, 12, 2409.	4.1	6
708	Evaluation Method on Energy-Efficient Retrofitting of Wooden Walls of Chinese Traditional Dwelling—A Case Study of Rendetang in Jinhua. Buildings, 2022, 12, 1017.	3.1	3
709	Thermally adaptive walls for buildings applications: A state of the art review. Energy and Buildings, 2022, 271, 112314.	6.7	13
710	Residential Building Envelope Energy Retrofit Methods, Simulation Tools, and Example Projects: A Review of the Literature. Buildings, 2022, 12, 954.	3.1	14
711	Experimental assessment for the thermal performance of scrap tire blocks as external wall insulators. Engineering Reports, 0, , .	1.7	0

#	Article	IF	CITATIONS
712	Thermal Behaviour and Micro Climate Studies of Several Wall Insulation on Houses in a Tropical Climate (Aw) Area. IOP Conference Series: Earth and Environmental Science, 2022, 1058, 012019.	0.3	1
713	A non-volatile thermal switch for building energy savings. Cell Reports Physical Science, 2022, 3, 100960.	5.6	4
714	Thermal insulation solutions for opaque envelope of low-energy buildings: A systematic review of methods and applications. Renewable and Sustainable Energy Reviews, 2022, 167, 112738.	16.4	19
715	Multilevel Structural Design and Heterointerface Engineering of a Host–Guest Binary Aerogel toward Multifunctional Broadband Microwave Absorption. , 2022, 4, 1787-1797.		27
716	Assembling nanocelluloses into fibrous materials and their emerging applications. Carbohydrate Polymers, 2023, 299, 120008.	10.2	10
717	A systemic review to improve the intermittent operation efficiency of air-conditioning and heating system. Journal of Building Engineering, 2022, 60, 105136.	3.4	5
718	Energy, economic and environmental benefits of integrating passive design strategies into buildings: A review. Renewable and Sustainable Energy Reviews, 2022, 167, 112828.	16.4	45
719	Ultralight, highly flexible in situ thermally crosslinked polyimide aerogels with superior mechanical and thermal protection properties via nanofiber reinforcement. Journal of Colloid and Interface Science, 2022, 628, 829-839.	9.4	17
720	Fire retardant performance, toxicity and combustion characteristics, and numerical evaluation of core materials for sandwich panels. Environmental Pollution, 2022, 312, 120067.	7.5	7
721	Assessment of buildings' dynamic thermal insulation technologies-A review. Applied Energy, 2022, 326, 119985.	10.1	22
722	Integrated seismic and energy retrofitting of existing buildings: A state-of-the-art review. Journal of Building Engineering, 2022, 61, 105274.	3.4	22
723	Biomass-derived cellulose nanofibers and iron oxide-based nanohybrids for thermal insulation application. Nanoscale Advances, 2022, 4, 3381-3390.	4.6	12
724	Towards Improving Rural Living Environment for Chinese Cold Region Based on Investigation of Thermal Environment and Space Usage Status. SSRN Electronic Journal, 0, , .	0.4	2
725	Mof@Lignocellulosic Nanofibril Aerogel Designed by Carboxymethylated Nanocellulose Bridging for Thermal Insulation and Fire Retardancy. SSRN Electronic Journal, 0, , .	0.4	0
726	Ultralow Emittance Thermal Radiation Barrier Achieved by a High-Contrast Grating Coating. Journal of Thermophysics and Heat Transfer, 0, , 1-13.	1.6	1
727	Experimental and computational analysis of polymeric lattice structure for efficient building materials. Applied Thermal Engineering, 2022, , 119366.	6.0	9
728	A comprehensive state-of-the-art review of sustainable thermal insulation system used in external walls for reduction in energy consumption in buildings. International Journal of Green Energy, 2023, 20, 895-913.	3.8	2
729	A simple and efficient method for the preparation of SiO2/PI/AF aerogel composite fabrics and their thermal insulation performance. Ceramics International, 2023, 49, 210-215.	4.8	10

ARTICLE IF CITATIONS # Economic strategies for low-temperature transportation of asphalt pavement: a comparative analysis 730 4.4 1 of temperature variations. International Journal of Pavement Engineering, 2023, 24, . Improving thermal insulation properties of lightweight epoxy resin matrix composites with millimeter-sized hollow glass microspheres/epoxy hollow spheres. Energy and Buildings, 2022, 277, 6.7 112546. Multifunctional ultralight, recoverable, piezoresistive, and super thermal insulating SiC nanowire 732 3.8 1 sponges. Journal of the American Ceramic Society, 2023, 106, 1299-1308. A comprehensive review on pit thermal energy storage: Technical elements, numerical approaches and 8.1 recent applications. Journal of Energy Storage, 2022, 55, 105716. Insulating foamed lightweight cementitious composite with co-addition of micro-sized aerogel and 734 7.2 5 hydrogen peroxide. Construction and Building Materials, 2022, 360, 129485. A review of tourism and climate change mitigation: The scales, scopes, stakeholders and strategies of carbon management. Tourism Management, 2023, 95, 104681. 9.8 37 Preparation and characterization of flame-retardant and thermal insulating bio-based composite 736 6.7 7 aerogels. Energy and Buildings, 2023, 278, 112656. Analysis of thermal insulation in social housing in Spain (1939–1989) and its possible adaptation to the Sustainable Development Goals (SDGs). AIMS Energy, 2022, 10, 1190-1215. Development of ultralight, tough and hydrophobic polymethylmethacrylate/polyvinylidene fluoride 738 7.0 9 shape memory foams for heat insulation applications. Materials and Désign, 2023, 225, 111527. Plant bio-inspired laminar cellulose-based foam with flame retardant, thermal insulation and 10.3 excellent mechanical properties. Journal of Materials Chemistry A, 2023, 11, 1138-1147. Thermal insulation capability of nanostructured insulations and their combination as hybrid 740 5.75 insulation systems. Case Studies in Thermal Engineering, 2023, 41, 102630. Hydrophobic thermal insulation material designed from hazelnut shells, pinecone, paper and sheep wool. Construction and Building Materials, 2023, 365, 130131. Get the light & amp; keep the warmth - A highly insulating, translucent aerogel glass brick for building 742 3.4 6 envelopes. Journal of Building Engineering, 2023, 64, 105600. MEASURES AND MEANS TO IMPROVE THE ENERGY EFFICIENCY OF FOOD PRODUCTION. Animal Science and 743 0.1 Food Technology, 2022, 13, . Towards the Production of High Added-Value Products from the Pyrolysis and Steam Pyro-Gasification of Five Biomass-Based Building Insulation Materials at End-of-Life. Waste and 744 3.4 1 Biomass Valorization, 2023, 14, 2061-2083. Multiscale cellulose-based fireproof and thermal insulation gel materials with water-regulated 745 forms. Nano Research, O, , . Emerging trends in flame retardancy of rigid polyurethane foam and its composites: A review. Journal 746 2.4 10 of Cellular Plastics, 2023, 59, 65-122. Lightweight, Thermally Insulating, Fireâ€Proof Graphiteâ€Cellulose Foam. Advanced Functional Materials, 747 14.9 2023, 33, .

#	Article	IF	CITATIONS
748	Towards Improving Rural Living Environment for Chinese Cold Region Based on Investigation of Thermal Environment and Space Usage Status. Buildings, 2022, 12, 2139.	3.1	0
749	Hygrothermal evaluation of sustainable insulating panels. Journal of Physics: Conference Series, 2022, 2385, 012013.	0.4	0
750	Effect of Microencapsulated Longâ€Chain Chlorinated Paraffin on Flame Retardant of Rigid Polyurethane Foam. ChemNanoMat, 2023, 9, .	2.8	2
751	Soluble and colorless polyimide coated cotton fabric with attractive multifunction: Warmth retention, breathable, antifouling, UV and acid resistance. Chemical Engineering Journal, 2023, 455, 140755.	12.7	7
752	A novel carbon-based fiber aerogel with interfacial thermal resistance: Temperature insulation, oxidation resistance, and mechanical performance. Ceramics International, 2023, 49, 13698-13707.	4.8	4
753	A scalable high-porosity wood for sound absorption and thermal insulation. Nature Sustainability, 2023, 6, 306-315.	23.7	36
754	Wall Insulation Materials in Different Climate Zones: A Review on Challenges and Opportunities of Available Alternatives. Thermo, 2023, 3, 38-65.	1.3	9
755	Thermal insulation properties of lightweight, self-healing, and mesoporous carrageenan/PMMA cryogels. RSC Advances, 2023, 13, 1094-1105.	3.6	3
756	Tailorable thermoplastic insulation foam composites enabled by porous-shell hollow glass spheres and expandable thermoplastic microspheres. Polymer, 2023, 267, 125652.	3.8	2
757	Double-Decker Silsesquioxane-Grafted Polysilsesquioxane Hybrid Films as Thermal Insulation Materials. ACS Applied Polymer Materials, 2023, 5, 743-750.	4.4	4
758	Polysilsesquioxane-Containing Thermally Degradable Groups for Potential Application as Thermal Insulation Materials. ACS Applied Polymer Materials, 2023, 5, 1390-1397.	4.4	3
759	Effect of Particle Size and Concentration of Nanocellulose on Thermal Properties of Nanocellulose Aerogel. Journal of Physics: Conference Series, 2023, 2437, 012061.	0.4	2
760	Effective thermal conductivity of vacuum insulation panels prepared with recyclable fibrous cotton core. International Journal of Thermal Sciences, 2023, 187, 108176.	4.9	5
761	Adaptive dynamic building envelope integrated with phase change material to enhance the heat storage and release efficiency: A state-of-the-art review. Energy and Buildings, 2023, 286, 112928.	6.7	9
762	A review of the state-of-the-art on thermal insulation performance of polymeric foams. Thermal Science and Engineering Progress, 2023, 41, 101808.	2.7	11
763	Study on heat transfer characteristics of cement-based honeycomb structures based on infrared imaging. Journal of Building Engineering, 2023, 68, 106134.	3.4	2
764	Anisotropic thermally superinsulating boron nitride composite aerogel for building thermal management. Composites Part A: Applied Science and Manufacturing, 2023, 169, 107522.	7.6	5
765	Carbon assessment of building shell options for eco self-build community housing through the integration of building energy modelling and life cycle analysis tools. Journal of Building Engineering, 2023, 70, 106356.	3.4	1

#	Article	IF	CITATIONS
766	Correction of the thermal conductivity of polyurethane insulation material under freeze-thaw and water absorption conditions and its application. Cold Regions Science and Technology, 2023, 211, 103859.	3.5	2
767	Study on the Influence of the Preparation Method of Konjac Glucomannan-Silica Aerogels on the Microstructure, Thermal Insulation, and Flame-Retardant Properties. Molecules, 2023, 28, 1691.	3.8	2
768	Image-aided physical and compression characterisation of expanded polystyrene geofoam. Geosynthetics International, 0, , 1-13.	2.9	3
769	Hygrothermal properties of insulation materials from rice straw and natural binders for buildings. Construction and Building Materials, 2023, 372, 130770.	7.2	7
770	Simplified Guidelines for Retrofitting Scenarios in the European Countries. Energies, 2023, 16, 2408.	3.1	3
771	Elemental analysis of air-conditioning insulation materials using X-ray fluorescence. IOP Conference Series: Earth and Environmental Science, 2023, 1143, 012020.	0.3	0
772	Identifying the Most Efficient Natural Fibre for Common Commercial Building Insulation Materials with an Integrated PSI, MEREC, LOPCOW and MCRAT Model. Polymers, 2023, 15, 1500.	4.5	17
773	Dual template strategy to prepare ultralight and high-temperature resistant ceramic nanorod aerogels for efficient thermal insulation. Ceramics International, 2023, 49, 22677-22689.	4.8	5
774	THERMAL MANAGEMENT STRATEGY WITH PHASE CHANGE MATERIAL (PCM) CAPSULES FOR PULSED-POWER SOURCE CONTROLLER IN EXTREME OIL-WELL THERMAL ENVIRONMENT. Journal of Enhanced Heat Transfer, 2023, , .	1.1	0
775	Sustainable Wood-Waste-Based Thermal Insulation Foam for Building Energy Efficiency. Buildings, 2023, 13, 840.	3.1	8
776	Thermal properties of multiple-wythe masonry overlayed with textile reinforced concrete sandwich panels. Sadhana - Academy Proceedings in Engineering Sciences, 2023, 48, .	1.3	1
777	Simulation Program for Modeling Temperature Distribution in a Food Dehydrator. , 2023, , .		0
778	A flexible silica aerogel paper with temperature-switch opacifier for thermal insulation. Journal of Materials Research and Technology, 2023, 24, 4037-4046.	5.8	3
779	Lowâ€Grade Waste Heat Enables Over 80ÂLÂm ^{â^'} ² Âh ^{â^'1} Interfacial Stea Generation Based on 3D Superhydrophilic Foam. Advanced Materials, 2023, 35, .	^m 21.0	4
780	The perspectives and trends of THz technology in material research for future communication - A comprehensive review. Physica Scripta, 0, , .	2.5	0
781	Towards rural net-zero energy buildings through integration of photovoltaic systems within bio-based earth houses: Case study in Eastern Morocco. Solar Energy, 2023, 259, 15-29.	6.1	11
782	Optimizing microencapsulated PCM ratios of sustainable cement mortar for energy savings in buildings. Construction and Building Materials, 2023, 391, 131844.	7.2	9
783	A Review of Sustainable Bioâ€Based Insulation Materials for Energyâ€Efficient Buildings. Macromolecular Materials and Engineering, 0, , .	3.6	3

#	Article	IF	CITATIONS
785	A experimental characterization of seismic plus thermal energy retrofitting techniques for masonry infill walls. Journal of Building Engineering, 2023, 75, 106854.	3.4	1
786	Mathematical and thermo-economic analysis of thermal insulation for thermal energy storage applications. Renewable Energy, 2023, 213, 233-245.	8.9	1
787	Robust, Fire-Retardant, and Water-Resistant Wood/Polyimide Composite Aerogels with a Hierarchical Pore Structure for Thermal Insulation. Gels, 2023, 9, 467.	4.5	4
788	Ultra-light-weight, anti-flammable and water-proof cellulosic aerogels for thermal insulation applications. International Journal of Biological Macromolecules, 2023, 246, 125343.	7.5	10
789	Green and sustainable kapok fibre as novel core materials for vacuum insulations panels. Applied Energy, 2023, 347, 121394.	10.1	3
790	Properties of transparent bamboo based on different positions of bamboo. Industrial Crops and Products, 2023, 202, 117077.	5.2	3
791	Quantitative integration of fire risk with life cycle analysis of building: The case of thermal insulation. Journal of Building Engineering, 2023, 76, 107124.	3.4	2
792	An environment-friendly, fire-resistant, thermal-insulating and mechanical-robust wood with anisotropic capacitive pressure-sensitive performance. Materials Today Communications, 2023, 36, 106571.	1.9	1
793	Valorization of Wheat Crop Waste in AraucanÃa, Chile: Development of Prototype of Thermal Insulation Material for Blowing Technique and Geographical Analysis. Buildings, 2023, 13, 1152.	3.1	2
794	Alignment engineering in thermal materials. Materials Science and Engineering Reports, 2023, 154, 100738.	31.8	8
795	A three-dimensional network modifier (dimethyldiethoxysilane) makes ZrO2-SiO2 aerogel with excellent thermal insulation performance and high-temperature stability. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 671, 131716.	4.7	3
796	Development and characterization of Polystyrene–Date palm surface fibers composites for sustainable heat insulation in construction. Journal of Building Engineering, 2023, 75, 106982.	3.4	3
797	Analysing the existing dynamic insulation technologies focusing on buildings' renovation – A review. IOP Conference Series: Earth and Environmental Science, 2023, 1196, 012011.	0.3	0
798	Thermo-smart composite materials: Exploring the potential of graphene-doped porous silica foams. Construction and Building Materials, 2023, 394, 132249.	7.2	0
799	Influence of the hot water mass flow rate on heating of radiant floors of green buildings. Journal of Building Physics, 0, , .	2.4	0
800	Facile fabrication of green and sustainable functionalized Bombax ceiba L. wood based aerogel for multifunctional applications. Industrial Crops and Products, 2023, 202, 117076.	5.2	1
801	Seismic and energy upgrading of existing buildings—fullâ€scale testing of retrofitted masonryâ€infilled RC frames. Earthquake Engineering and Structural Dynamics, 2023, 52, 4489-4517.	4.4	2
802	Microcell morphology evolution and mechanical performance of UHMWPE/PEG porous materials with bimodal cell structure. Composite Structures, 2023, 322, 117347.	5.8	0

#	Article	IF	CITATIONS
804	Post-occupancy evaluation for enhancing building performance and automation deployment. Journal of Building Engineering, 2023, 77, 107388.	3.4	3
805	Properties of Lightweight Insulating Boards Produced from Triticale Straw Particles. Materials, 2023, 16, 5272.	2.9	1
806	Boosting Water Evaporation by Construction of Photothermal Materials with a Biomimetic Black Soil Aggregate Structure. ACS Applied Materials & amp; Interfaces, 2023, 15, 37609-37618.	8.0	2
807	Thermal insulation performance curves for exterior walls in heating and cooling seasons. Journal of Thermal Engineering, 2023, 9, 1053-1069.	1.6	0
808	Hierarchical polyimide-polyborosiloxane host-guest structure with impact resistance, acoustic and thermal insulation performance for electro-stability applications. Chemical Engineering Journal, 2023, 473, 145214.	12.7	4
809	Are straw bales better insulation materials for constructions? A review. Developments in the Built Environment, 2023, 15, 100209.	4.0	1
810	High-value Applications of Nanocellulose. , 2017, 2, 58-64.		6
811	Superelastic Cobalt Silicate@Resorcinol Formaldehyde Resin Coreâ€6hell Nanobelt Aerogel Monoliths with Outstanding Fire Retardant and Thermal Insulating Capability. Small, 2023, 19, .	10.0	0
812	Chapter 2: A Review on International Research in Zero-Energy Buildings. , 2016, , .		0
813	New approach in the reuse of modified ground tire rubber as thermal and acoustic insulation to be used in civil engineering. Journal of Material Cycles and Waste Management, 0, , .	3.0	1
814	Multifunctional elastic aerogels of nanofibrous metalâ^'organic framework for thermal insulation and broadband low-frequency sound absorption. Composites Science and Technology, 2023, 242, 110183.	7.8	2
815	From Forces to Assemblies: van der Waals Forces-Driven Assemblies in Anisotropic Quasi-2D Graphene and Quasi-1D Nanocellulose Heterointerfaces towards Quasi-3D Nanoarchitecture. Nanomaterials, 2023, 13, 2399.	4.1	1
816	Optimal temperature-actuated control of a thermally-insulated roller blind. Building and Environment, 2023, 244, 110751.	6.9	1
817	A review of microscopic characterization and related properties of fiber-incorporated cement-based materials. Reviews on Advanced Materials Science, 2023, 62, .	3.3	0
818	Flexural Experiment and Design Method of Steel-Wire-Enhanced Insulation Panels. Buildings, 2023, 13, 1978.	3.1	0
819	Composite Materials of Rice Husk and Reed Fibers for Thermal Insulation Plates Using Sodium Silicate as a Binder. Sustainability, 2023, 15, 11273.	3.2	1
820	Porous Aerogel Structures as Promising Materials for Photocatalysis, Thermal Insulation Textiles, and Technical Applications: A Review. Catalysts, 2023, 13, 1286.	3.5	4
821	Flexible and Transformable Ceramic Aerogels via a Fireâ€Reborn Strategy for Thermal Superinsulation in Extreme Conditions. Advanced Functional Materials, 2023, 33,	14.9	3

#	Article	IF	CITATIONS
822	Silica Aerogels. Springer Handbooks, 2023, , 309-334.	0.6	0
823	Fiber Sedimentation and Layer-By-Layer Assembly Strategy for Designing Biomimetic Quasi-Ordered Mullite Fiber Aerogels as Extreme Conditions Thermal Insulators. ACS Applied Materials & Interfaces, 2023, 15, 46010-46021.	8.0	1
824	Lightweight and recyclable hybrid multifunctional foam based cellulose fibers with excellent flame retardant, thermal, and acoustic insulation property. Composites Science and Technology, 2023, 244, 110315.	7.8	5
825	Investigating the Relationship of Outdoor Heat Stress upon Indoor Thermal Comfort and Qualitative Sleep Evaluation: The Case of Ankara. Atmosphere, 2023, 14, 1407.	2.3	2
826	The Extent to Which Hemp Insulation Materials Can Be Used in Canadian Residential Buildings. Sustainability, 2023, 15, 14471.	3.2	0
827	Colorful low-emissivity paints for space heating and cooling energy savings. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	7.1	9
828	Fabrication of flexible polyimide/rGO composite foams and their derived carbon foams for thermal insulation and EMI shielding applications. Polymer, 2023, 284, 126296.	3.8	2
829	Practical Correlation for Vacuum Insulation Panel Edge Loss and Panel R-value. Environmental Science and Engineering, 2023, , 669-672.	0.2	0
830	Improving the Energy Performance of a Household Using Solar Energy: A Case Study. Energies, 2023, 16, 6423.	3.1	2
831	Use of foam concrete and 3D printing technology in civil engineering: A state of the art review. AIP Conference Proceedings, 2023, , .	0.4	0
832	Thermally Insulating and Moistureâ€Resilient Foams Based on Upcycled Aramid Nanofibers and Nanocellulose. Advanced Materials, 2023, 35, .	21.0	5
833	Numerical calculation and experimental analysis of thermal environment in industrialized aquaculture facilities. PLoS ONE, 2023, 18, e0290449.	2.5	0
834	Effects Of Silica Aerogel Produced From Boron Wastes To Compressive Strength And Thermal Performance Of Environmentally Friendly Bricks. Türk Doğa Ve Fen Dergisi, 2023, 12, 24-32.	0.5	0
835	The challenge of rehabilitating relocated listed heritage Buildings: Requirements and opportunities. Energy and Buildings, 2024, 303, 113577.	6.7	2
836	Vacuum insulation panels: An overview of research literature with an emphasis on environmental and economic studies for building applications. Renewable and Sustainable Energy Reviews, 2024, 189, 113849.	16.4	0
837	Multiscale Design for Robust, Thermal Insulating, and Flame Selfâ€Extinguishing Cellulose Foam. Small, 2024, 20, .	10.0	1
838	Development of novel ultra-high-performance lightweight concrete modified with dehydrated cement powder and aerogel. Journal of Sustainable Cement-Based Materials, 2024, 13, 351-374.	3.1	0
839	Drought Tolerant Plants' Fiber and Recycled PET Co-Fibrous Composite as Acoustic Absorbers and Thermal Insulators. Journal of Natural Fibers, 2023, 20, .	3.1	0

#	Article	IF	CITATIONS
840	Thermal Insulation Properties of Delignified Balsa and Paulownia Wood "Foams―with Polylactic Acid Coverings. Forests, 2023, 14, 2339.	2.1	0
841	Integrated Performance Evaluation of Aerogel-Based Fibre-Enhanced Thermal Renders Applied on Building Walls. Gels, 2023, 9, 898.	4.5	1
842	Application of Silica-Aerogel-Fibre-Based Thermal Renders for Retrofits in Building Walls: A Comparative Assessment with Benchmark Solutions. Gels, 2023, 9, 861.	4.5	1
843	A Review of Potential Electrochemical Applications in Buildings for Energy Capture and Storage. Micromachines, 2023, 14, 2203.	2.9	0
844	Vapour diffusion calculations through graphite-enhanced polystyrene. AIP Conference Proceedings, 2023, , .	0.4	0
845	Influence of phase change material and nano silica aerogel aggregates on the characteristics of cementitious composite: An experimental and predictive study. Journal of Building Engineering, 2024, 82, 108148.	3.4	1
846	Insulation systems based on foamed plastic. E3S Web of Conferences, 2023, 457, 01016.	0.5	0
847	Alternative perimeter cladding compositions for nearly zero-energy buildings. AIP Conference Proceedings, 2023, , .	0.4	0
848	Anomaly in the relation between thermal conductivity and crystallinity of silicate glass-ceramics. Ceramics International, 2024, 50, 9908-9912.	4.8	0
849	Impact of Positioning Phase Change Materials on Thermal Performance of Buildings in Cold Climates. Journal of Physics: Conference Series, 2023, 2654, 012066.	0.4	0
850	Incorporation of Cellulose-Based Aerogels into Textile Structures. Materials, 2024, 17, 27.	2.9	0
851	Building thermal comfort improving by using PCM and super insulators: Thermal and economic studies. E3S Web of Conferences, 2023, 469, 00023.	0.5	0
852	The modeling of meso-structure of fiber/particle composites and its influence on ETC under different inner pressure: A comprehensive study by RNMG-LBM. International Journal of Thermal Sciences, 2024, 197, 108850.	4.9	0
853	Effective thermal conductivity of fiberglass insulation. International Journal of Applied Glass Science, 0, , .	2.0	0
854	Thermal Conductivity Calculation in Organic Liquids: Application to Poly-α-Olefin. Molecules, 2024, 29, 291.	3.8	0
855	Effect of Applied Pressure on the Performance of Biodegradable Fiber Insulation Board Manufactured from Camphor Branches (Cinnamomum camphora). Forests, 2024, 15, 156.	2.1	0
856	Balanced Thermal Insulation, Flame-Retardant and Mechanical Properties of PU Foam Constructed via Cost-Effective EG/APP/SA Ternary Synergistic Modification. Polymers, 2024, 16, 330.	4.5	0
857	Polylactic acid coating of cellulose/chitosan insulating foams as a strategy for enhancing mechanical properties and hydrophobicity. Progress in Organic Coatings, 2024, 189, 108288.	3.9	0

#	Article	IF	CITATIONS
858	Thermal performances of Super Insulation Materials (SIMs): A comprehensive analysis of characteristics, heat transfer mechanisms, laboratory tests, and experimental comparisons. International Communications in Heat and Mass Transfer, 2024, 152, 107293.	5.6	1
859	Hydroponic materials improve organic micropollutant removal in vertical flow constructed wetlands treating wastewater. Chemosphere, 2024, 352, 141388.	8.2	0
860	Solar Wall Technology and Its Impact on Building Performance. Energies, 2024, 17, 1075.	3.1	0
861	Study of the Composition of the Activating Mixture for the Production of Foamed Geopolymer Materials. Lecture Notes in Civil Engineering, 2024, , 433-442.	0.4	0
862	A review of insulation materials used to reduce thermal loads in buildings. AIP Conference Proceedings, 2024, , .	0.4	0
863	Multifunctional Bagasse Foam with Improved Thermal Insulation and Flame Retardancy by a Borax-Induced Self-Assembly and Ambient Pressure Drying Technique. ACS Applied Materials & Interfaces, 2024, 16, 13611-13621.	8.0	0
864	Thermodynamic Characterization of Building Thermal Insulating Materials Using Cardboard Wastes and Zea Mays Everta. Advances in Science, Technology and Innovation, 2024, , 103-110.	0.4	0