

# Jiri Zach

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

973  
citations

759190

12  
h-index

501174

28  
g-index

51  
all docs

51  
docs citations

51  
times ranked

917  
citing authors

#	ARTICLE	IF	CITATIONS
1	Development and performance evaluation of natural thermal-insulation materials composed of renewable resources. Energy and Buildings, 2011, 43, 2518-2523.	6.7	305
2	Performance evaluation and research of alternative thermal insulations based on sheep wool. Energy and Buildings, 2012, 49, 246-253.	6.7	182
3	The use of insulating materials based on natural fibers in combination with plant facades in building constructions. Energy and Buildings, 2016, 116, 45-58.	6.7	105
4	Development of Thermal Insulating Materials on Natural Base for Thermal Insulation Systems. Procedia Engineering, 2013, 57, 1288-1294.	1.2	80
5	Improving the energy efficiency in buildings while reducing the waste using autoclaved aerated concrete made from power industry waste. Energy and Buildings, 2013, 58, 319-323.	6.7	48
6	Environmentally efficient thermal and acoustic insulation based on natural and waste fibers. Journal of Chemical Technology and Biotechnology, 2016, 91, 2156-2161.	3.2	25
7	Studying the Properties of Particulate Insulating Materials on Natural Basis. Procedia Engineering, 2016, 151, 368-374.	1.2	23
8	Hygrothermal properties of advanced bio-based insulation materials. Energy and Buildings, 2021, 253, 111528.	6.7	21
9	Effect of thickness of the intumescent alkali aluminosilicate coating on temperature distribution in reinforced concrete. Journal of Building Engineering, 2016, 8, 14-19.	3.4	20
10	Development of vacuum insulating panels (VIP) with non-traditional core materials. Energy and Buildings, 2019, 199, 12-19.	6.7	20
11	Investigation of the Process of Heat Transfer in the Structure of Thermal Insulation Materials Based on Natural Fibres. Procedia Engineering, 2016, 151, 352-359.	1.2	16
12	The use of foam glass based aggregates for the production of ultra-lightweight porous concrete for the production of noise barrier wall panels. Transportation Research Procedia, 2019, 40, 639-646.	1.5	16
13	Technology of Concrete with Low Generation of Hydration Heat. Procedia Engineering, 2013, 65, 296-301.	1.2	11
14	Development of Vacuum Insulation Panels with Utilization of Organic By-Products. Energies, 2020, 13, 1165.	3.1	11
15	Utilization of Lightweight Aggregate from Expanded Obsidian for Advanced Thermal Insulating Plasters Production. Advanced Materials Research, 0, 335-336, 1199-1203.	0.3	10
16	The Effect of Active Additives and Coarse Aggregate Granulometric Composition on the Properties and Durability of Pervious Concrete. Materials, 2022, 15, 1035.	2.9	8
17	Advanced, Thermal Insulation Materials Suitable for Insulation and Repair of Buildings. Advanced Materials Research, 0, 688, 54-59.	0.3	7
18	Study of the Use of Vacuum Insulation as Integrated Thermal Insulation in Ceramic Masonry Blocks. Procedia Engineering, 2016, 151, 206-213.	1.2	7

#	ARTICLE	IF	CITATIONS
19	Experimental Analysis of Transparent Insulation Based on Poly-carbonate Multi-Wall Systems: Thermal and Optical Performance. Energy Procedia, 2017, 132, 502-507.	1.8	7
20	Development of advanced plasters for insulation and renovation of building constructions with regard to their hygrothermal behaviour. Cement and Concrete Composites, 2018, 92, 47-55.	10.7	7
21	Study of Behaviour of Advanced Silicate Materials for Thermal and Moisture Rehabilitation of Buildings. Advanced Materials Research, 0, 649, 167-170.	0.3	6
22	Schafwolle als alternativer WÄrmedÄmmstoff und ihr hygrothermisches Verhalten. Bauphysik, 2014, 36, 249-256.	0.5	5
23	Composite Binder Containing Industrial By-Products (FCCCw and PSw) and Nano SiO <sub>2</sub> . Materials, 2021, 14, 1604.	2.9	5
24	Laboratory Testing of Developed Thermal Insulation Plasters on Pillars Built from Masonry Bricks. Procedia Engineering, 2017, 172, 377-384.	1.2	4
25	Methods for Determination of the Quality of Concretes with Respect to their High Temperature Behaviour. Procedia Engineering, 2013, 65, 260-265.	1.2	3
26	Study of Heat Transfer Process in Structure of Thermal Insulating Materials Based on Natural Fibers. Advanced Materials Research, 0, 1000, 227-230.	0.3	3
27	Possibilities of Development of Thermal Insulating Materials Based on Waste Textile Fibers. Advanced Materials Research, 2015, 1124, 183-188.	0.3	3
28	Possibilities of Regulation of Temperature in Concrete during Hydration by Means of Selection of Suitable Input Materials. Applied Mechanics and Materials, 0, 507, 199-203.	0.2	2
29	Behaviour of cement composites with lightweight and heavyweight aggregates at high temperatures. Periodica Polytechnica: Civil Engineering, 2016, , .	0.6	2
30	The Possibilities of Modification of Crop-based Insulation Materials Applicable in Civil Engineering in Low-energy and Passive Houses. Procedia Engineering, 2017, 180, 1186-1194.	1.2	2
31	Utilization of Alternative Insulation Materials for Thermal Insulating Ceramics Blocks Production. Advanced Materials Research, 0, 482-484, 1570-1575.	0.3	1
32	Development and Study of the Possibilities to Use Natural Materials for Thermal-Insulation Systems of ETICS. Advanced Materials Research, 0, 587, 31-35.	0.3	1
33	Development of Materials Based on Flax for Thermal Insulation and Thermal Rehabilitation of Structures. Advanced Materials Research, 0, 688, 153-157.	0.3	1
34	Alternative Technology of Constructing Masonry Structures Designed for Areas with Increased Seismic Activity. Procedia Engineering, 2016, 151, 177-182.	1.2	1
35	Development of New Advanced Plasters with Waste Fibers Content. Solid State Phenomena, 2018, 276, 248-253.	0.3	1
36	Design Procedure Concerning Composition of Composites Containing Gypsum-Free Cement. Advanced Materials Research, 0, 450-451, 719-726.	0.3	0

#	ARTICLE	IF	CITATIONS
37	Hygrothermal Behavior of Thermal Insulating Material Based on Technical Hemp and its Application in Construction. Advanced Materials Research, 0, 860-863, 1223-1226.	0.3	0
38	Development of Masonry Components Protected against Moisture. Advanced Materials Research, 0, 860-863, 1248-1251.	0.3	0
39	Studying of the Behavior of Thermal Insulation Materials Based on Natural Fibers for Incorporation into the Building Structure. Advanced Materials Research, 2014, 1041, 67-70.	0.3	0
40	Non-Traditional Thermal-Insulating and Rehabilitation Materials and their Hygrothermal Behaviour. Advanced Materials Research, 2014, 1041, 59-62.	0.3	0
41	Possibilities of Using Natural Fibres for Production of Particular Insulation for Use in Civil Engineering. Advanced Materials Research, 2015, 1124, 111-116.	0.3	0
42	Temperature Control in High Performance Concrete. Advanced Materials Research, 2015, 1100, 162-165.	0.3	0
43	Study of Hygrothermal Behavior of Insulation Materials Based on Natural Fibers. Advanced Materials Research, 2015, 1124, 97-102.	0.3	0
44	Development of Thermal Insulation, Capillary Active Plasters Suitable for Historical Buildings. Advanced Materials Research, 2015, 1122, 35-38.	0.3	0
45	Simulation and Measurement of Hygrothermal Behaviour of Newly Developed Plasters. Applied Mechanics and Materials, 2016, 824, 598-605.	0.2	0
46	Study of the Moisture Behavior of Newly Developed Plasters Applied on Brick Pillars. Procedia Engineering, 2016, 151, 58-65.	1.2	0
47	A study of the heat transfer process in the structure of fibre-based materials under low air pressure. AIP Conference Proceedings, 2018, , .	0.4	0
48	Development of ultralight fine-grained composite material with foam glass aggregate. AIP Conference Proceedings, 2020, , .	0.4	0
49	Ceramic masonry units intended for the masonry resistant to high humidity. Materiali in Tehnologije, 2015, 49, 817-820.	0.5	0
50	Study of the properties and hygrothermal behaviour of alternative insulation materials based on natural fibres. Materiali in Tehnologije, 2016, 50, 137-140.	0.5	0