

Václav Neřerka

List of Publications by Year in descending order

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Version: 2024-02-01

55
papers

809
citations

623188

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docs citations

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times ranked

598
citing authors

#	ARTICLE	IF	CITATIONS
1	Improvement of bonding between synthetic fibers and a cementitious matrix using recycled concrete powder and plasma treatment: from a single fiber to FRC. <i>European Journal of Environmental and Civil Engineering</i> , 2022, 26, 3880-3897.	1.0	10
2	Self-healing concrete: application of monodâ€™s approach for modeling <i>Bacillus pseudofirmus</i> growth curves. <i>European Journal of Environmental and Civil Engineering</i> , 2022, 26, 8229-8241.	1.0	4
3	PVA increases efficiency of bacterially-induced self-healing in cement mortars. <i>Cement and Concrete Composites</i> , 2022, 131, 104593.	4.6	8
4	Characterization of quarry dusts and industrial by-products as potential substitutes for traditional fillers and their impact on water susceptibility of asphalt concrete. <i>Construction and Building Materials</i> , 2021, 301, 124294.	3.2	4
5	A comprehensive study on adhesion between modified bituminous binders and mineral aggregates. <i>Construction and Building Materials</i> , 2021, 305, 124686.	3.2	14
6	Assessment of aggregate-bitumen coverage using entropy-based image segmentation. <i>Road Materials and Pavement Design</i> , 2020, 21, 2364-2375.	2.0	6
7	Recovery of residual anhydrous clinker in finely ground recycled concrete. <i>Resources, Conservation and Recycling</i> , 2020, 155, 104640.	5.3	35
8	Enhancing cementitious pastes with waste marble sludge. <i>Construction and Building Materials</i> , 2020, 255, 119372.	3.2	31
9	MECHANICAL AND IMAGE ANALYSIS OF ADHESION BETWEEN MINERAL AGGREGATE AND BITUMINOUS BINDER. <i>Acta Polytechnica CTU Proceedings</i> , 2020, 26, 112-116.	0.3	1
10	Mitigating inclusion-induced shrinkage cracking in cementitious composites by incorporating recycled concrete fines. <i>Construction and Building Materials</i> , 2020, 248, 118673.	3.2	22
11	Validation of Micromechanical Model for Prediction of ITZ Thickness of High-Strength Concrete Containing Secondary Cementitious Materials. <i>Materials Science Forum</i> , 2020, 995, 143-148.	0.3	4
12	Real-Time Optical Measurement of Displacements Using Subpixel Image Registration. <i>Experimental Techniques</i> , 2019, 43, 315-323.	0.9	10
13	Impact of silica fume, fly ash, and metakaolin on the thickness and strength of the ITZ in concrete. <i>Cement and Concrete Composites</i> , 2019, 103, 252-262.	4.6	147
14	Role of lime, fly ash, and slag in cement pastes containing recycled concrete fines. <i>Construction and Building Materials</i> , 2019, 201, 702-714.	3.2	49
15	Contact Angle Measurement Tool Based on Image Analysis. <i>Experimental Techniques</i> , 2018, 42, 271-278.	0.9	16
16	Deterioration of bonding capacity of plasma-treated polymer fiber reinforcement. <i>Cement and Concrete Composites</i> , 2018, 89, 205-215.	4.6	19
17	Micromechanical characterization and modeling of cement pastes containing waste marble powder. <i>Journal of Cleaner Production</i> , 2018, 195, 1081-1090.	4.6	45
18	A jigsaw puzzle metamaterial concept. <i>Composite Structures</i> , 2018, 202, 1275-1279.	3.1	13

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19	Modeling glulams in linear range with parameters updated using Bayesian inference. <i>Engineering Structures</i> , 2017, 138, 293-307.	2.6	7
20	Micromechanics-based simulations of compressive and tensile testing on lime-based mortars. <i>Mechanics of Materials</i> , 2017, 105, 49-60.	1.7	17
21	An integrated experimental-numerical study of the performance of lime-based mortars in masonry piers under eccentric loading. <i>Construction and Building Materials</i> , 2016, 114, 913-924.	3.2	22
22	Impact of surface plasma treatment on the performance of PET fiber reinforcement in cementitious composites. <i>Cement and Concrete Research</i> , 2016, 89, 276-287.	4.6	41
23	Replacement of Cement with Finely Ground Recycled Concrete: Influence on Mechanical Properties. <i>Applied Mechanics and Materials</i> , 2016, 825, 69-72.	0.2	3
24	MECHANICAL PROPERTIES OF PVA NANOFIBER TEXTILES WITH INCORPORATED NANODIAMONDS, COPPER AND SILVER IONS. <i>Acta Polytechnica</i> , 2015, 55, 14-21.	0.3	4
25	MICROSTRUCTURE DESCRIPTION AND MICROMECHANICAL PROPERTIES OF SPRUCE WOOD. <i>Acta Polytechnica</i> , 2015, 55, 39-49.	0.3	9
26	EFFECT OF PVA MODIFICATION ON PROPERTIES OF CEMENT COMPOSITES. <i>Acta Polytechnica</i> , 2015, 55, 64-75.	0.3	28
27	Investigation of crushed brick-matrix interface in lime-based ancient mortar by microscopy and nanoindentation. <i>Cement and Concrete Composites</i> , 2015, 55, 122-128.	4.6	49
28	Comprehensive study on mechanical properties of lime-based pastes with additions of metakaolin and brick dust. <i>Cement and Concrete Research</i> , 2014, 64, 17-29.	4.6	110
29	Influence of Freeze-Thaw Cycles on Mechanical Properties of Gypsum Determined Using the Impulse Excitation Method. <i>Applied Mechanics and Materials</i> , 2013, 486, 353-358.	0.2	2
30	Utilization of Recycled Fine-Ground Concrete from Railway Sleepers for Production of Cement-Based Binder. <i>Applied Mechanics and Materials</i> , 2013, 486, 323-326.	0.2	12
31	Influence of Copper Ions on Mechanical Properties of PVA-Based Nanofiber Textiles. <i>Applied Mechanics and Materials</i> , 2013, 486, 201-204.	0.2	2
32	A Micromechanics-Based Model for Stiffness and Strength Estimation of Cocciopesto Mortars. <i>Acta Polytechnica</i> , 2012, 52, .	0.3	9
33	Mechanical Properties of Single and Double-Layered PVA Nanofibers. <i>Key Engineering Materials</i> , 0, 586, 261-264.	0.4	5
34	Influence of Aggregate Stiffness on Fracture-Mechanical Properties of Lime-Based Mortars. <i>Applied Mechanics and Materials</i> , 0, 486, 289-294.	0.2	3
35	Fracture-Micromechanics Based Model of Mortars Susceptible to Shrinkage. <i>Key Engineering Materials</i> , 0, 592-593, 189-192.	0.4	0
36	Composite Material Based on Cement and PVA: Evolution of Mechanical Properties during First 28 Days. <i>Advanced Materials Research</i> , 0, 1054, 215-220.	0.3	7

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37	Mechanical Properties of Recycled Binder/Micro-Filler Cement-Based Material. <i>Advanced Materials Research</i> , 0, 1054, 234-237.	0.3	11
38	Micromechanical Properties of Spruce Tissues Using Static Nanoindentation and Modulus Mapping. <i>Applied Mechanics and Materials</i> , 0, 732, 115-118.	0.2	5
39	Compression Testing of Gypsum-Based Composite Reinforced by Recycled Wires from Automobile Tires. <i>Applied Mechanics and Materials</i> , 0, 732, 393-396.	0.2	1
40	Development of Mechanical Properties of Cement Paste with Different Addition of Polyvinyl Alcohol. <i>Applied Mechanics and Materials</i> , 0, 732, 81-84.	0.2	1
41	Non-Destructive Testing of Composite Gypsum Material Properties – Long Time Measurement. <i>Applied Mechanics and Materials</i> , 0, 732, 321-324.	0.2	1
42	Use of Digital Image Correlation to Track Strain Evolution in Compressed Masonry Piers. <i>Applied Mechanics and Materials</i> , 0, 732, 337-340.	0.2	0
43	Performance of Stabilized and Non-Stabilized PVA Nanofiber Textiles Subjected to Tension. <i>Applied Mechanics and Materials</i> , 0, 732, 119-122.	0.2	1
44	Effect of Curing Humidity on Stiffness of Cement Based Mortars with Recycled Fillers. <i>Applied Mechanics and Materials</i> , 0, 825, 19-22.	0.2	0
45	Modulus Mapping and its Use to Determine the Effect Process of Drying on the Cells of Spruce. <i>Key Engineering Materials</i> , 0, 714, 25-28.	0.4	1
46	An Additively Manufactured Modular Metamaterial Composed of a Single Cell. <i>Key Engineering Materials</i> , 0, 722, 325-330.	0.4	0
47	Comparison of Compressive Strength and Young’s Modulus of Cement Samples with Different Types of Aggregate. <i>Key Engineering Materials</i> , 0, 677, 207-210.	0.4	0
48	Using 2D Digital Image Analysis to Locate Position of Micro Fibers in Cross-Sections of Fiber-Reinforced Concrete. <i>Key Engineering Materials</i> , 0, 677, 169-174.	0.4	3
49	Testing of 3-Dimensional Stabilizing Elements for Protection of Slopes: Possibilities of In Situ Testing. <i>Applied Mechanics and Materials</i> , 0, 827, 239-242.	0.2	0
50	Composite Middle Lamella Hardness and Young’s Modulus of Artificial Dried Spruce Wood by Nanoindentation. <i>Applied Mechanics and Materials</i> , 0, 827, 320-323.	0.2	0
51	Use of Open Source DIC Tools for Analysis of Multiple Cracking in Fiber-Reinforced Concrete. <i>Applied Mechanics and Materials</i> , 0, 827, 336-339.	0.2	10
52	Effect of Reinforcement on Flexural Strength and Ductility of Gypsum-Based Composites with Recycled Wires from Automobile Tires. <i>Applied Mechanics and Materials</i> , 0, 827, 348-351.	0.2	1
53	ASSESSMENT OF 2D-DIC STOCHASTIC PATTERNS. <i>Acta Polytechnica CTU Proceedings</i> , 0, 13, 1.	0.3	6
54	A Lightweight DFT-Based Approach to the Optical Measurement of Displacements Using an Open-Source Python Code. <i>Experimental Techniques</i> , 0, , 1.	0.9	0

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55	MECHANICAL PROPERTIES IMPROVEMENT OF FIBER REINFORCED CONCRETE. Acta Polytechnica CTU Proceedings, 0, 22, 123-127.	0.3	0