Vlastimil Bilek

List of Publications by Year
in descending order

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53 papers	561 citations	687363 13 h-index	713466 21 g-index
53 all docs	53 docs citations	53 times ranked	514 citing authors

#	Article	IF	Citations
1	Comparison of Testing Methods for Evaluating the Resistance of Alkali-Activated Blast Furnace Slag Systems to Sulfur Dioxide. Materials, 2022, 15, 1344.	2.9	5
2	Experimental Study of Slag Changes during the Very Early Stages of Its Alkaline Activation. Materials, 2022, 15, 231.	2.9	10
3	Assessment of fatigue resistance of concrete: S-N curves to the Parisâ€™ law curves. Construction and Building Materials, 2022, 341, 127811.	7.2	12
4	Frost Resistance of Alkali-Activated Concreteâ€"An Important Pillar of Their Sustainability. Sustainability, 2021, 13, 473.	3.2	19
5	Comparative Study of High-Performance Concrete Characteristics and Loading Test of Pretensioned Experimental Beams. Crystals, 2021, 11, 427.	2.2	13
6	Mechanical Fracture and Fatigue Characteristics of Fine-Grained Composite Based on Sodium Hydroxide-Activated Slag Cured under High Relative Humidity. Applied Sciences (Switzerland), 2021, 11, 259.	2.5	7
7	Analysis of Fiber-Reinforced Concrete Slabs under Centric and Eccentric Load. Materials, 2021, 14, 7152.	2.9	3
8	Influence of the chevron notch type on the values of fracture energy evaluated on alkali-activated concrete. Engineering Fracture Mechanics, 2020, 236, 107209.	4.3	4
9	Influence of chlorides on the fracture toughness and fracture resistance under the mixed mode I/II of high-performance concrete. Theoretical and Applied Fracture Mechanics, 2020, 110, 102812.	4.7	16
10	Determination of Mechanical Characteristics for Fiber-Reinforced Concrete with Straight and Hooked Fibers. Crystals, 2020, 10, 545.	2.2	43
11	Blastfurnace Hybrid Cement with Waste Water Glass Activator: Alkaliâ€"Silica Reaction Study. Materials, 2020, 13, 3646.	2.9	3
12	Numerical Modeling and Analysis of Concrete Slabs in Interaction with Subsoil. Sustainability, 2020, 12, 9868.	3.2	21
13	High Performance Fine Grained Concrete with Content of Pumice. Solid State Phenomena, 2020, 309, 21-25.	0.3	0
14	Doubts over capillary pressure theory in context with drying and autogenous shrinkage of alkali-activated materials. Construction and Building Materials, 2020, 248, 118620.	7.2	24
15	Fatigue and fracture mechanical properties of selected concrete for subtle precast structural elements. MATEC Web of Conferences, 2020, 310, 00033.	0.2	0
16	Non-Linear Analysis of an RC Beam Without Shear Reinforcement with a Sensitivity Study of the Material Properties of Concrete. Slovak Journal of Civil Engineering, 2020, 28, 33-43.	0.5	24
17	Study of Latent Self-healing Ability of Sodium Hydroxide Activated Blast Furnace Slag Systems via Non-destructive Measurement. Smart Innovation, Systems and Technologies, 2020, , 915-926.	0.6	1
18	Fracture Resistance of Alkali Activated Concrete under the Mixed Mode I/II Load Conditions. Procedia Structural Integrity, 2019, 17, 610-617.	0.8	4

#	Article	IF	Citations
19	Influence of the Amount of Ammonium Salts in Fly Ash on Concrete with Ternary Binders. Solid State Phenomena, 2019, 292, 91-95.	0.3	1
20	Two Options of Self-Curing of High Performance Concrete. Solid State Phenomena, 2018, 272, 88-93.	0.3	2
21	Polyethylene glycol molecular weight as an important parameter affecting drying shrinkage and hydration of alkali-activated slag mortars and pastes. Construction and Building Materials, 2018, 166, 564-571.	7.2	35
22	High Performance Concrete with Ternary Binders. Key Engineering Materials, 2018, 761, 120-123.	0.4	3
23	Influence of alkali ions on the efficiency of shrinkage reduction by polypropylene glycol in alkali activated systems. Advances in Cement Research, 2018, 30, 240-244.	1.6	8
24	Cement Kiln By-Pass Dust: An Effective Alkaline Activator for Pozzolanic Materials. Materials, 2018, 11, 1770.	2.9	19
25	Comparison of Fracture Resistance of the Normal and High Strength Concrete Evaluated by Brazilian Disc Test. Proceedings (mdpi), 2018, 2, .	0.2	4
26	The mixed-mode fracture resistance of C 50/60 and its suitability for use in precast elements as determined by the Brazilian disc test and three-point bending specimens. Theoretical and Applied Fracture Mechanics, 2018, 97, 108-119.	4.7	28
27	Polypropylene Glycols as Effective Shrinkage-Reducing Admixtures in Alkali-Activated Materials. ACI Materials Journal, 2018, 115, .	0.2	6
28	Bond Strength Between Reinforcing Steel and Different Types of Concrete. Procedia Engineering, 2017, 190, 243-247.	1.2	25
29	Construction and Static Loading Tests of Experimental Subtle Frame from High Performance Concrete for Energy Efficient Buildings. Solid State Phenomena, 2017, 259, 275-279.	0.3	1
30	Hybrid Cements with Non Silicate Activators. Solid State Phenomena, 2017, 259, 30-34.	0.3	3
31	Fracture properties of concrete specimens made from alkali activated binders. IOP Conference Series: Materials Science and Engineering, 2017, 236, 012068.	0.6	2
32	Effect of Na3PO4 on the Hydration Process of Alkali-Activated Blast Furnace Slag. Materials, 2016, 9, 395.	2.9	40
33	Some Issues of Shrinkage-Reducing Admixtures Application in Alkali-Activated Slag Systems. Materials, 2016, 9, 462.	2.9	46
34	Hexavalent Chromium Reduction by Ferrous Sulphate Heptahydrate Addition into the Portland Clinker. Procedia Engineering, 2016, 151, 73-79.	1.2	9
35	Development of alkali-activated concrete for structures â€“ Mechanical properties and durability. Perspectives in Science, 2016, 7, 190-194.	0.6	19
36	Effect of a combination of fly ash and shrinkage-reducing additives on the properties of alkali-activated slag-based mortars. Materiali in Tehnologije, 2016, 50, 813-817.	0.5	8

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37	Monitoring early-age concrete with the acoustic-emission method and determining the change in the electrical properties. Materiali in Tehnologije, 2015, 49, 703-707.	0.5	3
38	Effect of the by-pass cement-kiln dust and fluidized-bed-combustion fly ash on the properties of fine-grained alkali-activated slag-based composites. Materiali in Tehnologije, 2015, 49, 549-552.	0.5	8
39	Durability and Testing â€“ Physical Processes. RILEM State-of-the-Art Reports, 2014, , 277-307.	0.7	4
40	Durability and Testing â€“ Degradation via Mass Transport. RILEM State-of-the-Art Reports, 2014, , 223-276.	0.7	12
41	Cement based composites for thin building elements: Fracture and fatigue parameters. Procedia Engineering, 2010, 2, 911-916.	1.2	4
42	Fatigue Parameters of Cement-Based Composites with Various Types of Fibres. Key Engineering Materials, 0, 417-418, 129-132.	0.4	4
43	Evolution from High Strength Concrete to High Performance Concrete. Key Engineering Materials, 0, 629-630, 49-54.	0.4	0
44	Influence of the Age and Level of Concrete Fatigue on Prestressed Railway Sleeper Response: Parametric Study and Experiment. Advanced Materials Research, 0, 969, 218-221.	0.3	4
45	Mechanical and Fatigue Parameters of Two Types of Alkali-Activated Concrete. Key Engineering Materials, 0, 665, 129-132.	0.4	2
46	Structural Design and Experimental Verification of Precast Columns from High Performance Concrete. Advanced Materials Research, 0, 1106, 110-113.	0.3	2
47	Hybrid Alkali Activated Concretes - Conception and Development for Practical Application. Solid State Phenomena, 0, 249, 3-7.	0.3	6
48	Experimental Verification of Subtle Frame Components Prototypes from High Performance Concrete for Energy Efficient Buildings. Solid State Phenomena, 0, 249, 301-306.	0.3	1
49	Comparative Evaluation ofÂMechanical Properties ofÂFibre-Reinforced Concrete and Approach to Modelling ofÂBearing Capacity Ground Slab. Periodica Polytechnica: Civil Engineering, 0, , .	0.6	18
50	Calculation of Resistance and Non-Linear Analysis of Reinforced Concrete Beams. Solid State Phenomena, 0, 292, 140-145.	0.3	2
51	AAM for Structure Beams and Analysis of Beam without Shear Reinforcement. Solid State Phenomena, 0, 292, 3-8.	0.3	4
52	Aspects of Testing and Material Properties of Fiber Concrete. Solid State Phenomena, 0, 292, 9-14.	0.3	2
53	Measurement and Utilization of Acoustic Emission for the Analysis and Monitoring of Concrete Slabs on the Subsoil. Periodica Polytechnica: Civil Engineering, 0, , .	0.6	17