

Robert Cerny

List of Publications by Citations

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434
papers

5,160
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36
h-index

56
g-index

604
ext. papers

6,379
ext. citations

3.3
avg, IF

6.09
L-index

#	Paper	IF	Citations
434	Effect of moisture content on heat and moisture transport and storage properties of thermal insulation materials. <i>Energy and Buildings</i> , 2012 , 53, 39-46	7	158
433	Hygric, thermal and durability properties of autoclaved aerated concrete. <i>Construction and Building Materials</i> , 2013 , 41, 352-359	6.7	127
432	Surface diffusion in porous media: A critical review. <i>Microporous and Mesoporous Materials</i> , 2011 , 142, 405-422	5.3	126
431	High performance concrete with Czech metakaolin: Experimental analysis of strength, toughness and durability characteristics. <i>Construction and Building Materials</i> , 2010 , 24, 1404-1411	6.7	89
430	Properties of self-compacting concrete mixtures containing metakaolin and blast furnace slag. <i>Construction and Building Materials</i> , 2011 , 25, 1325-1331	6.7	84
429	Flue gas desulfurization gypsum: Study of basic mechanical, hygric and thermal properties. <i>Construction and Building Materials</i> , 2007 , 21, 1500-1509	6.7	84
428	Time-domain reflectometry method and its application for measuring moisture content in porous materials: A review. <i>Measurement: Journal of the International Measurement Confederation</i> , 2009 , 42, 329-336	4.6	82
427	Engineering properties of concrete containing natural zeolite as supplementary cementitious material: Strength, toughness, durability, and hygrothermal performance. <i>Cement and Concrete Composites</i> , 2015 , 55, 259-267	8.6	81
426	Properties of high performance concrete containing fine-ground ceramics as supplementary cementitious material. <i>Cement and Concrete Composites</i> , 2012 , 34, 55-61	8.6	80
425	Energy-efficient thermal treatment of sewage sludge for its application in blended cements. <i>Journal of Cleaner Production</i> , 2016 , 112, 409-419	10.3	73
424	Effect of pozzolanic admixtures on mechanical, thermal and hygric properties of lime plasters. <i>Construction and Building Materials</i> , 2006 , 20, 849-857	6.7	72
423	Transport Processes in Concrete		68
422	Application of waste brick powder in alkali activated aluminosilicates: Functional and environmental aspects. <i>Journal of Cleaner Production</i> , 2018 , 194, 714-725	10.3	68
421	Mechanical, fracture-mechanical, hygric, thermal, and durability properties of lime-metakaolin plasters for renovation of historical buildings. <i>Construction and Building Materials</i> , 2012 , 31, 22-28	6.7	66
420	Hygrothermal performance study of an innovative interior thermal insulation system. <i>Applied Thermal Engineering</i> , 2009 , 29, 1941-1946	5.8	63
419	Lightweight gypsum composites: Design strategies for multi-functionality. <i>Cement and Concrete Composites</i> , 2011 , 33, 84-89	8.6	61
418	Properties of Alkali Activated Aluminosilicate Material after Thermal Load. <i>International Journal of Thermophysics</i> , 2006 , 27, 1250-1263	2.1	59

4 ¹⁷	Salt transport and storage parameters of renovation plasters and their possible effects on restored buildings walls. <i>Construction and Building Materials</i> , 2011 , 25, 1205-1212	6.7	57
4 ¹⁶	Structural, mechanical and hygrothermal properties of lightweight concrete based on the application of waste plastics. <i>Construction and Building Materials</i> , 2018 , 180, 1-11	6.7	56
4 ¹⁵	High performance concrete containing lower slag amount: A complex view of mechanical and durability properties. <i>Construction and Building Materials</i> , 2009 , 23, 2237-2245	6.7	53
4 ¹⁴	Water Vapor Adsorption in Porous Building Materials: Experimental Measurement and Theoretical Analysis. <i>Transport in Porous Media</i> , 2012 , 91, 939-954	3.1	52
4 ¹³	Long-term on-site assessment of hygrothermal performance of interior thermal insulation system without water vapour barrier. <i>Energy and Buildings</i> , 2009 , 41, 51-55	7	51
4 ¹²	Alkali-activated aluminosilicate composite with heat-resistant lightweight aggregates exposed to high temperatures: Mechanical and water transport properties. <i>Cement and Concrete Composites</i> , 2010 , 32, 157-163	8.6	49
4 ¹¹	Free Water Intake as Means of Material Characterization. <i>Journal of Building Physics</i> , 2009 , 33, 29-44	2.6	48
4 ¹⁰	Calcined gypsum metakaolin binders: Design of optimal composition. <i>Cement and Concrete Composites</i> , 2014 , 52, 91-96	8.6	47
4 ⁰⁹	Effect of w/c and temperature on the early-stage hydration heat development in Portland-limestone cement. <i>Construction and Building Materials</i> , 2014 , 50, 140-147	6.7	46
4 ⁰⁸	Application of burnt clay shale as pozzolan addition to lime mortar. <i>Cement and Concrete Composites</i> , 2012 , 34, 486-492	8.6	41
4 ⁰⁷	DSC and TG Analysis of a Blended Binder Based on Waste Ceramic Powder and Portland Cement. <i>International Journal of Thermophysics</i> , 2016 , 37, 1	2.1	40
4 ⁰⁶	Modified lime-cement plasters with enhanced thermal and hygric storage capacity for moderation of interior climate. <i>Energy and Buildings</i> , 2016 , 126, 113-127	7	40
4 ⁰⁵	Experimental Investigation of the Properties of Lime-Based Plaster-Containing PCM for Enhancing the Heat-Storage Capacity of Building Envelopes. <i>International Journal of Thermophysics</i> , 2014 , 35, 767-782	2.1	39
4 ⁰⁴	Measurement of linear thermal expansion coefficient of alkali-activated aluminosilicate composites up to 1000°C. <i>Cement and Concrete Composites</i> , 2009 , 31, 263-267	8.6	39
4 ⁰³	The effect of compressive stress on thermal and hygric properties of Portland cement mortar in wide temperature and moisture ranges. <i>Cement and Concrete Research</i> , 2000 , 30, 1267-1276	10.3	39
4 ⁰²	Effect of hydrophilic admixtures on moisture and heat transport and storage parameters of mineral wool. <i>Construction and Building Materials</i> , 2006 , 20, 425-434	6.7	37
4 ⁰¹	Experimental assessment of hygrothermal performance of an interior thermal insulation system using a laboratory technique simulating on-site conditions. <i>Energy and Buildings</i> , 2008 , 40, 673-678	7	36
4 ⁰⁰	Red-clay ceramic powders as geopolymer precursors: Consideration of amorphous portion and CaO content. <i>Applied Clay Science</i> , 2018 , 161, 82-89	5.2	35

399	Water and salt transport and storage properties of Mn-bearing sandstone. <i>Construction and Building Materials</i> , 2008 , 22, 1736-1748	6.7	35
398	Transition to circular economy in the construction industry: Environmental aspects of waste brick recycling scenarios. <i>Waste Management</i> , 2020 , 118, 510-520	8.6	35
397	Application of Effective Media Theory for Determination of Thermal Properties of Hollow Bricks as a Function of Moisture Content. <i>International Journal of Thermophysics</i> , 2013 , 34, 894-908	2.1	34
396	Physical and chemical characterization of technogenic pozzolans for the application in blended cements. <i>Construction and Building Materials</i> , 2018 , 160, 106-116	6.7	34
395	Osmosis in porous media: A review of recent studies. <i>Microporous and Mesoporous Materials</i> , 2013 , 170, 299-317	5.3	33
394	Exterior thermal insulation systems for AAC building envelopes: Computational analysis aimed at increasing service life. <i>Energy and Buildings</i> , 2012 , 47, 84-90	7	32
393	Apparent Thermal Properties of Phase-Change Materials: An Analysis Using Differential Scanning Calorimetry and Impulse Method. <i>International Journal of Thermophysics</i> , 2013 , 34, 851-864	2.1	31
392	Thermal Properties of Alkali-activated Slag Subjected to High Temperatures. <i>Journal of Building Physics</i> , 2007 , 30, 337-350	2.6	31
391	Effective thermal conductivity of hollow bricks with cavities filled by air and expanded polystyrene. <i>Journal of Building Physics</i> , 2014 , 37, 436-448	2.6	30
390	Non-steady-state methods for determining the moisture diffusivity of porous materials. <i>International Communications in Heat and Mass Transfer</i> , 1998 , 25, 109-116	5.8	30
389	Effect of High Temperatures on the Properties of Alkali Activated Aluminosilicate with Electrical Porcelain Filler. <i>International Journal of Thermophysics</i> , 2008 , 29, 693-705	2.1	30
388	Biomass ash-based mineral admixture prepared from municipal sewage sludge and its application in cement composites. <i>Clean Technologies and Environmental Policy</i> , 2018 , 20, 159-171	4.3	29
387	Ecotoxicology of building materials: A critical review of recent studies. <i>Journal of Cleaner Production</i> , 2017 , 165, 500-508	10.3	29
386	Properties of municipal solid waste incineration ashes with respect to their separation temperature. <i>Waste Management and Research</i> , 2012 , 30, 1041-8	4	29
385	Application of waste ceramic dust as a ready-to-use replacement of cement in lime-cement plasters: an environmental-friendly and energy-efficient solution. <i>Clean Technologies and Environmental Policy</i> , 2016 , 18, 1725-1733	4.3	29
384	Mechanical, durability and hygrothermal properties of concrete produced using Portland cement-ceramic powder blends. <i>Structural Concrete</i> , 2016 , 17, 105-115	2.6	29
383	Simultaneous DSC and TG analysis of high-performance concrete containing natural zeolite as a supplementary cementitious material. <i>Journal of Thermal Analysis and Calorimetry</i> , 2015 , 121, 67-73	4.1	28
382	Excimer-laser-induced melting and solidification of monocrystalline Si: Equilibrium and nonequilibrium models. <i>Physical Review B</i> , 1991 , 44, 4097-4102	3.3	28

381	Salt Damage and Rising Damp Treatment in Building Structures. <i>Advances in Materials Science and Engineering</i> , 2016 , 2016, 1-13	1.5	28
380	Effect of hydrophobization on the properties of lime-ηetakaolin plasters. <i>Construction and Building Materials</i> , 2012 , 37, 556-561	6.7	27
379	Effect of Moisture on Thermal Conductivity of Lime-Based Composites. <i>International Journal of Thermophysics</i> , 2009 , 30, 1999-2014	2.1	27
378	Properties of lime composites containing a new type of pozzolana for the improvement of strength and durability. <i>Composites Part B: Engineering</i> , 2012 , 43, 3534-3540	10	26
377	Thermal Conductivity of Mineral Wool Materials Partially Saturated by Water. <i>International Journal of Thermophysics</i> , 2006 , 27, 1214-1227	2.1	26
376	Thermal and hygric properties of biomaterials suitable for interior thermal insulation systems in historical and traditional buildings. <i>Building and Environment</i> , 2019 , 154, 81-88	6.5	25
375	Determination of Moisture Diffusivity using the Time Domain Reflectometry (TDR) Method. <i>Journal of Building Physics</i> , 2006 , 30, 59-70	2.6	25
374	Effect of Moisture on the Thermal Conductivity of a Cementitious Composite. <i>International Journal of Thermophysics</i> , 2006 , 27, 1228-1240	2.1	25
373	Experimental analysis of coupled water and chloride transport in cement mortar. <i>Cement and Concrete Composites</i> , 2004 , 26, 705-715	8.6	25
372	Computer aided design of interior thermal insulation system suitable for autoclaved aerated concrete structures. <i>Applied Thermal Engineering</i> , 2013 , 58, 165-172	5.8	23
371	Rational design of cement composites containing pozzolanic additions. <i>Construction and Building Materials</i> , 2017 , 148, 411-418	6.7	22
370	Hydration heat development in blended cements containing fine-ground ceramics. <i>Thermochimica Acta</i> , 2012 , 543, 125-129	2.9	22
369	Effect of cracks on hygric and thermal characteristics of concrete. <i>Bauphysik</i> , 2008 , 30, 438-444	0.4	22
368	Inferring Bounded Evolution in Phenotypic Characters from Phylogenetic Comparative Data. <i>Systematic Biology</i> , 2016 , 65, 651-61	8.4	21
367	Carbon footprint analysis of calcined gypsum production in the Czech Republic. <i>Journal of Cleaner Production</i> , 2018 , 177, 795-802	10.3	20
366	Computational modelling of coupled water and salt transport in porous materials using diffusion-ηdvection model. <i>Journal of the Franklin Institute</i> , 2011 , 348, 1574-1587	4	20
365	Study of excimer laser induced melting and solidification of Si by time-resolved reflectivity measurements. <i>Applied Physics A: Solids and Surfaces</i> , 1992 , 54, 327-333		20
364	Life cycle assessment of natural and recycled gypsum production in the Spanish context. <i>Journal of Cleaner Production</i> , 2020 , 253, 120056	10.3	20

363	Mechanical and Thermal Properties of Moderate-Strength Concrete with Ceramic Powder Used as Supplementary Cementitious Material. <i>Advanced Materials Research</i> , 2014 , 1054, 194-198	0.5	19
362	Determination of Moisture Diffusivity as a Function of Both Moisture and Temperature. <i>International Journal of Thermophysics</i> , 2012 , 33, 1704-1714	2.1	19
361	Chloride Binding in Building Materials. <i>Journal of Building Physics</i> , 2006 , 29, 189-200	2.6	19
360	Thermal and hygric properties of Portland cement mortar after high-temperature exposure combined with compressive stress. <i>Cement and Concrete Research</i> , 2003 , 33, 1347-1355	10.3	19
359	Characterization of geopolymers prepared using powdered brick. <i>Journal of Materials Research and Technology</i> , 2019 , 8, 6253-6261	5.5	18
358	Hydric, thermal and mechanical properties of self-compacting concrete containing different fillers. <i>Construction and Building Materials</i> , 2008 , 22, 1594-1600	6.7	18
357	Mechanical and hydric properties of alkali-activated aluminosilicate composite with electrical porcelain aggregates. <i>Cement and Concrete Composites</i> , 2008 , 30, 266-273	8.6	18
356	Nonequilibrium model of laser-induced phase change processes in amorphous silicon thin films. <i>Physical Review B</i> , 1998 , 57, 194-202	3.3	18
355	Early-stage hydration heat development in blended cements containing natural zeolite studied by isothermal calorimetry. <i>Thermochimica Acta</i> , 2014 , 582, 53-58	2.9	17
354	Computational analysis of thermal performance of a passive family house built of hollow clay bricks. <i>Energy and Buildings</i> , 2014 , 76, 211-218	7	17
353	Effect of applied weather data sets in simulation of building energy demands: Comparison of design years with recent weather data. <i>Renewable and Sustainable Energy Reviews</i> , 2019 , 100, 22-32	16.2	17
352	Monitoring Thermal Performance of Hollow Bricks with Different Cavity Fillers in Different Climate Conditions. <i>International Journal of Thermophysics</i> , 2015 , 36, 557-568	2.1	16
351	High temperature durability of fiber reinforced high alumina cement composites. <i>Construction and Building Materials</i> , 2018 , 162, 881-891	6.7	16
350	Application of a microwave impulse technique to the measurement of free water content in early hydration stages of cement paste. <i>Cement and Concrete Research</i> , 2003 , 33, 93-102	10.3	16
349	A simple gravimetric method for determining the moisture diffusivity of building materials. <i>Construction and Building Materials</i> , 2003 , 17, 223-228	6.7	16
348	MSWI bottom ash as eco-aggregate in cement mortar design 2012 ,		16
347	Thermophysical properties of concrete for nuclear-safety related structures. <i>Cement and Concrete Research</i> , 1997 , 27, 415-426	10.3	15
346	The effects of thermal load and frost cycles on the water transport in two high-performance concretes. <i>Cement and Concrete Research</i> , 2001 , 31, 1129-1140	10.3	15

345	Biomass fly ash as an alternative to coal fly ash in blended cements: Functional aspects. <i>Construction and Building Materials</i> , 2021 , 271, 121544	6.7	15
344	Damage functions for the cold regions and their applications in hygrothermal simulations of different types of building structures. <i>Cold Regions Science and Technology</i> , 2017 , 135, 1-7	3.8	14
343	Thermal and hygric assessment of an inside-insulated brick wall: 2D critical experiment and computational analysis. <i>Journal of Building Physics</i> , 2018 , 41, 497-520	2.6	14
342	Determination of the equivalent thermal conductivity of complex material systems with large-scale heterogeneities. <i>International Journal of Thermal Sciences</i> , 2014 , 86, 365-373	4.1	14
341	A Boltzmann transformation method for investigation of water vapor transport in building materials. <i>Journal of Building Physics</i> , 2012 , 35, 213-223	2.6	14
340	Effects of the type of calorimeter and the use of plasticizers and hydrophobizers on the measured hydration heat development of FGD gypsum. <i>Journal of Thermal Analysis and Calorimetry</i> , 2008 , 91, 791-796	4.1	14
339	Effect of cement composition on the early hydration of blended cements with natural zeolite. <i>Journal of Thermal Analysis and Calorimetry</i> , 2017 , 128, 721-733	4.1	13
338	Effect of calcined Czech claystone on the properties of high performance concrete: Microstructure, strength and durability. <i>Construction and Building Materials</i> , 2018 , 168, 966-974	6.7	13
337	Characterization of early-age hydration processes in lime-ceramic binders using isothermal calorimetry, X-ray diffraction and scanning electron microscopy. <i>Thermochimica Acta</i> , 2016 , 633, 108-115	2.9	13
336	Effect of temperature on water vapor transport properties. <i>Journal of Building Physics</i> , 2014 , 38, 156-169	2.6	13
335	Generation of a critical weather year for hygrothermal simulations using partial weather data sets. <i>Building and Environment</i> , 2014 , 76, 54-61	6.5	13
334	Lime-based plasters with combined expanded clay-silica aggregate: Microstructure, texture and engineering properties. <i>Cement and Concrete Composites</i> , 2017 , 83, 374-383	8.6	13
333	Service life assessment of historical building envelopes constructed using different types of sandstone: a computational analysis based on experimental input data. <i>Scientific World Journal, The</i> , 2014 , 2014, 802509	2.2	13
332	Application of genetic algorithm for determination of water vapor diffusion parameters of building materials. <i>Journal of Building Physics</i> , 2012 , 35, 238-250	2.6	13
331	Apparent thermal conductivity approach at high-temperature measurements of porous materials. <i>Measurement: Journal of the International Measurement Confederation</i> , 2011 , 44, 1220-1228	4.6	13
330	Thermal properties of alkali-activated aluminosilicate composite with lightweight aggregates at elevated temperatures. <i>Fire and Materials</i> , 2011 , 35, 231-244	1.8	13
329	Effect of thermal decomposition processes on the thermal properties of carbon fiber reinforced cement composites in high-temperature range. <i>Journal of Thermal Analysis and Calorimetry</i> , 2007 , 90, 475-488	4.1	13
328	Effect of Cu-Zn coated steel fibers on high temperature resistance of reactive powder concrete. <i>Cement and Concrete Research</i> , 2019 , 117, 45-57	10.3	13

327	Fabrication of Dodecanol/Diatomite Shape-Stabilized PCM and Its Utilization in Interior Plaster. <i>International Journal of Thermophysics</i> , 2018 , 39, 1	2.1	13
326	Application of isothermal calorimetry and thermal analysis for the investigation of calcined gypsum- β -metakaolin-water system. <i>Journal of Thermal Analysis and Calorimetry</i> , 2015 , 122, 115-122	4.1	12
325	Ecotoxicity assessment of short- and medium-chain chlorinated paraffins used in polyvinyl-chloride products for construction industry. <i>Science of the Total Environment</i> , 2018 , 640-641, 523-528	10.2	12
324	Pore Structure and Thermal Characteristics of Clay Bricks. <i>Advanced Materials Research</i> , 2014 , 982, 104-107	10.7	12
323	Effect of temperature on the early-stage hydration characteristics of Portland cement: A large-volume calorimetric study. <i>Construction and Building Materials</i> , 2012 , 36, 969-976	6.7	12
322	Determination of a partial phase composition in calcined gypsum by calorimetric analysis of hydration kinetics. <i>Journal of Thermal Analysis and Calorimetry</i> , 2012 , 109, 57-62	4.1	12
321	System for Testing the Hygrothermal Performance of Multi-Layered Building Envelopes. <i>Journal of Thermal Envelope and Building Science</i> , 2002 , 25, 239-249		12
320	A model of binary alloy solidification with convection in the melt. <i>International Journal of Heat and Mass Transfer</i> , 1992 , 35, 1787-1793	4.9	12
319	Application of MSWI bottom ash as alternative aggregate in cement mortar 2011 ,		12
318	High-strength concrete based on ternary binder with high pozzolan content. <i>Structural Concrete</i> , 2018 , 19, 1258-1267	2.6	11
317	Application of heavy metals sorbent as reactive component in cementitious composites. <i>Journal of Cleaner Production</i> , 2018 , 199, 565-573	10.3	11
316	Theoretical and Experimental Analysis of Moisture-Dependent Thermal Conductivity of Lightweight Ceramic Bricks. <i>International Journal of Thermophysics</i> , 2014 , 35, 1912-1921	2.1	11
315	Determination of Moisture Content of Hygroscopic Building Materials Using Time Domain Reflectometry. <i>Journal of Applied Sciences</i> , 2008 , 8, 1732-1737	0.3	11
314	Effect of Moisture Content on Thermal Properties of Porous Building Materials. <i>International Journal of Thermophysics</i> , 2017 , 38, 1	2.1	10
313	Computational assessment of thermal performance of contemporary ceramic blocks with complex internal geometry in building envelopes. <i>Energy and Buildings</i> , 2015 , 99, 61-66	7	10
312	A fast computational approach for the determination of thermal properties of hollow bricks in energy-related calculations. <i>Energy</i> , 2015 , 83, 749-755	7.9	10
311	Terrestrial eutrophication of building materials and buildings: An emerging topic in environmental studies. <i>Science of the Total Environment</i> , 2019 , 689, 1316-1328	10.2	10
310	Coupled heat and moisture transport in damaged concrete under an atmospheric environment. <i>Construction and Building Materials</i> , 2017 , 143, 607-620	6.7	9

309	Preparation and Characterization of Novel Plaster with Improved Thermal Energy Storage Performance. <i>Energies</i> , 2019 , 12, 3318	3.1	9
308	Energy Effects of Retrofitting the Educational Facilities Located in South-Eastern Poland. <i>Energies</i> , 2020 , 13, 2449	3.1	9
307	Time Domain Reflectometry flat sensor for non-invasive monitoring of moisture changes in building materials. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020 , 165, 108091	4.6	9
306	Heat and Moisture Transport and Storage Parameters of Bricks Affected by the Environment. <i>International Journal of Thermophysics</i> , 2018 , 39, 1	2.1	9
305	Multi-parameter optimization of lime composite design using a modified downhill simplex method. <i>Composites Part B: Engineering</i> , 2016 , 93, 184-189	10	9
304	Free of Volatile Organic Compounds Protection against Moisture in Building Materials/Zabezpieczenia Przegród Budowlanych Przed Wilgocią Wolne Od Lotnych Związków Organicznych. <i>Ecological Chemistry and Engineering S</i> , 2014 , 21, 401-411	1.3	9
303	Application of Time-Domain Reflectometry for Measurement of Moisture Profiles in a Drying Experiment. <i>International Journal of Thermophysics</i> , 2012 , 33, 1661-1673	2.1	9
302	Application of large-volume calorimetry for monitoring the early-stage hydration heat development in cement-based composites as a function of w/c. <i>Thermochimica Acta</i> , 2012 , 546, 44-48	2.9	9
301	THERMOPHYSICAL AND MECHANICAL PROPERTIES OF FIBER-REINFORCED COMPOSITE MATERIAL SUBJECTED TO HIGH TEMPERATURES. <i>Journal of Civil Engineering and Management</i> , 2010 , 16, 395-400	3	9
300	Numerical solution of the non-isothermal moving boundary problem in heat conduction. <i>Computer Physics Communications</i> , 1991 , 64, 241-251	4.2	9
299	A measuring method for the determination of linear thermal expansion of porous materials at high temperatures. <i>High Temperatures - High Pressures</i> , 1999 , 31, 595-600	1.3	9
298	Preparation of self-heating alkali-activated materials using industrial waste products. <i>Journal of Cleaner Production</i> , 2020 , 260, 121116	10.3	9
297	Energy efficiency of latent heat storage systems in residential buildings: Coupled effects of wall assembly and climatic conditions. <i>Renewable and Sustainable Energy Reviews</i> , 2020 , 132, 110097	16.2	9
296	Hygrothermal properties of glass fiber reinforced cements subjected to elevated temperature. <i>Materials and Structures/Materiaux Et Constructions</i> , 2004 , 37, 597-607	3.4	8
295	Hydric and mechanical properties of carbon fiber reinforced cement composites subjected to thermal load. <i>Construction and Building Materials</i> , 2004 , 18, 567-578	6.7	8
294	Pulsed laser-induced phase transformations in CdTe single crystals. <i>Applied Surface Science</i> , 2005 , 248, 259-263	6.7	8
293	Water and Water Vapor Penetration Through Coatings. <i>Journal of Thermal Envelope and Building Science</i> , 2002 , 26, 165-177		8
292	Measuring the effective specific heat of building materials. <i>Thermochimica Acta</i> , 1996 , 282-283, 239-250	2.9	8

291	Blended Cements with Calcined Illitic Clay: Workability and Hydration. <i>RILEM Bookseries</i> , 2018 , 310-317	0.5	8
290	Eucalyptus camaldulensis, Citrus aurantium, and Citrus sinensis Essential Oils as Antifungal Activity against <i>Aspergillus flavus</i> , <i>Aspergillus niger</i> , <i>Aspergillus terreus</i> , and <i>Fusarium culmorum</i> . <i>Processes</i> , 2020 , 8, 1003	2.9	8
289	Application of ceramic waste in brick blocks with enhanced acoustic properties. <i>Journal of Cleaner Production</i> , 2020 , 261, 121185	10.3	7
288	Simultaneous Differential Scanning Calorimetry and Thermogravimetric Analysis of Portland Cement as a Function of Age. <i>International Journal of Thermophysics</i> , 2016 , 37, 1	2.1	7
287	Experimental Assessment of Thermal Conductivity of a Brick Block with Internal Cavities Using a Semi-scale Experiment. <i>International Journal of Thermophysics</i> , 2013 , 34, 909-915	2.1	7
286	Wet-Treated MSWI Fly Ash Used as Supplementary Cementitious Material. <i>Advances in Materials Science and Engineering</i> , 2015 , 2015, 1-8	1.5	7
285	Heat and Water Vapor Transport Properties of Selected Commercially Produced Plasters. <i>Advanced Materials Research</i> , 2014 , 982, 90-93	0.5	7
284	Reuse of Waste Ceramic Powder with a High Content of Amorphous Phases as Partial Replacement of Portland Cement. <i>Advanced Materials Research</i> , 2014 , 905, 212-215	0.5	7
283	Pore Distribution and Water Vapor Diffusion Parameters of Lime Plasters with Waste Brick Powder. <i>Advanced Materials Research</i> , 2014 , 1054, 205-208	0.5	7
282	An isothermal heat flow calorimeter for large-volume applications. <i>Journal of Thermal Analysis and Calorimetry</i> , 2012 , 110, 1021-1027	4.1	7
281	Mechanical, Hygric, and Thermal Properties of Cement-Based Composite with Hybrid Fiber Reinforcement Subjected to High Temperatures. <i>International Journal of Thermophysics</i> , 2009 , 30, 1310-1322	2.1	7
280	A two-phase moving boundary problem with two moving interfaces in laser processing of materials. <i>Computational Materials Science</i> , 1997 , 8, 228-242	3.2	7
279	Analysis of glass fiber reinforced cement composites and their thermal and hygric material parameters. <i>Journal of Thermal Analysis and Calorimetry</i> , 2004 , 77, 85-97	4.1	7
278	Thermal and Hygric Parameters of Carbon-fiber-reinforced Cement Composites after Thermal and Mechanical Loading. <i>Journal of Building Physics</i> , 2005 , 29, 121-143	2.6	7
277	Modeling the phase-change processes in pulsed laser-irradiated InSb. <i>Physical Review B</i> , 1999 , 59, 10685-10690	3.1	7
276	Theoretical and experimental studies of a-Si:H recrystallization by XeCl excimer laser irradiation. <i>Applied Surface Science</i> , 1995 , 86, 359-363	6.7	7
275	Numerical simulation of the formation of Ni silicides induced by pulsed lasers. <i>Computational Materials Science</i> , 1995 , 4, 269-281	3.2	7
274	Calorimetry of building materials. <i>Journal of Thermal Analysis</i> , 1995 , 43, 489-496		7

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265	Engineering properties of composite materials containing waste ceramic dust from advanced hollow brick production as a partial replacement of Portland cement. <i>Journal of Building Physics</i> , 2016 , 40, 17-34	2.6	6
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258	The thermal and mechanical performance of cement-based composites with enhanced thermal insulation properties 2014 ,		6
257	Assessment of Wood-Based Fly Ash as Alternative Cement Replacement. <i>Sustainability</i> , 2020 , 12, 9580	3.6	6
256	Water Vapor Diffusion and Adsorption of Sandstones: Influence of Rock Texture and Composition. <i>Advances in Materials Science and Engineering</i> , 2016 , 2016, 1-7	1.5	6

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240	Properties of innovative renders on a lime basis for the renovation of historical buildings 2009 ,		5
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238	Bond Behavior of FRP Bars in Lightweight SCC under Direct Pull-Out Conditions: Experimental and Numerical Investigation. <i>Materials</i> , 2022 , 15, 3555	3.5	5

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214	Database of climatic data as a rewarding tool for inclusion of weather observations in computational service life assessments of historical buildings 2013 ,		4
213	Mechanical, hygric and thermal properties of building stones 2013 ,		4
212	Application of Time-domain Reflectometry Method for Measuring Moisture Content in Porous Building Materials. <i>Trends in Applied Sciences Research</i> , 2007 , 2, 188-200	0.3	4
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203	Effect of hygric and thermal properties of connecting layers on the performance of interior thermal insulation systems 2017 ,		3
202	Long-term monitoring of the Sedlec Ossuary [Analysis of hygrothermal conditions 2016 ,		3

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188	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 ,		3
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182	The properties of innovated mortars utilizing secondary raw material 2014 ,		3
181	Characterization of Responsive Plasters for Passive Moisture and Temperature Control. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 9116	2.6	3
180	Effect of Absorptivity of Superabsorbent Polymers on Design of Cement Mortars. <i>Materials</i> , 2020 , 13,	3.5	3
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174	Traditional fired-clay bricks versus large and highly perforated fired-clay bricks masonry 2015 , 63-81		2
173	Parameters describing the coupled water and nitrate transport and storage in materials of historical masonry 2015 ,		2
172	Application of Ceramic Powder as Supplementary Cementitious Material in Lime Plasters. <i>Medziagotyra</i> , 2016 , 22,	0.4	2
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165	Experimental analysis of electrical properties of composite materials 2017 ,		2
164	Chapel of cemetery church of all saints in Sedlec □ Long-term analysis of hygrothermal conditions 2017 ,		2
163	Fast Inverse-Analysis Calculation of Diffusion Coefficient for Salt Transport in Porous Building Materials. <i>Advanced Materials Research</i> , 2015 , 1126, 117-122	0.5	2
162	Thermogravimetry of Portland Cement from Argentina and Czech Republic. <i>Advanced Materials Research</i> , 2015 , 1126, 169-173	0.5	2
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157	High Temperature Testing of Cement Mortar Containing MSWI Bottom Ash. <i>Applied Mechanics and Materials</i> , 2013 , 377, 55-59	0.3	2
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153	Coupled thermal and moisture expansion of porous materials. <i>International Journal of Thermophysics</i> , 1996 , 17, 271-277	2.1	2
152	Time Resolved Reflectivity Studies of Phase Transitions in Polycrystalline Si Induced by Excimer Laser Irradiation. <i>Solid State Phenomena</i> , 1996 , 51-52, 173-178	0.4	2
151	A theoretical relation between viscosity and thermal conductivity of gases based on macroscopic balance equations. <i>European Physical Journal D</i> , 1994 , 44, 913-926		2
150	Effect of the mode and dynamics of thermal processes on DSC-acquired phase-change temperature and latent heat of different kinds of PCM. <i>Materiali in Tehnologije</i> , 2017 , 51, 919-924	1.6	2
149	Environmental Efficiency Aspects of Basalt Fibers Reinforcement in Concrete Mixtures. <i>Energies</i> , 2021 , 14, 7736	3.1	2
148	Natural zeolite as environmentally friendly supplementary cementitious material in concrete 2012 ,		2

147	Waste ceramics as supplementary cementitious material: characterization and utilization 2014 ,		2
146	Fine-ground ceramics as an alternative binder in high performance concrete 2010 ,		2
145	Environmental friendly concrete production using municipal solid waste incineration materials 2011 ,		2
144	Mechanical, hygric and thermal properties of innovative renovation renders 2011 ,		2
143	Effect of limestone powder on strength and permeability of cementitious mortars. <i>MATEC Web of Conferences</i> , 2020 , 322, 01009	0.3	2
142	Mutual interactions of fungi and molds on woods treated with a caffeine solution: A preliminary study 2020 ,		2
141	Improving the Energy Performance of Public Buildings Equipped with Individual Gas Boilers Due to Thermal Retrofitting. <i>Energies</i> , 2021 , 14, 1565	3.1	2
140	Influence of selected storage temperatures on wood properties and its biological resistance after the use of methylxanthines. <i>BioResources</i> , 2021 , 16, 6231-6243	1.3	2
139	Strength Development and Physical Properties of Cement Paste with Incorporated Ceramic Powder. <i>Medziagotyra</i> , 2016 , 22,	0.4	2
138	Effect of water-ice phase change on thermal performance of building materials 2016 ,		2
137	UHPFRC at high temperatures Simultaneous thermal analysis and thermodilatometry 2016 ,		2
136	Experimental Determination of Heat and Moisture Transport Properties of AAC in the Range of Subzero to Room Temperatures. <i>International Journal of Thermophysics</i> , 2019 , 40, 1	2.1	2
135	Interactions of superabsorbent polymers based on acrylamide substances with microorganisms occurring in human dwellings. <i>Ecotoxicology and Environmental Safety</i> , 2020 , 195, 110522	7	2
134	Evaluation of thermal performance of window lintel construction detail. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 415, 012015	0.4	2
133	Formulation of a hygrothermal model for description of ice-forming process in porous building materials 2018 ,		2
132	Mechanical and hygric properties of lime plasters modified by biomass fly ash. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 365, 032059	0.4	2
131	Exploiting advantages of empirical and optimization approaches to design alkali activated materials in a more efficient way. <i>Construction and Building Materials</i> , 2021 , 292, 123460	6.7	2
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129	Data acquisition and acoustic modeling of heterogeneous building materials 2019 ,		1
128	Experimental Analysis of Different Kinds of Sandstone for Reconstruction of Historical Masonry. <i>Applied Mechanics and Materials</i> , 2015 , 719-720, 210-213	0.3	1
127	Effect of cation type on chloride binding in building stones 2015 ,		1
126	Characterization of a lime-pozzolan plaster containing phase change material 2015 ,		1
125	Software for service life assessment of historical buildings: Implementation of coupled heat, moisture and salt transport model 2015 ,		1
124	Red Ceramic Wastes: A Calcined Clay Pozzolan. <i>RILEM Bookseries</i> , 2015 , 179-187	0.5	1
123	Model formulas for facilitating determination of concentration-dependent diffusion coefficients. <i>Metals and Materials International</i> , 2015 , 21, 907-912	2.4	1
122	Computational Prediction of Susceptibility to Biofilms Growth: Two-Dimensional Analysis of Critical Construction Details. <i>Energies</i> , 2020 , 13, 293	3.1	1
121	Phase composition of ceramic-based alkali-activated polymers: combination of X-ray diffraction and thermal analysis. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020 , 142, 157-166	4.1	1
120	Influence of weather-affected material characteristics on appearance of freeze/thaw cycles in building envelopes 2017 ,		1
119	Porous Structure and Hygric Properties of Concrete for Radioactive Waste Repositories. <i>Key Engineering Materials</i> , 2018 , 760, 127-131	0.4	1
118	Mechanical and Basic Physical Properties of High-Strength Concrete Exposed to Elevated Temperatures. <i>Key Engineering Materials</i> , 2018 , 760, 108-113	0.4	1
117	Moisture properties of the lightweight brick body 2016 ,		1
116	Mechanical and thermal properties of the Czech marbles 2016 ,		1
115	Seebeck effect influence on joule heat evolution in electrically conductive silicate materials 2016 ,		1
114	Hydration of blended cement pastes containing waste ceramic powder as a function of age 2016 ,		1
113	Identification of Water Diffusivity of Inorganic Porous Materials Using Evolutionary Algorithms. <i>Transport in Porous Media</i> , 2016 , 113, 51-66	3.1	1
112	Computational modelling of thermal processes in a calorimetric experiment 2018 ,		1

111	Transport of gadolinium in a cement composite. <i>MATEC Web of Conferences</i> , 2019 , 282, 02105	0.3	1
110	Growth effectivity of molds in contact with methylxanthines. <i>MATEC Web of Conferences</i> , 2019 , 282, 02058	0.3	1
109	Ternary binder based plasters with improved thermal insulating ability. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017 , 251, 012008	0.4	1
108	Effect of silica fume on hydration of air-cured blended cement pastes measured by DSC/TG analysis 2017 ,		1
107	Hydration heat of alkali activated fine-grained ceramic 2017 ,		1
106	Role of Time Relaxation in a One-Dimensional Diffusion-Advection Model of Water and Salt Transport. <i>Advances in Mathematical Physics</i> , 2015 , 2015, 1-6	1.1	1
105	Moisture dependent thermal properties of hydrophilic mineral wool: application of the effective media theory. <i>Medziagotyra</i> , 2015 , 21,	0.4	1
104	Effect of Freeze/Thaw Cycles on the Physical Properties of Selected Building Stones. <i>Advanced Materials Research</i> , 2014 , 1035, 83-88	0.5	1
103	Mechanical Behavior of the Cement Mortar with High Amount of Municipal Solid Waste Incineration (MSWI) Bottom Ash as an Alternative Aggregate. <i>Advanced Materials Research</i> , 2014 , 982, 74-78	0.5	1
102	Effect of Porosity on Mechanical and Hygric Properties of Concrete with Natural Pozzolan Addition. <i>Advanced Materials Research</i> , 2014 , 982, 22-26	0.5	1
101	Moisture Transport Properties of Hydrophilic Mineral Wool. <i>Advanced Materials Research</i> , 2014 , 982, 6-10	0.5	1
100	New Type of Lime Plaster with Pozzolana Admixture for Renewal of Historical Buildings. <i>Advanced Materials Research</i> , 2011 , 324, 336-339	0.5	1
99	Identification of water vapour transport properties of gypsum using evolutionary algorithms 2012 ,		1
98	Chapter 3 Modeling Laser-Induced Phase-Change Processes: Theory and Computation. <i>Semiconductors and Semimetals</i> , 2003 , 43-78	0.6	1
97	Effect of density change on the stability of a planar phase interface. <i>International Communications in Heat and Mass Transfer</i> , 1994 , 21, 605-614	5.8	1
96	Influence of variations of temporal pulse shape in excimer laser processing of semiconductors. <i>Computational Materials Science</i> , 1994 , 2, 319-325	3.2	1
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93	Thermal properties of aramid-fiber reinforced cement composite 2010 , 965-972		1
92	Effect of slag on chloride transport and storage properties of HPC 2010 , 1497-1504		1
91	Properties of hydrophilic mineral wool Front-Rock Max E. <i>Pollack Periodica</i> , 2009 , 4, 101-106	0.7	1
90	Utilization of Crushed Pavement Blocks in Concrete: Assessment of Functional Properties and Environmental Impacts. <i>Materials</i> , 2021 , 14,	3.5	1
89	Moisture Buffering Potential of Plasters for Energy Efficiency in Modern Buildings		1
88	Efficacy of Caffeine Treatment for Wood Protection-Influence of Wood and Fungi Species. <i>Polymers</i> , 2021 , 13,	4.5	1
87	High Temperature Exposure of HPC [Experimental Analysis of Residual Properties and Thermal Response. <i>MATEC Web of Conferences</i> , 2016 , 63, 01004	0.3	1
86	Characterization of ceramic-based alkali activated aluminosilicate composites 2020 ,		1
85	Hygrothermal performance of innovative renovation renders used for different types of historical masonry. <i>WIT Transactions on State-of-the-art in Science and Engineering</i> , 2013 , 121-131		1
84	Kinetics of pozzolanic reaction and carbonation in ceramic [lime system: Thermogravimetry and solid-state NMR spectroscopy study. <i>Journal of Building Engineering</i> , 2020 , 32, 101729	5.2	1
83	Uptake of caffeine by <i>Serpula lacrymans</i> 2020 ,		1
82	Experimental and Computational Study of Thermal Processes in Red Clays Exposed to High Temperatures. <i>Energies</i> , 2020 , 13, 2211	3.1	1
81	Properties of Hydrophilic Mineral Wool for Desalination of Historical Masonry. <i>Medziagotyra</i> , 2016 , 22,	0.4	1
80	The influence of inner hydrophobisation on water transport properties of modified lime plasters 2016 ,		1
79	Microclimate of a former treasury in Cathedral of Assumption of Our Lady and Saint John the Baptist in Sedlec [Long-time analysis 2018 ,		1
78	Methodology of sealing plugs development for brick block with enhanced acoustic properties 2018 ,		1
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