Robert Cerny

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Effect of moisture content on heat and moisture transport and storage properties of thermal insulation materials. Energy and Buildings, 2012, 53, 39-46.	3.1	210
2	Hygric, thermal and durability properties of autoclaved aerated concrete. Construction and Building Materials, 2013, 41, 352-359.	3.2	184
3	Surface diffusion in porous media: A critical review. Microporous and Mesoporous Materials, 2011, 142, 405-422.	2.2	164
4	Application of waste brick powder in alkali activated aluminosilicates: Functional and environmental aspects. Journal of Cleaner Production, 2018, 194, 714-725.	4.6	140
5	High performance concrete with Czech metakaolin: Experimental analysis of strength, toughness and durability characteristics. Construction and Building Materials, 2010, 24, 1404-1411.	3.2	126
6	Engineering properties of concrete containing natural zeolite as supplementary cementitious material: Strength, toughness, durability, and hygrothermal performance. Cement and Concrete Composites, 2015, 55, 259-267.	4.6	124
7	Properties of high performance concrete containing fine-ground ceramics as supplementary cementitious material. Cement and Concrete Composites, 2012, 34, 55-61.	4.6	115
8	Properties of self-compacting concrete mixtures containing metakaolin and blast furnace slag. Construction and Building Materials, 2011, 25, 1325-1331.	3.2	108
9	Flue gas desulfurization gypsum: Study of basic mechanical, hydric and thermal properties. Construction and Building Materials, 2007, 21, 1500-1509.	3.2	105
10	Time-domain reflectometry method and its application for measuring moisture content in porous materials: A review. Measurement: Journal of the International Measurement Confederation, 2009, 42, 329-336.	2.5	104
11	Energy-efficient thermal treatment of sewage sludge for its application in blended cements. Journal of Cleaner Production, 2016, 112, 409-419.	4.6	99
12	Structural, mechanical and hygrothermal properties of lightweight concrete based on the application of waste plastics. Construction and Building Materials, 2018, 180, 1-11.	3.2	95
13	Lightweight gypsum composites: Design strategies for multi-functionality. Cement and Concrete Composites, 2011, 33, 84-89.	4.6	93
14	Effect of pozzolanic admixtures on mechanical, thermal and hygric properties of lime plasters. Construction and Building Materials, 2006, 20, 849-857.	3.2	86
15	Mechanical, fracture-mechanical, hydric, thermal, and durability properties of lime–metakaolin plasters for renovation of historical buildings. Construction and Building Materials, 2012, 31, 22-28.	3.2	84
16	Hygrothermal performance study of an innovative interior thermal insulation system. Applied Thermal Engineering, 2009, 29, 1941-1946.	3.0	79
17	Salt transport and storage parameters of renovation plasters and their possible effects on restored buildings' walls. Construction and Building Materials, 2011, 25, 1205-1212.	3.2	78
18	Properties of Alkali Activated Aluminosilicate Material after Thermal Load. International Journal of Thermophysics, 2006, 27, 1250-1263.	1.0	73

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19	Free Water Intake as Means of Material Characterization. Journal of Building Physics, 2009, 33, 29-44.	1.2	72
20	Transition to circular economy in the construction industry: Environmental aspects of waste brick recycling scenarios. Waste Management, 2020, 118, 510-520.	3.7	72
21	Water Vapor Adsorption in Porous Building Materials: Experimental Measurement and Theoretical Analysis. Transport in Porous Media, 2012, 91, 939-954.	1.2	68
22	Long-term on-site assessment of hygrothermal performance of interior thermal insulation system without water vapour barrier. Energy and Buildings, 2009, 41, 51-55.	3.1	62
23	High performance concrete containing lower slag amount: A complex view of mechanical and durability properties. Construction and Building Materials, 2009, 23, 2237-2245.	3.2	61
24	Calcined gypsum–lime–metakaolin binders: Design of optimal composition. Cement and Concrete Composites, 2014, 52, 91-96.	4.6	59
25	Alkali-activated aluminosilicate composite with heat-resistant lightweight aggregates exposed to high temperatures: Mechanical and water transport properties. Cement and Concrete Composites, 2010, 32, 157-163.	4.6	58
26	Red-clay ceramic powders as geopolymer precursors: Consideration of amorphous portion and CaO content. Applied Clay Science, 2018, 161, 82-89.	2.6	58
27	Effect of w/c and temperature on the early-stage hydration heat development in Portland-limestone cement. Construction and Building Materials, 2014, 50, 140-147.	3.2	57
28	Water and salt transport and storage properties of Mšené sandstone. Construction and Building Materials, 2008, 22, 1736-1748.	3.2	56
29	Physical and chemical characterization of technogenic pozzolans for the application in blended cements. Construction and Building Materials, 2018, 160, 106-116.	3.2	55
30	Modified lime-cement plasters with enhanced thermal and hygric storage capacity for moderation of interior climate. Energy and Buildings, 2016, 126, 113-127.	3.1	54
31	Thermal and hygric properties of biomaterials suitable for interior thermal insulation systems in historical and traditional buildings. Building and Environment, 2019, 154, 81-88.	3.0	54
32	The effect of compressive stress on thermal and hygric properties of Portland cement mortar in wide temperature and moisture ranges. Cement and Concrete Research, 2000, 30, 1267-1276.	4.6	52
33	Application of burnt clay shale as pozzolan addition to lime mortar. Cement and Concrete Composites, 2012, 34, 486-492.	4.6	51
34	Experimental Investigation of the Properties of Lime-Based Plaster-Containing PCM for Enhancing the Heat-Storage Capacity of Building Envelopes. International Journal of Thermophysics, 2014, 35, 767-782.	1.0	51
35	Application of waste ceramic dust as a ready-to-use replacement of cement in lime-cement plasters: an environmental-friendly and energy-efficient solution. Clean Technologies and Environmental Policy, 2016, 18, 1725-1733.	2.1	51
36	DSC and TG Analysis of a Blended Binder Based on Waste Ceramic Powder and Portland Cement. International Journal of Thermophysics, 2016, 37, 1.	1.0	50

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37	Mechanical, durability and hygrothermal properties of concrete produced using Portland cement-ceramic powder blends. Structural Concrete, 2016, 17, 105-115.	1.5	49
38	Ecotoxicology of building materials: A critical review of recent studies. Journal of Cleaner Production, 2017, 165, 500-508.	4.6	49
39	Effect of hydrophilic admixtures on moisture and heat transport and storage parameters of mineral wool. Construction and Building Materials, 2006, 20, 425-434.	3.2	48
40	Measurement of linear thermal expansion coefficient of alkali-activated aluminosilicate composites up to 1000°C. Cement and Concrete Composites, 2009, 31, 263-267.	4.6	47
41	Biomass ash-based mineral admixture prepared from municipal sewage sludge and its application in cement composites. Clean Technologies and Environmental Policy, 2018, 20, 159-171.	2.1	47
42	Experimental assessment of hygrothermal performance of an interior thermal insulation system using a laboratory technique simulating on-site conditions. Energy and Buildings, 2008, 40, 673-678.	3.1	45
43	Effect of hydrophobization on the properties of lime–metakaolin plasters. Construction and Building Materials, 2012, 37, 556-561.	3.2	44
44	Exterior thermal insulation systems for AAC building envelopes: Computational analysis aimed at increasing service life. Energy and Buildings, 2012, 47, 84-90.	3.1	43
45	Biomass fly ash as an alternative to coal fly ash in blended cements: Functional aspects. Construction and Building Materials, 2021, 271, 121544.	3.2	43
46	Application of Effective Media Theory for Determination of Thermal Properties of Hollow Bricks as a Function of Moisture Content. International Journal of Thermophysics, 2013, 34, 894-908.	1.0	42
47	Osmosis in porous media: A review of recent studies. Microporous and Mesoporous Materials, 2013, 170, 299-317.	2.2	42
48	Effective thermal conductivity of hollow bricks with cavities filled by air and expanded polystyrene. Journal of Building Physics, 2014, 37, 436-448.	1.2	42
49	Computational modelling of coupled water and salt transport in porous materials using diffusion–advection model. Journal of the Franklin Institute, 2011, 348, 1574-1587.	1.9	41
50	Properties of municipal solid waste incineration ashes with respect to their separation temperature. Waste Management and Research, 2012, 30, 1041-1048.	2.2	41
51	Apparent Thermal Properties of Phase-Change Materials: An Analysis Using Differential Scanning Calorimetry and Impulse Method. International Journal of Thermophysics, 2013, 34, 851-864.	1.0	41
52	Simultaneous DSC and TG analysis of high-performance concrete containing natural zeolite as a supplementary cementitious material. Journal of Thermal Analysis and Calorimetry, 2015, 121, 67-73.	2.0	40
53	Characterization of geopolymers prepared using powdered brick. Journal of Materials Research and Technology, 2019, 8, 6253-6261.	2.6	39
54	Life cycle assessment of natural and recycled gypsum production in the Spanish context. Journal of Cleaner Production, 2020, 253, 120056.	4.6	38

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55	Determination of Moisture Diffusivity using the Time Domain Reflectometry (TDR) Method. Journal of Building Physics, 2006, 30, 59-70.	1.2	37
56	Thermal Properties of Alkali-activated Slag Subjected to High Temperatures. Journal of Building Physics, 2007, 30, 337-350.	1.2	37
57	Thermal Conductivity of Mineral Wool Materials Partially Saturated by Water. International Journal of Thermophysics, 2006, 27, 1214-1227.	1.0	36
58	Effect of High Temperatures on the Properties of Alkali Activated Aluminosilicate with Electrical Porcelain Filler. International Journal of Thermophysics, 2008, 29, 693-705.	1.0	36
59	Salt Damage and Rising Damp Treatment in Building Structures. Advances in Materials Science and Engineering, 2016, 2016, 1-13.	1.0	36
60	Non-steady-state methods for determining the moisture diffusivity of porous materials. International Communications in Heat and Mass Transfer, 1998, 25, 109-116.	2.9	35
61	Experimental analysis of coupled water and chloride transport in cement mortar. Cement and Concrete Composites, 2004, 26, 705-715.	4.6	35
62	Rational design of cement composites containing pozzolanic additions. Construction and Building Materials, 2017, 148, 411-418.	3.2	35
63	Early-stage hydration heat development in blended cements containing natural zeolite studied by isothermal calorimetry. Thermochimica Acta, 2014, 582, 53-58.	1.2	34
64	Carbon footprint analysis of calcined gypsum production in the Czech Republic. Journal of Cleaner Production, 2018, 177, 795-802.	4.6	34
65	Effect of applied weather data sets in simulation of building energy demands: Comparison of design years with recent weather data. Renewable and Sustainable Energy Reviews, 2019, 100, 22-32.	8.2	33
66	Excimer-laser-induced melting and solidification of monocrystalline Si: Equilibrium and nonequilibrium models. Physical Review B, 1991, 44, 4097-4102.	1.1	32
67	Determination of Moisture Diffusivity as a Function of Both Moisture and Temperature. International Journal of Thermophysics, 2012, 33, 1704-1714.	1.0	31
68	Properties of lime composites containing a new type of pozzolana for the improvement of strength and durability. Composites Part B: Engineering, 2012, 43, 3534-3540.	5.9	31
69	Effect of Moisture on Thermal Conductivity of Lime-Based Composites. International Journal of Thermophysics, 2009, 30, 1999-2014.	1.0	30
70	Inferring Bounded Evolution in Phenotypic Characters from Phylogenetic Comparative Data. Systematic Biology, 2016, 65, 651-661.	2.7	30
71	Effect of Moisture on the Thermal Conductivity of a Cementitious Composite. International Journal of Thermophysics, 2006, 27, 1228-1240.	1.0	29
72	Effect of cracks on hygric and thermal characteristics of concrete. Bauphysik, 2008, 30, 438-444.	1.2	29

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73	Computer aided design of interior thermal insulation system suitable for autoclaved aerated concrete structures. Applied Thermal Engineering, 2013, 58, 165-172.	3.0	29
74	Damage functions for the cold regions and their applications in hygrothermal simulations of different types of building structures. Cold Regions Science and Technology, 2017, 135, 1-7.	1.6	28
75	High temperature durability of fiber reinforced high alumina cement composites. Construction and Building Materials, 2018, 162, 881-891.	3.2	28
76	Effect of Cu-Zn coated steel fibers on high temperature resistance of reactive powder concrete. Cement and Concrete Research, 2019, 117, 45-57.	4.6	28
77	Hydration heat development in blended cements containing fine-ground ceramics. Thermochimica Acta, 2012, 543, 125-129.	1.2	27
78	Generation of a critical weather year for hygrothermal simulations using partial weather data sets. Building and Environment, 2014, 76, 54-61.	3.0	27
79	Lime-based plasters with combined expanded clay-silica aggregate: Microstructure, texture and engineering properties. Cement and Concrete Composites, 2017, 83, 374-383.	4.6	27
80	Thermal and hygric assessment of an inside-insulated brick wall: 2D critical experiment and computational analysis. Journal of Building Physics, 2018, 41, 497-520.	1.2	26
81	Chloride Binding in Building Materials. Journal of Building Physics, 2006, 29, 189-200.	1.2	25
82	Service Life Assessment of Historical Building Envelopes Constructed Using Different Types of Sandstone: A Computational Analysis Based on Experimental Input Data. Scientific World Journal, The, 2014, 2014, 1-12.	0.8	25
83	Preparation of self-heating alkali-activated materials using industrial waste products. Journal of Cleaner Production, 2020, 260, 121116.	4.6	25
84	Eucalyptus camaldulensis, Citrus aurantium, and Citrus sinensis Essential Oils as Antifungal Activity against Aspergillus flavus, Aspergillus niger, Aspergillus terreus, and Fusarium culmorum. Processes, 2020, 8, 1003.	1.3	25
85	Directly foamed geopolymers: A review of recent studies. Cement and Concrete Composites, 2022, 130, 104530.	4.6	25
86	Hydric, thermal and mechanical properties of self-compacting concrete containing different fillers. Construction and Building Materials, 2008, 22, 1594-1600.	3.2	24
87	Mechanical and Thermal Properties of Moderate-Strength Concrete with Ceramic Powder Used as Supplementary Cementitious Material. Advanced Materials Research, 0, 1054, 194-198.	0.3	24
88	Effect of cement composition on the early hydration of blended cements with natural zeolite. Journal of Thermal Analysis and Calorimetry, 2017, 128, 721-733.	2.0	23
89	Effect of calcined Czech claystone on the properties of high performance concrete: Microstructure, strength and durability. Construction and Building Materials, 2018, 168, 966-974.	3.2	23
90	Fabrication of Dodecanol/Diatomite Shape-Stabilized PCM and Its Utilization in Interior Plaster. International Journal of Thermophysics, 2018, 39, 1.	1.0	23

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91	Thermal and hygric properties of Portland cement mortar after high-temperature exposure combined with compressive stress. Cement and Concrete Research, 2003, 33, 1347-1355.	4.6	22
92	Study of excimer laser induced melting and solidification of Si by time-resolved reflectivity measurements. Applied Physics A: Solids and Surfaces, 1992, 54, 327-333.	1.4	21
93	Application of genetic algorithm for determination of water vapor diffusion parameters of building materials. Journal of Building Physics, 2012, 35, 238-250.	1.2	21
94	Effects of the type of calorimeter and the use of plasticizers and hydrophobizers on the measured hydration heat development of FGD gypsum. Journal of Thermal Analysis and Calorimetry, 2008, 91, 791-796.	2.0	20
95	A Boltzmann transformation method for investigation of water vapor transport in building materials. Journal of Building Physics, 2012, 35, 213-223.	1.2	20
96	Pore Structure and Thermal Characteristics of Clay Bricks. Advanced Materials Research, 2014, 982, 104-107.	0.3	20
97	Monitoring Thermal Performance of Hollow Bricks with Different Cavity Fillers in Difference Climate Conditions. International Journal of Thermophysics, 2015, 36, 557-568.	1.0	20
98	Characterization of early-age hydration processes in lime-ceramic binders using isothermal calorimetry, X-ray diffraction and scanning electron microscopy. Thermochimica Acta, 2016, 633, 108-115.	1.2	20
99	Assessment of Wood-Based Fly Ash as Alternative Cement Replacement. Sustainability, 2020, 12, 9580.	1.6	20
100	Investigation of gypsum composites with different lightweight fillers. Construction and Building Materials, 2021, 297, 123791.	3.2	20
101	Application of a microwave impulse technique to the measurement of free water content in early hydration stages of cement paste. Cement and Concrete Research, 2003, 33, 93-102.	4.6	19
102	Mechanical and hydric properties of alkali-activated aluminosilicate composite with electrical porcelain aggregates. Cement and Concrete Composites, 2008, 30, 266-273.	4.6	19
103	Computational analysis of thermal performance of a passive family house built of hollow clay bricks. Energy and Buildings, 2014, 76, 211-218.	3.1	19
104	Ecotoxicity assessment of short- and medium-chain chlorinated paraffins used in polyvinyl-chloride products for construction industry. Science of the Total Environment, 2018, 640-641, 523-528.	3.9	19
105	Terrestrial eutrophication of building materials and buildings: An emerging topic in environmental studies. Science of the Total Environment, 2019, 689, 1316-1328.	3.9	19
106	Energy efficiency of latent heat storage systems in residential buildings: Coupled effects of wall assembly and climatic conditions. Renewable and Sustainable Energy Reviews, 2020, 132, 110097.	8.2	19
107	Environmental Efficiency Aspects of Basalt Fibers Reinforcement in Concrete Mixtures. Energies, 2021, 14, 7736.	1.6	19
108	Nonequilibrium model of laser-induced phase change processes in amorphous silicon thin films. Physical Review B, 1998, 57, 194-202.	1.1	18

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109	The effects of thermal load and frost cycles on the water transport in two high-performance concretes. Cement and Concrete Research, 2001, 31, 1129-1140.	4.6	18
110	A fast computational approach for the determination of thermal properties of hollow bricks in energy-related calculations. Energy, 2015, 83, 749-755.	4.5	18
111	MSWI bottom ash as eco-aggregate in cement mortar design. , 2012, , .		18
112	Thermophysical properties of concrete for nuclear-safety related structures. Cement and Concrete Research, 1997, 27, 415-426.	4.6	17
113	A simple gravimetric method for determining the moisture diffusivity of building materials. Construction and Building Materials, 2003, 17, 223-228.	3.2	17
114	Application of isothermal calorimetry and thermal analysis for the investigation of calcined gypsum–lime–metakaolin–water system. Journal of Thermal Analysis and Calorimetry, 2015, 122, 115-122.	2.0	17
115	Highâ€strength concrete based on ternary binder with high pozzolan content. Structural Concrete, 2018, 19, 1258-1267.	1.5	17
116	Time Domain Reflectometry flat sensor for non-invasive monitoring of moisture changes in building materials. Measurement: Journal of the International Measurement Confederation, 2020, 165, 108091.	2.5	17
117	Application of ceramic waste in brick blocks with enhanced acoustic properties. Journal of Cleaner Production, 2020, 261, 121185.	4.6	17
118	Sustainable composite material based on surface-modified rape straw and environment-friendly adhesive. Construction and Building Materials, 2021, 300, 124036.	3.2	17
119	Effect of thermal decomposition processes on the thermal properties of carbon fiber reinforced cement composites in high-temperature range. Journal of Thermal Analysis and Calorimetry, 2007, 90, 475-488.	2.0	16
120	Effect of temperature on the early-stage hydration characteristics of Portland cement: A large-volume calorimetric study. Construction and Building Materials, 2012, 36, 969-976.	3.2	16
121	Determination of the equivalent thermal conductivity of complex material systems with large-scale heterogeneities. International Journal of Thermal Sciences, 2014, 86, 365-373.	2.6	16
122	Effect of temperature on water vapor transport properties. Journal of Building Physics, 2014, 38, 156-169.	1.2	16
123	Modeling of radionuclide transport in porous media: A review of recent studies. Journal of Nuclear Materials, 2019, 526, 151765.	1.3	16
124	Reactive Powder Concrete Containing Basalt Fibers: Strength, Abrasion and Porosity. Materials, 2020, 13, 2948.	1.3	16
125	Computational analysis of hygrothermal performance of renovation renders. , 2010, , .		16
126	Apparent thermal conductivity approach at high-temperature measurements of porous materials. Measurement: Journal of the International Measurement Confederation, 2011, 44, 1220-1228	2.5	15

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127	Thermal properties of alkaliâ€activated aluminosilicate composite with lightweight aggregates at elevated temperatures. Fire and Materials, 2011, 35, 231-244.	0.9	15
128	Free of Volatile Organic Compounds Protection against Moisture in Building Materials/Zabezpieczenia Przegród Budowlanych Przed WilgociÄ Wolne Od Lotnych ZwiÄzków Organicznych. Ecological Chemistry and Engineering S, 2014, 21, 401-411.	0.3	15
129	Coupled heat and moisture transport in damaged concrete under an atmospheric environment. Construction and Building Materials, 2017, 143, 607-620.	3.2	15
130	Application of heavy metals sorbent as reactive component in cementitious composites. Journal of Cleaner Production, 2018, 199, 565-573.	4.6	15
131	System for Testing the Hygrothermal Performance of Multi-Layered Building Envelopes. Journal of Thermal Envelope and Building Science, 2002, 25, 239-249.	0.5	14
132	Determination of a partial phase composition in calcined gypsum by calorimetric analysis of hydration kinetics. Journal of Thermal Analysis and Calorimetry, 2012, 109, 57-62.	2.0	14
133	Self-Heating Ability of Geopolymers Enhanced by Carbon Black Admixtures at Different Voltage Loads. Energies, 2019, 12, 4121.	1.6	14
134	Alkaline activation of low-reactivity ceramics: Peculiarities induced by the precursors' dual character. Cement and Concrete Composites, 2020, 105, 103440.	4.6	14
135	Antifungal activity of methylxanthines based on their properties. BioResources, 2020, 15, 8110-8120.	0.5	14
136	A model of binary alloy solidification with convection in the melt. International Journal of Heat and Mass Transfer, 1992, 35, 1787-1793.	2.5	13
137	Mechanical, Hygric, and Thermal Properties of Cement-Based Composite with Hybrid Fiber Reinforcement Subjected to High Temperatures. International Journal of Thermophysics, 2009, 30, 1310-1322.	1.0	13
138	Effect of Moisture Content on Thermal Properties of Porous Building Materials. International Journal of Thermophysics, 2017, 38, 1.	1.0	13
139	Preparation and Characterization of Novel Plaster with Improved Thermal Energy Storage Performance. Energies, 2019, 12, 3318.	1.6	13
140	Hydration of Ordinary Portland Cement in Presence of Lead Sorbed on Ceramic Sorbent. Materials, 2019, 12, 19.	1.3	13
141	Interior thermal insulation systems based on wood fiberboards: experimental analysis and computational assessment of hygrothermal and energy performance in the Central European climate. Energy and Buildings, 2020, 222, 110093.	3.1	13
142	Application of MSWI bottom ash as alternative aggregate in cement mortar. WIT Transactions on Ecology and the Environment, 2011, , .	0.0	13
143	Environmental Consequences of Rubber Crumb Application: Soil and Water Pollution. Polymers, 2022, 14, 1416.	2.0	13
144	Utilization of ceramic powder, calcined shale and sintered mullite as partial replacements of calcium aluminate cement. Construction and Building Materials, 2022, 326, 126824.	3.2	13

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145	Self-heating alkali activated materials: Microstructure and its effect on electrical, thermal and mechanical properties. Construction and Building Materials, 2022, 335, 127527.	3.2	13
146	Application of Time-Domain Reflectometry for Measurement of Moisture Profiles in a Drying Experiment. International Journal of Thermophysics, 2012, 33, 1661-1673.	1.0	12
147	Wet-Treated MSWI Fly Ash Used as Supplementary Cementitious Material. Advances in Materials Science and Engineering, 2015, 2015, 1-8.	1.0	12
148	Computational assessment of thermal performance of contemporary ceramic blocks with complex internal geometry in building envelopes. Energy and Buildings, 2015, 99, 61-66.	3.1	12
149	Multi-parameter optimization of lime composite design using a modified downhill simplex method. Composites Part B: Engineering, 2016, 93, 184-189.	5.9	12
150	Heat and Moisture Transport and Storage Parameters of Bricks Affected by the Environment. International Journal of Thermophysics, 2018, 39, 1.	1.0	12
151	Determination of Moisture Content of Hygroscopic Building Materials Using Time Domain Reflectometry. Journal of Applied Sciences, 2008, 8, 1732-1737.	0.1	12
152	Bond Behavior of FRP Bars in Lightweight SCC under Direct Pull-Out Conditions: Experimental and Numerical Investigation. Materials, 2022, 15, 3555.	1.3	12
153	Measuring the effective specific heat of building materials. Thermochimica Acta, 1996, 282-283, 239-250.	1.2	11
154	THERMOPHYSICAL AND MECHANICAL PROPERTIES OF FIBERâ€REINFORCED COMPOSITE MATERIAL SUBJECTED TO HIGH TEMPERATURES. Journal of Civil Engineering and Management, 2010, 16, 395-400.	1.9	11
155	Theoretical and Experimental Analysis of Moisture-Dependent Thermal Conductivity of Lightweight Ceramic Bricks. International Journal of Thermophysics, 2014, 35, 1912-1921.	1.0	11
156	Energy Effects of Retrofitting the Educational Facilities Located in South-Eastern Poland. Energies, 2020, 13, 2449.	1.6	11
157	Numerical solution of the non-isothermal moving boundary problem in heat conduction. Computer Physics Communications, 1991, 64, 241-251.	3.0	10
158	Calorimetry of building materials. Journal of Thermal Analysis, 1995, 43, 489-496.	0.7	10
159	Water and Water Vapor Penetration Through Coatings. Journal of Thermal Envelope and Building Science, 2002, 26, 165-177.	0.5	10
160	Pulsed laser-induced phase transformations in CdTe single crystals. Applied Surface Science, 2005, 248, 259-263.	3.1	10
161	Application of large-volume calorimetry for monitoring the early-stage hydration heat development in cement-based composites as a function of w/c. Thermochimica Acta, 2012, 546, 44-48.	1.2	10
162	Water Vapor Diffusion and Adsorption of Sandstones: Influence of Rock Texture and Composition. Advances in Materials Science and Engineering, 2016, 2016, 1-7.	1.0	10

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163	Behavior of Sandstones Under Heat Treatment. International Journal of Thermophysics, 2017, 38, 1.	1.0	10
164	Complex assessment of reconstruction works on an institutional building: A case study. Journal of Cleaner Production, 2018, 202, 871-882.	4.6	10
165	Influence of free and sorbed zinc on cement hydration. Journal of Thermal Analysis and Calorimetry, 2019, 138, 1935-1943.	2.0	10
166	Alkali-activated waste ceramics: Importance of precursor particle size distribution. Ceramics International, 2021, 47, 31574-31582.	2.3	10
167	A measuring method for the determination of linear thermal expansion of porous materials at high temperatures. High Temperatures - High Pressures, 1999, 31, 595-600.	0.3	10
168	Computational prediction of hygrothermal conditions in innovated AAC-based building envelopes. WIT Transactions on Engineering Sciences, 2010, , .	0.0	10
169	Limited interdisciplinary knowledge transfer as a missing link for sustainable building retrofits in the residential sector. Journal of Cleaner Production, 2022, 343, 131079.	4.6	10
170	Numerical simulation of the formation of Ni silicides induced by pulsed lasers. Computational Materials Science, 1995, 4, 269-281.	1.4	9
171	Hygrothermal properties of glass fiber reinforced cements subjected to elevated temperature. Materials and Structures/Materiaux Et Constructions, 2004, 37, 597-607.	1.3	9
172	Hydric and mechanical properties of carbon fiber reinforced cement composites subjected to thermal load. Construction and Building Materials, 2004, 18, 567-578.	3.2	9
173	An isothermal heat flow calorimeter for large-volume applications. Journal of Thermal Analysis and Calorimetry, 2012, 110, 1021-1027.	2.0	9
174	Experimental Assessment of Thermal Conductivity of a Brick Block with Internal Cavities Using a Semi-scale Experiment. International Journal of Thermophysics, 2013, 34, 909-915.	1.0	9
175	Thermal Properties of PVA-Fiber Reinforced Cement Composites at High Temperatures. Applied Mechanics and Materials, 0, 377, 45-49.	0.2	9
176	Heat and Water Vapor Transport Properties of Selected Commercially Produced Plasters. Advanced Materials Research, 0, 982, 90-93.	0.3	9
177	Coupled Water and Salt Transport in Porous Materials: Rapid Determination of a Varying Diffusion Coefficient from Experimental Data. Transport in Porous Media, 2014, 105, 597-610.	1.2	9
178	Water transport parameters of autoclaved aerated concrete: Experimental assessment of different modeling approaches. Journal of Building Physics, 2015, 39, 170-188.	1.2	9
179	Engineering properties of composite materials containing waste ceramic dust from advanced hollow brick production as a partial replacement of Portland cement. Journal of Building Physics, 2016, 40, 17-34.	1.2	9
180	Effect of Absorptivity of Superabsorbent Polymers on Design of Cement Mortars. Materials, 2020, 13, 5503.	1.3	9

#	Article	IF	CITATIONS
181	Blended Cements with Calcined Illitic Clay: Workability and Hydration. RILEM Bookseries, 2018, , 310-317.	0.2	9
182	Basic physical, mechanical and electrical properties of electrically enhanced alkali-activated aluminosilicates. Materiali in Tehnologije, 2017, 51, 1005-1009.	0.3	9
183	Hygrothermal performance of innovative renovation renders used for different types of historical masonry. , 2011, , .		9
184	Theoretical and experimental studies of a-Si:H recrystallization by XeCl excimer laser irradiation. Applied Surface Science, 1995, 86, 359-363.	3.1	8
185	Computational modeling of CdZnTe crystal growth from the melt. Computational Materials Science, 2000, 17, 34-60.	1.4	8
186	Analysis of glass fiber reinforced cement composites and their thermal and hygric material parameters. Journal of Thermal Analysis and Calorimetry, 2004, 77, 85-97.	2.0	8
187	A material database for computational models of heat, moisture, salt and momentum transport: Construction of the code as an input module and example of application. , 2013, , .		8
188	Determination of Radiative Heat Transfer Coefficient at High Temperatures Using a Combined Experimental-Computational Technique. Measurement Science Review, 2015, 15, 85-91.	0.6	8
189	In-situ analysis of hygric performance of piaristic monastery building. AIP Conference Proceedings, 2015, , .	0.3	8
190	Assessment of fast heat evolving processes using inverse analysis of calorimetric data. International Journal of Heat and Mass Transfer, 2017, 115, 831-838.	2.5	8
191	Determination of Thermal Conductivity of Silicate Matrix for Applications in Effective Media Theory. International Journal of Thermophysics, 2018, 39, 1.	1.0	8
192	A Method for Rapid Evaluation of Thermal Performance of Wall Assemblies Based on Geographical Location. Energies, 2019, 12, 1353.	1.6	8
193	Heat transport and storage processes in differential scanning calorimeter: Computational analysis and model validation. International Journal of Heat and Mass Transfer, 2019, 136, 355-364.	2.5	8
194	Determination of the positive weather year for application in hygrothermal simulations. , 2015, , .		8
195	Properties of innovative renders on a lime basis for the renovation of historical buildings. WIT Transactions on the Built Environment, 2009, , .	0.0	8
196	Database of climatic data as a rewarding tool for inclusion of weather observations in computational service life assessments of historical buildings. , 2013, , .		8
197	Mechanical, hygric and thermal properties of building stones. WIT Transactions on the Built Environment, 2013, , .	0.0	8
198	Efficacy of Caffeine Treatment for Wood Protection—Influence of Wood and Fungi Species. Polymers, 2021, 13, 3758.	2.0	8

#	Article	IF	CITATIONS
199	A two-phase moving boundary problem with two moving interfaces in laser processing of materials. Computational Materials Science, 1997, 8, 228-242.	1.4	7
200	Modeling the phase-change processes in pulsed laser-irradiated InSb. Physical Review B, 1999, 59, 10685-10690.	1.1	7
201	Computational model of pulsed laser-induced melting, evaporation and solidification of CdZnTe. Computational Materials Science, 2004, 31, 389-404.	1.4	7
202	Thermal and Hygric Parameters of Carbon-fiber-reinforced Cement Composites after Thermal and Mechanical Loading. Journal of Building Physics, 2005, 29, 121-143.	1.2	7
203	Determination of moisture-dependent moisture diffusivity using smoothed experimental data. , 2013, , .		7
204	Cement Composites for High Temperature Applications. Advanced Materials Research, 2014, 982, 154-158.	0.3	7
205	Reuse of Waste Ceramic Powder with a High Content of Amorphous Phases as Partial Replacement of Portland Cement. Advanced Materials Research, 2014, 905, 212-215.	0.3	7
206	Relationship between Pore Size Distribution and Mechanical Properties of Porous Sedimentary Rocks. Advanced Materials Research, 0, 905, 207-211.	0.3	7
207	Pore Distribution and Water Vapor Diffusion Parameters of Lime Plasters with Waste Brick Powder. Advanced Materials Research, 0, 1054, 205-208.	0.3	7
208	Application of a-SiO ₂ Rich Additives in Cement Paste. Applied Mechanics and Materials, 0, 749, 362-367.	0.2	7
209	Treated Coconut Coir Pith as Component of Cementitious Materials. Advances in Materials Science and Engineering, 2015, 2015, 1-8.	1.0	7
210	Joint Bratislava–Prague studies of radiocarbon and uranium in the environment using accelerator mass spectrometry and radiometric methods. Journal of Radioanalytical and Nuclear Chemistry, 2015, 304, 67-73.	0.7	7
211	Modification of the computational model of coupled heat and moisture transport: The transition between the liquid and gaseous phases of water. AIP Conference Proceedings, 2015, , .	0.3	7
212	Simultaneous Differential Scanning Calorimetry and Thermogravimetric Analysis of Portland Cement as a Function of Age. International Journal of Thermophysics, 2016, 37, 1.	1.0	7
213	Experimental analysis of electrical properties of composite materials. AIP Conference Proceedings, 2017, , .	0.3	7
214	Effect of cyclic wetting and drying on microstructure, composition and length changes of lime-based plasters. Cement and Concrete Composites, 2019, 104, 103411.	4.6	7
215	Correction of Errors in DSC Measurements Using Detailed Modeling of Thermal Phenomena in Calorimeter-Sample System. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 8178-8186.	2.4	7
216	Factors influencing envelope airtightness of lightweight timber-frame houses built in the Czech Republic in the period of 2006–2019. Building and Environment, 2021, 194, 107687.	3.0	7

#	Article	IF	CITATIONS
217	Heat and moisture transport in porous materials involving cyclic wetting and drying. , 2009, , .		7
218	The thermal and mechanical performance of cement-based composites with enhanced thermal insulation properties. WIT Transactions on Engineering Sciences, 2014, , .	0.0	7
219	Waste solidified alkalis as activators of aluminosilicate precursors: Functional and environmental evaluation. Journal of Building Engineering, 2022, 54, 104598.	1.6	7
220	Fired clay brick waste as low cost and eco-friendly pozzolana active filler in gypsum-based binders. Journal of Cleaner Production, 2022, 368, 133142.	4.6	7
221	A computational model of laser-induced melting and solidification with density change. Computer Physics Communications, 1992, 73, 179-191.	3.0	6
222	Electromagnetic vaporization of molten-metal drops. International Journal of Heat and Mass Transfer, 1993, 36, 277-286.	2.5	6
223	Nonequilibrium evaporation of molten-metal drops in an alternating magnetic field. International Journal of Heat and Mass Transfer, 1993, 36, 3449-3458.	2.5	6
224	Determination of the reflectivity of liquid semiconductors over a wide temperature range. International Journal of Thermophysics, 1995, 16, 841-849.	1.0	6
225	Phase transformations induced in CdTe single crystal by ruby laser pulsed irradiation. , 2004, , .		6
226	Interior Thermal Insulation System Based on Hydrophilic Mineral Wool. Journal of Building Physics, 2005, 29, 21-35.	1.2	6
227	Characterization of Building Stones Involved in Historical Masonry. Advanced Materials Research, 0, 324, 388-391.	0.3	6
228	Influence of Basalt Fibres and Aggregates on the Thermal Expansion of Cement-Based Composites. Advanced Materials Research, 0, 1054, 17-21.	0.3	6
229	Model formulas for facilitating determination of concentration-dependent diffusion coefficients. Metals and Materials International, 2015, 21, 907-912.	1.8	6
230	Application of Ceramic Powder as Supplementary Cementitious Material in Lime Plasters. Medziagotyra, 2016, 22, .	0.1	6
231	Contribution of waste products in single-layer ceramic building envelopes to overall energy savings. Energy, 2016, 111, 947-955.	4.5	6
232	Influence of various amount of diatomaceous earth used as cement substitute on mechanical properties of cement paste. AIP Conference Proceedings, 2016, , .	0.3	6
233	Thermal analysis of highâ€performance mortar containing burnt clay shale as a partial portland cement replacement in the temperature range up to 1000 °C. Fire and Materials, 2017, 41, 54-64.	0.9	6
234	Influence of weather-affected material characteristics on appearance of freeze/thaw cycles in building envelopes. AIP Conference Proceedings, 2017, , .	0.3	6

#	Article	IF	CITATIONS
235	Analysis of the Frost-Induced Damage of Building Enclosures on the Territory of the Czech Republic. Advances in Materials Science and Engineering, 2018, 2018, 1-11.	1.0	6
236	Rheological and mechanical properties of alkali-activated brick powder based pastes: effect of amount of alkali activator. IOP Conference Series: Materials Science and Engineering, 2018, 379, 012011.	0.3	6
237	Experimental Determination of Frost Resistance of Autoclaved Aerated Concrete at Different Levels of Moisture Saturation. International Journal of Thermophysics, 2018, 39, 1.	1.0	6
238	Experimental and Computational Study of Thermal Processes in Red Clays Exposed to High Temperatures. Energies, 2020, 13, 2211.	1.6	6
239	Characterization of Responsive Plasters for Passive Moisture and Temperature Control. Applied Sciences (Switzerland), 2020, 10, 9116.	1.3	6
240	Energy Efficiency of Novel Interior Surface Layer with Improved Thermal Characteristics and Its Effect on Hygrothermal Performance of Contemporary Building Envelopes. Energies, 2020, 13, 2012.	1.6	6
241	Improving the Energy Performance of Public Buildings Equipped with Individual Gas Boilers Due to Thermal Retrofitting. Energies, 2021, 14, 1565.	1.6	6
242	Influence of material characteristics of concrete and thermal insulation on the service life of exterior renders. WIT Transactions on Modelling and Simulation, 2009, , .	0.0	6
243	Thermotics As an Alternative Nonequilibrium Thermodynamic Approach Suitable for Real Thermoanalytical Measurements: A Short Review. Journal of Non-Equilibrium Thermodynamics, 2022, 47, 233-240.	2.4	6
244	Structural Performance of Lightweight Aggregate Concrete Reinforced by Glass or Basalt Fiber Reinforced Polymer Bars. Polymers, 2022, 14, 2142.	2.0	6
245	NUMERICAL SIMULATION OF ELECTROMAGNETIC MELTING AND EVAPORATION OF SPHERICAL METAL PARTS. Numerical Heat Transfer; Part A: Applications, 1994, 25, 135-150.	1.2	5
246	Dynamics of laser induced phase transformations in amorphous silicon. Applied Surface Science, 1997, 109-110, 317-321.	3.1	5
247	Innovative Lime-Pozzolana Renders for Reconstruction of Historical Buildings. Advanced Materials Research, 0, 324, 372-375.	0.3	5
248	Influence of Metashale as Cement Replacement on the Hygric Transport Properties of Concrete. Advanced Materials Research, 0, 1054, 188-193.	0.3	5
249	Mechanical and Thermal Properties of Composites Containing Waste Coir Pith. Advanced Materials Research, 0, 1054, 238-242.	0.3	5
250	Effect of Heating and Cooling Mode on Temperature and Enthalpy of Phase Changes in PCM Modified Plaster. Applied Mechanics and Materials, 0, 595, 149-154.	0.2	5
251	Properties of Lime Plasters with Different Ceramic Powder Dosage. Applied Mechanics and Materials, 0, 621, 19-23.	0.2	5
252	Application of fluorometric and numerical analysis for assessing the algal resistance of external thermal insulation composite systems. Journal of Building Physics, 2015, 38, 290-316.	1.2	5

#	Article	IF	CITATIONS
253	Characterization of Cement Pastes Containing Natural Zeolite as a Pozzolanic Admixture. Applied Mechanics and Materials, 0, 719-720, 206-209.	0.2	5
254	Measurement of the contribution of radiation to the apparent thermal conductivity of fiber reinforced cement composites exposed to elevated temperatures. International Journal of Thermal Sciences, 2016, 100, 298-304.	2.6	5
255	Effect of Weather Data Selection on Simulated Moisture and Temperature Fields in Building Envelopes in Central Europe. Energy Procedia, 2017, 132, 514-519.	1.8	5
256	Formulation of a hygrothermal model for description of ice-forming process in porous building materials. AIP Conference Proceedings, 2018, , .	0.3	5
257	Kinetics of pozzolanic reaction and carbonation in ceramic – lime system: Thermogravimetry and solid-state NMR spectroscopy study. Journal of Building Engineering, 2020, 32, 101729.	1.6	5
258	Mutual interactions of fungi and molds on woods treated with a caffeine solution: A preliminary study. , 2020, , .		5
259	Phase composition of ceramic-based alkali-activated polymers: combination of X-ray diffraction and thermal analysis. Journal of Thermal Analysis and Calorimetry, 2020, 142, 157-166.	2.0	5
260	Exploiting advantages of empirical and optimization approaches to design alkali activated materials in a more efficient way. Construction and Building Materials, 2021, 292, 123460.	3.2	5
261	Computational compensation of systematic errors accompanying non-equilibrium thermocouple measurements. International Journal of Thermal Sciences, 2021, 168, 107049.	2.6	5
262	Effect of thermal insulation on hygric and thermal conditions in the envelopes of renovated historical buildings. , 2012, , .		5
263	Utilization of Crushed Pavement Blocks in Concrete: Assessment of Functional Properties and Environmental Impacts. Materials, 2021, 14, 7361.	1.3	5
264	A model of binary-alloy solidification in the gravitational field. Thermochimica Acta, 1993, 218, 17-28.	1.2	4
265	Methods for evaluation of water-proofness quality and diffusion properties of coating materials. Construction and Building Materials, 1996, 10, 547-552.	3.2	4
266	Modeling the preparation of pc-Si thin films with a Cu vapor laser. Applied Physics A: Materials Science and Processing, 1998, 67, 513-516.	1.1	4
267	Computational model of nonequilibrium phase transitions in a Si-Ge system. Computational Materials Science, 1998, 10, 468-474.	1.4	4
268	Numerical solution of a Stefan-like problem in laser processing of semiconducting alloys. Mathematics and Computers in Simulation, 1999, 50, 165-173.	2.4	4
269	Computational modeling of turbulent melt flow in CdZnTe crystal growth. Computational Materials Science, 2002, 25, 316-328.	1.4	4
270	Analysis of dielectric mixing models for the moisture assessment of porous building materials. Pollack Periodica, 2009, 4, 79-88.	0.2	4

#	Article	IF	CITATIONS
271	Thermal Properties of Selected Timbers. Advanced Materials Research, 0, 982, 100-103.	0.3	4
272	Retention Curves of Different Types of Sandstone. Advanced Materials Research, 2014, 982, 44-48.	0.3	4
273	Application of Zeolite as a Partial Replacement of Cement in Concrete Production. Applied Mechanics and Materials, 0, 621, 30-34.	0.2	4
274	Comparison of Two Different Modes of Inverse Analysis Used for Determination of Moisture Diffusivity of Building Materials. Advanced Materials Research, 2014, 982, 49-53.	0.3	4
275	Advances in Building Technologies and Construction Materials. Advances in Materials Science and Engineering, 2015, 2015, 1-3.	1.0	4
276	A Method for Optimizing Lightweight-Gypsum Design Based on Sequential Measurements of Physical Parameters. Measurement Science Review, 2016, 16, 160-166.	0.6	4
277	Long-term monitoring of the Sedlec Ossuary – Analysis of hygrothermal conditions. AlP Conference Proceedings, 2016, , .	0.3	4
278	A Laboratory Experiment for Monitoring the Time Development of Water Freezing Processes in Porous Materials and Its Computational Analysis. International Journal of Thermophysics, 2016, 37, 1.	1.0	4
279	Identification of Water Diffusivity of Inorganic Porous Materials Using Evolutionary Algorithms. Transport in Porous Media, 2016, 113, 51-66.	1.2	4
280	Computational analysis of heat transport and storage processes in large-volume isothermal heat flow calorimeter. Applied Thermal Engineering, 2017, 121, 547-553.	3.0	4
281	Application of infrared thermography in complex moisture inspection of the Schebek Palace. AIP Conference Proceedings, 2017, , .	0.3	4
282	Physical and mathematical models of hygrothermal processes in historical building envelopes. AIP Conference Proceedings, 2017, , .	0.3	4
283	Mechanical and hygric properties of lime plasters modified by biomass fly ash. IOP Conference Series: Materials Science and Engineering, 2018, 365, 032059.	0.3	4
284	Influence of Superabsorbent Polymers on Moisture Control in Building Interiors. Energies, 2020, 13, 2009.	1.6	4
285	Functional Properties of SAP-Based Humidity Control Plasters. Polymers, 2021, 13, 2279.	2.0	4
286	Hygrothermal properties of glass fiber reinforced cements subjected to elevated temperature. Materials and Structures/Materiaux Et Constructions, 2004, 37, 597-607.	1.3	4
287	Effect of the mode and dynamics of thermal processes on DSC-acquired phase-change temperature and latent heat of different kinds of PCM. Materiali in Tehnologije, 2017, 51, 919-924.	0.3	4
288	The properties of innovated mortars utilizing secondary raw material. WIT Transactions on the Built Environment, 2014, , .	0.0	4

#	Article	IF	CITATIONS
289	Properties of plasters suitable for reconstruction of historical buildings. WIT Transactions on the Built Environment, 2013, , .	0.0	4
290	Application of Time-domain Reflectometry Method for Measuring Moisture Content in Porous Building Materials. Trends in Applied Sciences Research, 2007, 2, 188-200.	0.4	4
291	Light-emitting Si prepared by laser annealing of a-Si:H. Thin Solid Films, 1995, 255, 302-304.	0.8	3
292	High Temperature Testing of Cement Mortar Containing MSWI Bottom Ash. Applied Mechanics and Materials, 2013, 377, 55-59.	0.2	3
293	Application of Thermally Treated Sewage Sludge in Blended Cements. Advanced Materials Research, 0, 905, 191-194.	0.3	3
294	A Comparative Study on Thermal Properties of Two Types of Concrete Containing Fine Ceramic Waste and Burnt Clay Shale as a Supplementary Material. Advanced Materials Research, 2014, 982, 79-83.	0.3	3
295	Effect of Zeolite Admixture on Freeze/Thaw Resistance of Concrete Exposed to the Dynamic Climatic Conditions. Advanced Materials Research, 0, 982, 27-31.	0.3	3
296	Mechanical Behavior of the Cement Mortar with High Amount of Municipal Solid Waste Incineration (MSWI) Bottom Ash as an Alternative Aggregate. Advanced Materials Research, 0, 982, 74-78.	0.3	3
297	Properties of Cement Composites Containing Coir Pith. Advanced Materials Research, 0, 982, 136-140.	0.3	3
298	Lime Plasters Containing Waste Ceramic Powder as Partial Replacement of Siliceous Aggregates. Advanced Materials Research, 0, 1035, 77-82.	0.3	3
299	Thermal Properties of High-Performance Concrete Containing Fine-Ground Ceramics as a Partial Cement Replacement. Medziagotyra, 2015, 21, .	0.1	3
300	Software for service life assessment of historical buildings: Implementation of coupled heat, moisture and salt transport model. AIP Conference Proceedings, 2015, , .	0.3	3
301	Applicability of contemporary ceramic bricks for the reconstruction of historical masonry. AIP Conference Proceedings, 2015, , .	0.3	3
302	Parameters describing the coupled water and nitrate transport and storage in materials of historical masonry. AIP Conference Proceedings, 2015, , .	0.3	3
303	Strength Development and Physical Properties of Cement Paste with Incorporated Ceramic Powder. Medziagotyra, 2016, 22, .	0.1	3
304	Advances in Building Technologies and Construction Materials 2016. Advances in Materials Science and Engineering, 2016, 2016, 1-2.	1.0	3
305	The influence of inner hydrophobisation on water transport properties of modified lime plasters. AIP Conference Proceedings, 2016, , .	0.3	3
306	UHPFRC at high temperatures – Simultaneous thermal analysis and thermodilatometry. AIP Conference Proceedings, 2016, , .	0.3	3

#	Article	IF	CITATIONS
307	Mechanical and thermal properties of the Czech marbles. AIP Conference Proceedings, 2016, , .	0.3	3
308	Seebeck effect influence on joule heat evolution in electrically conductive silicate materials. AIP Conference Proceedings, 2016, , .	0.3	3
309	Hydration of blended cement pastes containing waste ceramic powder as a function of age. AIP Conference Proceedings, 2016, , .	0.3	3
310	Pore System and Hydric Properties of Two Different Lime Plasters with Finely Crushed Brick. Key Engineering Materials, 0, 675-676, 597-600.	0.4	3
311	Simultaneous thermal analysis and thermodilatometry of hybrid fiber reinforced UHPC. AIP Conference Proceedings, 2017, , .	0.3	3
312	Effect of silica fume on hydration of air-cured blended cement pastes measured by DSC/TG analysis. AIP Conference Proceedings, 2017, , .	0.3	3
313	Chapel of cemetery church of all saints in Sedlec – Long-term analysis of hygrothermal conditions. AlP Conference Proceedings, 2017, , .	0.3	3
314	Effect of hygric and thermal properties of connecting layers on the performance of interior thermal insulation systems. AIP Conference Proceedings, 2017, , .	0.3	3
315	Porous Structure and Hygric Properties of Concrete for Radioactive Waste Repositories. Key Engineering Materials, 0, 760, 127-131.	0.4	3
316	Evaluation of thermal performance of window lintel construction detail. IOP Conference Series: Materials Science and Engineering, 2018, 415, 012015.	0.3	3
317	Computational simulation of hygrothermal processes in historical building envelopes provided with interior thermal insulation. IOP Conference Series: Materials Science and Engineering, 2018, 364, 012009.	0.3	3
318	Transport of gadolinium in a cement composite. MATEC Web of Conferences, 2019, 282, 02105.	0.1	3
319	Moisture sorption and thickness swelling of wood-based materials intended for structural use in humid conditions and bonded with melamine resin. IOP Conference Series: Materials Science and Engineering, 2019, 549, 012042.	0.3	3
320	Experimental Determination of Heat and Moisture Transport Properties of AAC in the Range of Subzero to Room Temperatures. International Journal of Thermophysics, 2019, 40, 1.	1.0	3
321	Interactions of superabsorbent polymers based on acrylamide substances with microorganisms occurring in human dwellings. Ecotoxicology and Environmental Safety, 2020, 195, 110522.	2.9	3
322	Properties of lime-cement plasters incorporating ceramic powder. International Journal of Computational Methods and Experimental Measurements, 2017, 5, 144-153.	0.1	3
323	Effect of metakaolin on chloride binding in lime-based composites. WIT Transactions on Modelling and Simulation, 2007, , .	0.0	3
324	Experimental analysis of material properties of historical ceramic bricks and their potential current replacements. WIT Transactions on the Built Environment, 2015, , .	0.0	3

#	Article	IF	CITATIONS
325	Ecotoxicity and Biodegradation of Sustainable Environment-Friendly Bone-Glue-Based Adhesive Suitable for Insulation Materials. Polymers, 2022, 14, 2209.	2.0	3
326	Effect of density change on the stability of a planar phase interface. International Communications in Heat and Mass Transfer, 1994, 21, 605-614.	2.9	2
327	A theoretical relation between viscosity and thermal conductivity of gases based on macroscopic balance equations. European Physical Journal D, 1994, 44, 913-926.	0.4	2
328	Coupled thermal and moisture expansion of porous materials. International Journal of Thermophysics, 1996, 17, 271-277.	1.0	2
329	Time Resolved Reflectivity Studies of Phase Transitions in Polycrystalline Si Induced by Excimer Laser Irradiation. Solid State Phenomena, 1996, 51-52, 173-178.	0.3	2
330	Deposition of waste water into deep mines. Environmetrics, 1999, 10, 457-466.	0.6	2
331	Chapter 3 Modeling Laser-Induced Phase-Change Processes: Theory and Computation. Semiconductors and Semimetals, 2003, , 43-78.	0.4	2
332	New Type of Lime Plaster with Pozzolana Admixture for Renewal of Historical Buildings. Advanced Materials Research, 0, 324, 336-339.	0.3	2
333	Moisture Transport Properties of Hydrophilic Mineral Wool. Advanced Materials Research, 2014, 982, 6-10.	0.3	2
334	Adsorption isotherm predicted from a lattice gas with general lateral interactions in a single-phase regime. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P12006.	0.9	2
335	Fast Inverse-Analysis Calculation of Diffusion Coefficient for Salt Transport in Porous Building Materials. Advanced Materials Research, 2015, 1126, 117-122.	0.3	2
336	Thermogravimetry of Portland Cement from Argentina and Czech Republic. Advanced Materials Research, 0, 1126, 169-173.	0.3	2
337	Role of Time Relaxation in a One-Dimensional Diffusion-Advection Model of Water and Salt Transport. Advances in Mathematical Physics, 2015, 2015, 1-6.	0.4	2
338	Traditional fired-clay bricks versus large and highly perforated fired-clay bricks masonry. , 2015, , 63-81.		2
339	Characterization of a lime-pozzolan plaster containing phase change material. AIP Conference Proceedings, 2015, , .	0.3	2
340	Moisture diffusivity of wood. AIP Conference Proceedings, 2015, , .	0.3	2
341	Properties of Hydrophilic Mineral Wool for Desalination of Historical Masonry. Medziagotyra, 2016, 22, .	0.1	2
342	Effect of water-ice phase change on thermal performance of building materials. AIP Conference Proceedings, 2016, , .	0.3	2

#	Article	IF	CITATIONS
343	Hygric Properties of Lime-cement Plasters with the Addition of a Pozzolana. Procedia Engineering, 2016, 151, 127-132.	1.2	2
344	Moisture properties of the lightweight brick body. AIP Conference Proceedings, 2016, , .	0.3	2
345	Modeling of heat evolution in silicate building materials with electrically conductive admixtures. AIP Conference Proceedings, 2016, , .	0.3	2
346	Identification of Moisture Diffusivity of Autoclaved Aerated Concrete in the Form of Smooth Two-Variable Function. Energy Procedia, 2017, 132, 219-224.	1.8	2
347	Mechanical, hydric and thermal properties of fine-grained high performance concrete. , 2017, , .		2
348	Hydration heat of alkali activated fine-grained ceramic. AIP Conference Proceedings, 2017, , .	0.3	2
349	Methodology of sealing plugs development for brick block with enhanced acoustic properties. AIP Conference Proceedings, 2018, , .	0.3	2
350	Measurement and modelling of calcium diffusion in a sandstone. AIP Conference Proceedings, 2018, , .	0.3	2
351	Growth effectivity of molds in contact with methylxanthines. MATEC Web of Conferences, 2019, 282, 02058.	0.1	2
352	Data acquisition and acoustic modeling of heterogeneous building materials. AIP Conference Proceedings, 2019, , .	0.3	2
353	Bending characteristics of fiber-reinforced composite with plywood balsa core. AIP Conference Proceedings, 2019, , .	0.3	2
354	Basic physical and mechanical properties of cement composites after temperature exposure. MATEC Web of Conferences, 2020, 322, 01001.	0.1	2
355	Uptake of caffeine by Serpula lacrymans. AIP Conference Proceedings, 2020, , .	0.3	2
356	Computational Prediction of Susceptibility to Biofilms Growth: Two-Dimensional Analysis of Critical Construction Details. Energies, 2020, 13, 293.	1.6	2
357	Comparison of water removal methods from cement paste at early age. AIP Conference Proceedings, 2021, , .	0.3	2
358	Influence of selected storage temperatures on wood properties and its biological resistance after the use of methylxanthines. BioResources, 2021, 16, 6231-6243.	0.5	2
359	Natural zeolite as environmentally friendly supplementary cementitious material in concrete. WIT Transactions on Ecology and the Environment, 2012, , .	0.0	2
360	Waste ceramics as supplementary cementitious material: characterization and utilization. , 2014, , .		2

#	Article	IF	CITATIONS
361	Computational simulation of the effect of crystallization inhibitors on salt transport and crystallization in porous materials. WIT Transactions on Modelling and Simulation, 2007, , .	0.0	2
362	Desalination of historical masonry using hydrophilic mineral wool boards. WIT Transactions on Modelling and Simulation, 2007, , .	0.0	2
363	Service life assessment of exterior lime-pozzolan renders containing ceramic powder. , 2015, , .		2
364	Fine-ground ceramics as an alternative binder in high performance concrete. , 2010, , .		2
365	Computational and experimental characterization of building envelopes based on autoclaved aerated concrete. WIT Transactions on Engineering Sciences, 2011, , .	0.0	2
366	Environmental friendly concrete production using municipal solid waste incineration materials. WIT Transactions on Ecology and the Environment, 2011, , .	0.0	2
367	Mechanical, hygric and thermal properties of innovative renovation renders. WIT Transactions on the Built Environment, 2011, , .	0.0	2
368	Service life assessment of different types of plasters applied for the renovation of architectural heritage. WIT Transactions on the Built Environment, 2015, , .	0.0	2
369	Effect of different climatic conditions on the degradation of historical masonry in the Czech Republic. , 2015, , .		2
370	Microstructure Formation of Cement Mortars Modified by Superabsorbent Polymers. Polymers, 2021, 13, 3584.	2.0	2
371	Optimization methods for determination of moisture diffusivity of building materials in the drying phase. WIT Transactions on Ecology and the Environment, 2012, , .	0.0	2
372	A difference method for determining the thermal conductivity of porous materials in a wide temperature range. High Temperatures - High Pressures, 1997, 29, 51-57.	0.3	2
373	Monitoring the Damage of Exterior Renders Caused by the Environment. International Journal of Sustainable Development and Planning, 2017, 12, 342-351.	0.3	2
374	Effect of limestone powder on strength and permeability of cementitious mortars. MATEC Web of Conferences, 2020, 322, 01009.	0.1	2
375	Properties of CAC paste with varying alumina based admixtures. AIP Conference Proceedings, 2021, , .	0.3	2
376	Physical and chemical characteristics of heat resistant materials based on high alumina cement. AIP Conference Proceedings, 2021, , .	0.3	2
377	Advances and New Challenges for Recycled Aggregate Concrete. Advances in Materials Science and Engineering, 2021, 2021, 1-2.	1.0	2
378	Thermal inertia and evaluation of reaction kinetics: A critical review. Measurement: Journal of the International Measurement Confederation, 2022, 198, 111354.	2.5	2

#	Article	IF	CITATIONS
379	A model of solidification with buoyancy-driven convection in the melt. European Physical Journal D, 1990, 40, 301-316.	0.4	1
380	A model of solidification under microgravity conditions. European Physical Journal D, 1993, 43, 63-71.	0.4	1
381	Kinetics of Ni Silicides Synthesis with Excimer Laser Pulses Studied by TRR. Materials Research Society Symposia Proceedings, 1993, 320, 415.	0.1	1
382	Properties of Recrystallized Amorphous Silicon Prepared by XeCl Excimer Laser Irradiation. Materials Science Forum, 1994, 173-174, 29-34.	0.3	1
383	Influence of variations of temporal pulse shape in excimer laser processing of semiconductors. Computational Materials Science, 1994, 2, 319-325.	1.4	1
384	Computational analysis of a modified guarded hot plate experiment. , 2012, , .		1
385	Identification of water vapour transport properties of gypsum using evolutionary algorithms. , 2012, , \cdot		1
386	Effect of Freeze/Thaw Cycles on the Physical Properties of Selected Building Stones. Advanced Materials Research, 2014, 1035, 83-88.	0.3	1
387	Effect of Porosity on Mechanical and Hygric Properties of Concrete with Natural Pozzolan Addition. Advanced Materials Research, 0, 982, 22-26.	0.3	1
388	Validation of Genetic Programming Tool for the Inverse Analysis of Moisture Transport in Building Materials. Advanced Materials Research, 2015, 1126, 75-80.	0.3	1
389	Moisture dependent thermal properties of hydrophilic mineral wool: application of the effective media theory. Medziagotyra, 2015, 21, .	0.1	1
390	Experimental Analysis of Different Kinds of Sandstone for Reconstruction of Historical Masonry. Applied Mechanics and Materials, 2015, 719-720, 210-213.	0.2	1
391	Effect of cation type on chloride binding in building stones. AlP Conference Proceedings, 2015, , .	0.3	1
392	Application of the Lichtenecker's mixing rule in modeling the thermal properties of autoclaved aerated concrete. AIP Conference Proceedings, 2015, , .	0.3	1
393	Hygric properties of sandstones as a function of porosity. AIP Conference Proceedings, 2015, , .	0.3	1
394	Thermal insulating plasters and their hygric properties. AIP Conference Proceedings, 2015, , .	0.3	1
395	High-temperature testing of high performance fiber reinforced concrete. AIP Conference Proceedings, 2016, , .	0.3	1
396	Basic Physical and Mechanical Properties of Composites Based on Three Different Cements. Key Engineering Materials, 0, 677, 186-190.	0.4	1

#	Article	IF	CITATIONS
397	Effect of heat and moisture transport and storage properties of building stones on the hygrothermal performance of historical building envelopes. AIP Conference Proceedings, 2016, , .	0.3	1
398	Ternary binder based plasters with improved thermal insulating ability. IOP Conference Series: Materials Science and Engineering, 2017, 251, 012008.	0.3	1
399	Mechanical and Basic Physical Properties of High-Strength Concrete Exposed to Elevated Temperatures. Key Engineering Materials, 0, 760, 108-113.	0.4	1
400	Microclimate of a former treasury in Cathedral of Assumption of Our Lady and Saint John the Baptist in Sedlec — Long-time analysis. AIP Conference Proceedings, 2018, , .	0.3	1
401	Early age calorimetric investigations of geopolymers. AIP Conference Proceedings, 2018, , .	0.3	1
402	Mechanical and thermal properties of concrete suitable for radioactive waste disposal sites. IOP Conference Series: Materials Science and Engineering, 2018, 385, 012061.	0.3	1
403	Determination of material parameters of thermal insulation boards for the application on interior side of historical walls. IOP Conference Series: Materials Science and Engineering, 2018, 364, 012067.	0.3	1
404	Varying coefficients of diffusion of 133Ba2+ and 137Cs+ in granite. AIP Conference Proceedings, 2018, , .	0.3	1
405	Computational modelling of thermal processes in a calorimetric experiment. AIP Conference Proceedings, 2018, , .	0.3	1
406	Thermal, hygric and mechanical properties of HPC containing silica fume. AIP Conference Proceedings, 2019, , .	0.3	1
407	Concentration dependence of diffusion coefficients of 22Na+ and 134Cs+ in opalinus clay rocks. AIP Conference Proceedings, 2019, , .	0.3	1
408	Basic physical, electrical and thermal properties of geopolymers with enhanced electrical properties. AIP Conference Proceedings, 2019, , .	0.3	1
409	Efficient Techniques for Solution of Complex Computational Tasks in Building Physics. Advances in Civil Engineering, 2019, 2019, 1-11.	0.4	1
410	Possibility to use surface TDR sensors to estimate water absorption coefficient of porous materials. AIP Conference Proceedings, 2020, , .	0.3	1
411	Influence of built-in thermocouples on temperature field in cement composites exposed to high temperatures. AIP Conference Proceedings, 2020, , .	0.3	1
412	Self-heating ability of geopolymer with graphite powder. AIP Conference Proceedings, 2020, , .	0.3	1
413	Effect of superabsorbent polymer admixtures on hygric and thermal properties of cement mortar. E3S Web of Conferences, 2020, 172, 14011.	0.2	1
414	Special Issue "Recent Developments in Building Physics― Energies, 2020, 13, 6356.	1.6	1

#	Article	IF	CITATIONS
415	Effects of accelerated carbonation on properties of ceramic-based geopolymers. Journal of Thermal Analysis and Calorimetry, 2021, 145, 2951-2966.	2.0	1
416	Microscopic analysis of composite boards made from rapeseed straw particles. AIP Conference Proceedings, 2021, , .	0.3	1
417	Computational analysis of energy performance of advanced moisture responsive plasters. AIP Conference Proceedings, 2021, , .	0.3	1
418	High Temperature Exposure of HPC – Experimental Analysis of Residual Properties and Thermal Response. MATEC Web of Conferences, 2016, 63, 01004.	0.1	1
419	Characterization of ceramic-based alkali activated aluminosilicate composites. AIP Conference Proceedings, 2020, , .	0.3	1
420	Thermal properties of aramid-fiber reinforced cement composite. , 2010, , 965-972.		1
421	Effect of slag on chloride transport and storage properties of HPC. , 2010, , 1497-1504.		1
422	Properties of hydrophilic mineral wool Front-Rock Max E. Pollack Periodica, 2009, 4, 101-106.	0.2	1
423	Mathematical modeling of water and salt transport in porous materials. WIT Transactions on Modelling and Simulation, 2007, , .	0.0	1
424	Effect of moisture dependent thermal and hygric parameters on the moisture and temperature fields in multi-layered systems of building materials. WIT Transactions on Modelling and Simulation, 2013, , .	0.0	1
425	The high temperature resistance of a para-aramid fibre-reinforced concrete composite. , 2014, , .		1
426	Interface resistances in heat and moisture transport: semi-scale experimental analysis. WIT Transactions on Engineering Sciences, 2011, , .	0.0	1
427	Application of a combined computational-experimental approach for the service life estimate of exterior plasters of historical buildings. , 2009, , .		1
428	Moisture Buffering Potential of Plasters for Energy Efficiency in Modern Buildings. , 0, , .		1
429	EFFECT OF INCORPORATED SUPERABSORBENT POLYMERS ON WORKABILITY AND HYDRATION PROCESS IN CEMENT-BASED MATERIALS. , 2019, , .		1
430	Hygric and Thermal Properties of Materials Involved in the Envelopes of Contemporary Buildings. , 2011, , .		1
431	Influence of characteristic types of thermal insulation on energy savings of AAC-based building envelope: a comparison. , 2012, , .		1
432	A complex finite-element model for the investigation of historical masonry. WIT Transactions on the Built Environment, 2013, , .	0.0	1

#	Article	IF	CITATIONS
433	Hygrothermal performance of innovative renovation renders used for different types of historical masonry. WIT Transactions on State-of-the-art in Science and Engineering, 2013, , 121-131.	0.0	1
434	An in situ monitoring system for the study of environmental influences on durability and the destructive process of building materials and structures. WIT Transactions on Modelling and Simulation, 2013, , .	0.0	1
435	Computational assessment of energy efficiency and hygrothermal performance of retrofitted historical building envelopes. , 2015, , .		1
436	Computational Analysis of the Energy Efficiency of Stone Walls: Current Situation and Possible Improvements. International Journal of Sustainable Development and Planning, 2017, 12, 264-272.	0.3	1
437	Properties of high-performance fiber-reinforced concrete after thermal treatment at high temperatures. Materiali in Tehnologije, 2019, 53, 481-487.	0.3	1
438	Evaluation of parameters influencing the withdrawal strength of oak and beech dowels. BioResources, 2020, 15, 1665-1677.	0.5	1
439	Optimization of concrete mixture composition with superabsorbent polymer admixture. AIP Conference Proceedings, 2020, , .	0.3	1
440	Influence of metakaolin on pH of cement paste. AIP Conference Proceedings, 2021, , .	0.3	1
441	Characterization of brick clays suitable for advanced ceramic building elements. AIP Conference Proceedings, 2022, , .	0.3	1
442	Effects of Secondary Porosity on Microstructure and Mechanical Properties of SAP-Containing Lime-Based Plasters. Polymers, 2022, 14, 1162.	2.0	1
443	Moisture and temperature dependence of the moisture diffusivity. International Journal of Heat and Mass Transfer, 1990, 33, 2053-2055.	2.5	0
444	A two-dimensional model of binary-alloy solidification with a Mushy-zone. European Physical Journal D, 1992, 42, 411-430.	0.4	0
445	Nonequilibrium solidification of monocrystalline Si induced by ArF-excimer-laser irradiation. Thermochimica Acta, 1993, 218, 173-182.	1.2	Ο
446	Computational modeling of solid-state reactions in the Niî—,Si systems induced by pulsed lasers. Journal of Computational and Applied Mathematics, 1995, 63, 357-363.	1.1	0
447	Application of combined experimental and numerical techniques in determining the temperature dependence of reflectivity of semiconductors. International Journal of Thermophysics, 1996, 17, 527-533.	1.0	Ο
448	Pulsed laser assisted recrystallisation of monocrystalline InSb surfaces. Journal of Crystal Growth, 1999, 198-199, 1066-1069.	0.7	0
449	Hygrothermal Stress Induced Problems in Large Scale Sprayed Concrete Structures. , 1999, , 103-109.		0
450	Computational simulations of pulsed laser induced melting and solidification of monocrystalline GaSb. Computational Materials Science, 2000, 17, 384-388.	1.4	0

#	Article	IF	CITATIONS
451	HYGRIC AND THERMAL PROPERTIES OF HPC FOR CONCRETE CONTAINMENTS OF NUCLEAR POWER PLANTS. , 2002, , 765-774.		0
452	COMPUTATIONAL ANALYSIS OF THE PARAMETERS OF COUPLED WATER AND CHLORIDE TRANSPORT IN CEMENT MORTAR. , 2005, , 611-620.		0
453	HYGRIC AND THERMAL PROPERTIES OF HIGH PERFORMANCE CONCRETE. , 2005, , 555-562.		0
454	Computational simulation of salt transport and crystallization in surface layers of building envelopes. , 2012, , .		0
455	Effect of hysteresis on moisture transport in porous building materials. , 2012, , .		0
456	Strength and Elasticity of Mortar with Municipal Solid Waste Incineration Ash. Advanced Materials Research, 0, 584, 350-354.	0.3	0
457	A verification of the genetic programming method in the inverse analysis of moisture transport in building materials. , 2013, , .		0
458	A method for selection of a critical weather year for hygrothermal simulation based on incomplete weather data. , 2013, , .		0
459	Computational model of coupled heat, moisture and salt transport in multi-layered building structures: Implementation of the deterministic physical model and example of application. , 2013, , .		0
460	Preface of the "Symposium on computational modeling of transport processes in building materials and their multi-layered systems". , 2013, , .		0
461	Deterministic physical and mathematical models of coupled heat, moisture and salt transport in multi-layered systems of building materials. , 2013, , .		0
462	Comparison of computational methods for estimation of energy balance of building envelopes. , 2013, ,		0
463	Application of Two Different Methods for Determination of Water and Chloride Transport Parameters of Building Stones. Applied Mechanics and Materials, 0, 595, 143-148.	0.2	0
464	Application of Digital Optical Microscopy in Materials and Mechanical Engineering: Optical Porosimetry and Crack Detection. Advanced Materials Research, 0, 982, 68-73.	0.3	0
465	Hygric Transport Parameters of Several Kinds of Sandstones. Applied Mechanics and Materials, 2014, 621, 24-29.	0.2	0
466	Determination of Hygric Properties of Hollow Brick Block as a Function of Moisture Content. Advanced Materials Research, 0, 982, 54-58.	0.3	0
467	Analysis of Thermal Conductivity of Lime Plaster with Pozzolanic Addition by Different Homogenization Techniques. Advanced Materials Research, 0, 982, 1-5.	0.3	0
468	Differences in the Properties of Arenaceous Marlstones from Different Quarries. Advanced Materials Research, 2014, 982, 149-153.	0.3	0

#	Article	IF	CITATIONS
469	Uncertainty Analysis of Computational-Experimental Approach for Determination of Equivalent Thermal Conductivity of Highly Perforated Bricks. Advanced Materials Research, 0, 1126, 105-110.	0.3	0
470	<i>In Situ</i> Examination and Laboratory Testing of the Enclosure Wall of the Star Game Preserve. Advanced Materials Research, 0, 1126, 137-142.	0.3	0
471	Phase Change Materials: A Prospective Solution for Surface Layers of Building Envelopes. Applied Mechanics and Materials, 0, 749, 415-419.	0.2	0
472	A Contribution to the Analysis of Water Vapor Transport in Porous Building Materials. Materials Science Forum, 0, 824, 111-115.	0.3	0
473	Application of a Transient Method for Investigation of Water Vapour Transport Properties of Autoclaved Aerated Concrete. Materials Science Forum, 0, 824, 95-99.	0.3	0
474	A Contribution to the Treatment of Salt Damage in Historical Buildings. Materials Science Forum, 0, 824, 127-132.	0.3	0
475	Study of Mass Changes of Cement Pastes as a Function of Age Using Thermogravimetry. Materials Science Forum, 0, 824, 43-47.	0.3	0
476	Effect of External Environment on the Properties of Selected Plasters. Advanced Materials Research, 0, 1125, 377-381.	0.3	0
477	<i>In Situ</i> Analysis of Hygrothermal Performance of the Sedlec Ossuary. Advanced Materials Research, 2015, 1126, 22-27.	0.3	0
478	Determination of Salt Transport Properties of Sandstone: A Combined Experimental/Computational Approach. Advanced Materials Research, 0, 1125, 382-386.	0.3	0
479	EFFECT OF SANDSTONE ANISOTROPY ON ITS HEAT AND MOISTURE TRANSPORT PROPERTIES. Medziagotyra, 2015, 21, .	0.1	0
480	Preface of the "Computational modeling and experimental assessment of transport processes in building materials and their multi-layered systems― AIP Conference Proceedings, 2015, , .	0.3	0
481	Online climatic database for in-depth numerical analysis of building performance: Design of the code and example of application. AIP Conference Proceedings, 2015, , .	0.3	0
482	Thermal Properties of Cement Based Composites with Municipal Solid Waste Incinerator Fly Ash Accessed by Two Different Transient Methods. Medziagotyra, 2016, 22, .	0.1	0
483	Laboratory testing of a building envelope segment based on cellular concrete. AIP Conference Proceedings, 2016, , .	0.3	0
484	Analysis of the building constructions from the point of view of possible freeze-thaw deterioration. AIP Conference Proceedings, 2016, , .	0.3	0
485	Experimental and Theoretical Study of Heat Transport Parameters of Plasters Containing Pozzolanic Admixtures. Key Engineering Materials, 0, 675-676, 569-572.	0.4	0
486	Assessment of material degradation considering the characteristics of its pore structure. AIP Conference Proceedings, 2016, , .	0.3	0

#	Article	IF	CITATIONS
487	The Comparison of Water, Water Vapour Transport Properties and Mechanical Characterization of Two Commercial Plasters on Market in the Czech Republic. Key Engineering Materials, 0, 722, 357-361.	0.4	0
488	Analysis of the impact of applied climatic data on the computational modelling of frost damage in building structures. AIP Conference Proceedings, 2016, , .	0.3	0
489	Computational modeling of the effect of external environment on the degradation of high-performance concrete. AIP Conference Proceedings, 2017, , .	0.3	0
490	Influence of the cavity geometry on the heat transfer conditions inside highly perforated bricks. AIP Conference Proceedings, 2017, , .	0.3	0
491	Mechanical and thermal properties of HSC with fine natural pozzolana as SCM. AIP Conference Proceedings, 2017, , .	0.3	Ο
492	Steel and PVA Fibres Reinforced UHPC Exposed to High Temperatures - Analysis of Residual Properties. Materials Science Forum, 0, 902, 26-32.	0.3	0
493	Utilization of computational modelling for determination of hydration kinetics of heterogeneous materials. AIP Conference Proceedings, 2017, , .	0.3	0
494	Hygrothermal analysis of surface layers of historical masonry. AIP Conference Proceedings, 2017, , .	0.3	0
495	Improvement of properties of aluminosilicate pastes based on optimization of curing parameters. AIP Conference Proceedings, 2017, , .	0.3	0
496	Thermal properties of alkali-activated aluminosilicates with CNT admixture. AIP Conference Proceedings, 2017, , .	0.3	0
497	Improvement of mechanical properties of fiber reinforced mortar using a linear optimization method. AIP Conference Proceedings, 2017, , .	0.3	0
498	Verification of Joule heat evolution model for silicate building materials with electrically conductive admixtures. AIP Conference Proceedings, 2017, , .	0.3	0
499	The influence of high temperatures on selected properties of calcium aluminous composites. AIP Conference Proceedings, 2017, , .	0.3	0
500	Thermal insulation materials for inside applications: Hygric and thermal properties. AIP Conference Proceedings, 2017, , .	0.3	0
501	Thawing of ice in porous space of building materials: Experimental monitoring and computational modelling. AIP Conference Proceedings, 2017, , .	0.3	0
502	Interior thermal insulation systems for historical building envelopes. AIP Conference Proceedings, 2017, , .	0.3	0
503	Moisture diffusivity of HPFRC exposed to high temperatures. AIP Conference Proceedings, 2017, , .	0.3	0
504	Influence of Supplementary Cementitious Materials on the Properties of Concrete for Secondary Protection Barrier in Radioactive Waste Repositories. Key Engineering Materials, 0, 760, 96-101.	0.4	0

#	Article	IF	CITATIONS
505	Cumulative damage assessment of concrete exposed to environmental effects. AIP Conference Proceedings, 2018, , .	0.3	Ο
506	Physical and mathematical models of sound attenuation in porous materials. AIP Conference Proceedings, 2018, , .	0.3	0
507	Long-time assessment of hygrothermal conditions of the Sedlec charnel house. AIP Conference Proceedings, 2018, , .	0.3	Ο
508	Retrofitting of building envelopes: Evaluation of effectiveness using weather-affected material parameters. IOP Conference Series: Materials Science and Engineering, 2018, 415, 012009.	0.3	0
509	Basic physical, mechanical and hygric properties of renders suitable for historical buildings. IOP Conference Series: Materials Science and Engineering, 2018, 364, 012068.	0.3	0
510	Hygric and mechanical parameters of ternary binder based plasters lightweighted by expanded perlite. IOP Conference Series: Materials Science and Engineering, 2018, 379, 012004.	0.3	0
511	Computational analysis of thermal processes at early-age hydration of lime-based binders. AIP Conference Proceedings, 2018, , .	0.3	Ο
512	Heat, water and water vapour transport and storage properties of alkali-activated aluminosilicates. AIP Conference Proceedings, 2018, , .	0.3	0
513	Computational simulation of transport phenomena in self-heating aluminosilicate composites. AIP Conference Proceedings, 2018, , .	0.3	0
514	Effect of moisture variations on damage cumulation in surface layers of building structures. AIP Conference Proceedings, 2018, , .	0.3	0
515	Environmental assessment of mineral wool manufacturing. AIP Conference Proceedings, 2018, , .	0.3	Ο
516	Thermal and hygric properties of alkali activated aluminosilicates. AIP Conference Proceedings, 2018, ,	0.3	0
517	Advances in Building Technologies and Construction Materials 2018. Advances in Materials Science and Engineering, 2018, 2018, 1-3.	1.0	0
518	Hygric parameters of ternary binder based plasters lightweighted by expanded perlite. AIP Conference Proceedings, 2018, , .	0.3	0
519	Monitoring the effect of external conditions on the properties of building materials. IOP Conference Series: Materials Science and Engineering, 2018, 365, 032051.	0.3	0
520	Inverse analysis of moisture profiles for the assessment of moisture diffusivity of hybrid fiber reinforced UHPC. AIP Conference Proceedings, 2018, , .	0.3	0
521	Hygro-thermo-electrical modeling of transport phenomena in aluminosilicate composites. AIP Conference Proceedings, 2018, , .	0.3	0
522	Kinetic sorption in the transport of species in a cement based composite. AIP Conference Proceedings, 2019, , .	0.3	0

#	Article	IF	CITATIONS
523	Pore structure and hygric properties of composite materials for radionuclide protection barriers. MATEC Web of Conferences, 2019, 282, 02055.	0.1	0
524	Monitoring the course of early-age reactions in alkali activated aluminosilicates. MATEC Web of Conferences, 2019, 282, 02056.	0.1	0
525	Mechanical properties of concrete for radioactive waste repositories. MATEC Web of Conferences, 2019, 282, 02104.	0.1	0
526	Monetized environmental assessment of interior thermal insulation. MATEC Web of Conferences, 2019, 282, 02106.	0.1	0
527	Thermal characteristics of bentonite cement based composites. AIP Conference Proceedings, 2019, , .	0.3	0
528	Resistance of modified interior plasters to mould growth. AIP Conference Proceedings, 2019, , .	0.3	0
529	Effect of the current warming trend on the computational damage assessment of building materials. AIP Conference Proceedings, 2019, , .	0.3	0
530	Self-heating experiment: Alkali-activated aluminosilicate with carbon-based admixture. AIP Conference Proceedings, 2019, , .	0.3	0
531	Pore structure and hygrothermal characteristics of HPC based on Portland cement – Slag blends. AIP Conference Proceedings, 2019, , .	0.3	0
532	Methods for determination of acoustic properties of building materials. MATEC Web of Conferences, 2019, 282, 02061.	0.1	0
533	Effect of zeolite as a sorbent on cesium toxicity of cement-based materials. AIP Conference Proceedings, 2019, , .	0.3	0
534	Determination of effective specific heat capacity of interior plaster containing phase change materials. MATEC Web of Conferences, 2019, 282, 02052.	0.1	0
535	Effect of a varying moisture diffusivity in the transport of gadolinium in a porous material. AIP Conference Proceedings, 2019, , .	0.3	0
536	Influence of concentration change of calcium ions over time on their diffusion through sandstone. IOP Conference Series: Materials Science and Engineering, 2019, 549, 012043.	0.3	0
537	Utilization of hydrophilic cellulose fibers for preparation of plaster with enhanced moisture control capability. IOP Conference Series: Materials Science and Engineering, 2019, 549, 012045.	0.3	0
538	Enhancement of sorption capacity to Sr and Cs of a cement composite by addition of brick powder. IOP Conference Series: Materials Science and Engineering, 2019, 549, 012046.	0.3	0
539	Hygric and thermal properties of selected materials suitable for interior thermal insulation systems. AIP Conference Proceedings, 2019, , .	0.3	0
540	Computer-aided assessment of critical details of interior thermal insulation systems for historical masonry. AIP Conference Proceedings, 2019, , .	0.3	0

#	Article	IF	CITATIONS
541	Experimental and theoretical analysis of acoustic properties of building materials. AIP Conference Proceedings, 2019, , .	0.3	0
542	Verification of computational model for the assessment of interior thermal insulation systems using a laboratory critical experiment. AIP Conference Proceedings, 2019, , .	0.3	0
543	Analysis of in-diffusion of 241Am in concrete by an inverse technique. AIP Conference Proceedings, 2019, , .	0.3	0
544	Basic physical and electrical properties of geopolymers with graphite powder. AIP Conference Proceedings, 2020, , .	0.3	0
545	Classification of mold-infested buildings using gas sensors readouts and support vector machine. AIP Conference Proceedings, 2020, , .	0.3	0
546	The influence of zeolite on the sorption ability of concrete. AIP Conference Proceedings, 2020, , .	0.3	0
547	Utilization plasters with superabsorbent admixture to moderate moisture level in constructions. E3S Web of Conferences, 2020, 172, 11009.	0.2	0
548	Composite material based on rape straw and environmentally friendly adhesive. AIP Conference Proceedings, 2021, , .	0.3	0
549	The time lag in surface diffusion evaluated for the BET and BSB isotherms. AIP Conference Proceedings, 2021, , .	0.3	0
550	Properties of high performance concrete: the effect of cracks. WIT Transactions on the Built Environment, 2006, , .	0.0	0
551	Coupled heat and moisture transport in a building envelope on cast gypsum basis. WIT Transactions on Engineering Sciences, 2006, , .	0.0	0
552	Determination of water and salt transport parameters of porous materials using methods of inverse modelling. WIT Transactions on Modelling and Simulation, 2007, , .	0.0	0
553	Water Transport Properties of Alkali Activated Aluminosilicate Composite Determined by Two Different Methods. Trends in Applied Sciences Research, 2008, 3, 267-277.	0.4	0
554	Monitoring coupled moisture and salt transport using single vertical suction experiment. WIT Transactions on Modelling and Simulation, 2009, , .	0.0	0
555	Properties of HPC containing supplementary cementing materials. , 2010, , 1457-1462.		0
556	Analysis of chloride transport and storage properties of high performance concrete modified by fly ash addition as an effective tool for assessment of its durability. , 2010, , .		0
557	Effect of Environmental Conditions on Service Life of Thermal Insulation Systems. , 2011, , .		0
558	Application of the TDR measuring technique for in-situ measurements using surface probes. Budownictwo I Architektura, 2020, 8, 097-106.	0.1	0

#	Article	IF	CITATIONS
559	Application of effective media theory in the characterization of the hygrothermal performance of masonry. WIT Transactions on Engineering Sciences, 2011, , .	0.0	0
560	Computational modelling and experimental verification of the effective thermal conductivity of hollow bricks. WIT Transactions on Engineering Sciences, 2012, , .	0.0	0
561	Paraffin Injection in Renovation of Damp Brick Masonry. , 2013, , .		0
562	The Use of Diatomite in Cement Mortar. , 2013, , .		0
563	Investigation of the Effectiveness of Renovation Plasters. , 2013, , .		0
564	Effective hygric and thermal parameters of historical masonry accessed on effective media theory principles. WIT Transactions on State-of-the-art in Science and Engineering, 2013, , 87-98.	0.0	0
565	Predictive service life analysis of characteristic applications of zeolite concrete in building structures. , 2014, , .		0
566	The computational simulation of coupled heat and moisture transport as a tool for predicting the degradation of sedimentary porous rocks in historical masonry. WIT Transactions on Engineering Sciences, 2014, , .	0.0	0
567	Numerical simulation for the drying shrinkage of autoclaved aerated concrete. WIT Transactions on Engineering Sciences, 2014, , .	0.0	0
568	Characterization of the effect of wetting–drying cycles on the behaviour of hydrophilic additives in mineral wool. WIT Transactions on Engineering Sciences, 2015, , .	0.0	0
569	Non-additive thermally treated municipal solid waste incineration (MSWI) fly-ash and its utilization as supplementary cementitious materials. , 2015, , .		0
570	Characterization of the effect of brick-powder application in lime-based plasters. WIT Transactions on Modelling and Simulation, 2015, , .	0.0	0
571	Damage of porous stones by salt crystallization. WIT Transactions on Modelling and Simulation, 2015,	0.0	0
572	A material database for the computational assessment of the degradation of historical masonry. WIT Transactions on the Built Environment, 2015, , .	0.0	0
573	Application of latent-heat-storage building envelope systems for increasing energy efficiency in the building sector. , 2015, , .		0
574	Behaviour of cement composites with ceramic fibres exposed to higher temperatures. WIT Transactions on the Built Environment, 2016, , .	0.0	0
575	Characterization of Fine-Grained Ceramic Material for Environmental-Friendly Applications in the Building Sector. International Journal of Sustainable Development and Planning, 2017, 12, 336-341.	0.3	0
576	ENGINEERING PROPERTIES OF CONCRETE SUITABLE FOR CONSTRUCTING PHYSICAL BARRIERS IN RADIOACTIVE WASTE DISPOSAL FACILITIES. , 2017, , .		0

#	Article	IF	CITATIONS
577	EVALUATION OF THE APPLICATION OF A THERMAL INSULATION SYSTEM: IN-SITU COMPARISSON OF SEASONAL AND DAILY CLIMATIC FLUCTUATIONS. Acta Polytechnica, 2017, 57, 159-166.	0.3	0
578	EFFECT OF AMBIENT CONDITIONS ON THE PROPERTIES OF CONCRETE CONTAINING WASTE MATERIALS AS PARTIAL PORTLAND CEMENT REPLACEMENT. , 2017, , .		0
579	MICROSTRUCTURE, TEXTURE, AND MECHANICAL PROPERTIES OF GEOPOLYMERS PREPARED USING INDUSTRIAL WASTE. Proceedings of International Structural Engineering and Construction, 2017, 4, .	0.1	0
580	EVALUATION OF APPLIED REMEDIATION WORKS ON HISTORICAL MASONRY WALL EXPOSED TO LONG-TERM DETERIORATION. Proceedings of International Structural Engineering and Construction, 2017, 4, .	0.1	0
581	THEORETICAL APPROACH TO DETERMINATION OF ACOUSTIC PROPERTIES OF BUILDING MATERIALS. Proceedings of International Structural Engineering and Construction, 2017, 4, .	0.1	0
582	Effect of Applied Weather Data Sets on the Computational Assessment of Hygrothermal Performance of Historical Masonry. , 0, , .		0
583	EXPERIMENTAL EVALUATION OF CUMULATIVE DAMAGE OF PLASTERS EXPOSED TO ENVIRONMENTAL CONDITIONS OF CENTRAL EUROPE. , 2018, , .		0
584	DEVELOPMENT OF POROUS STRUCTURE OF CERAMIC-BASED GEOPOLYMERS. , 2018, , .		0
585	PREPARATION OF GEOPOLYMERS BASED ON CERAMIC WASTE PRODUCTS. , 2019, , .		0
586	ELECTRICAL PROPERTIES OF ENVIRONMENTAL- FRIENDLY SELF-HEATING COMPOSITE MATERIALS. , 2019, , .		0
587	Experimental and theoretical approach to determination of heat evolution in electrically conductive aluminosilicates. Thermal Science, 2020, 24, 787-794.	0.5	0
588	Biodegradation of methylxanthines by Coniophora puteana. AIP Conference Proceedings, 2021, , .	0.3	0
589	Experimental determination of acoustic properties of brick block by reverberation chambers method. AIP Conference Proceedings, 2020, , .	0.3	0
590	Impact of oven drying and sample dimensions on calcite content in cement pastes. AIP Conference Proceedings, 2021, , .	0.3	0
591	Optimization of electrode embedment for self-heating experiments of multifunctional geopolymers. AIP Conference Proceedings, 2021, , .	0.3	0
592	Density-based clustering of E-nose output from mold-contaminated buildings. AIP Conference Proceedings, 2021, , .	0.3	0
593	Effect of superabsorbent polymers on hydration heat evolution of cementitious materials. AIP Conference Proceedings, 2021, , .	0.3	0
594	Effect of storage temperatures on selected wood properties after caffeine treatment. AIP Conference Proceedings, 2021, , .	0.3	0

#	Article	IF	CITATIONS
595	Effect of immersion time in acetone and isopropanol on hydration stoppage of hardened cement paste. AIP Conference Proceedings, 2022, , .	0.3	0
596	Energy balance of multi-layered historical buildings with interior thermal insulation: Construction of an expert online system. AIP Conference Proceedings, 2022, , .	0.3	0
597	Influence of Untreated Metal Waste from 3D Printing on Electrical Properties of Alkali-Activated Slag Mortars. Energies, 2021, 14, 8178.	1.6	0
598	Measuring and Calculating the Thermal and Hygric Properties of Insulating Building Materials Over Wide Temperature and Moisture Ranges. , 1997, , 524-535.		0
599	Waste brick dust as a prospective eco-friendly alternative component of artificial soils for ecotoxicological studies. Environmental Science and Pollution Research, 0, , .	2.7	0