Vlastimil Bilek

List of Publications by Year
in descending order

53	561	687363 13	713466 21
papers	citations	h-index	g-index

53	53	53	514
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Some Issues of Shrinkage-Reducing Admixtures Application in Alkali-Activated Slag Systems. Materials, 2016, 9, 462.	2.9	46
2	Determination of Mechanical Characteristics for Fiber-Reinforced Concrete with Straight and Hooked Fibers. Crystals, 2020, 10, 545.	2.2	43
3	Effect of Na3PO4 on the Hydration Process of Alkali-Activated Blast Furnace Slag. Materials, 2016, 9, 395.	2.9	40
4	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
5	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
6	Bond Strength Between Reinforcing Steel and Different Types of Concrete. Procedia Engineering, 2017, 190, 243-247.	1.2	25
7	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
8	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
9	Numerical Modeling and Analysis of Concrete Slabs in Interaction with Subsoil. Sustainability, 2020, 12, 9868.	3.2	21
10	Development of alkali-activated concrete for structures â€“ Mechanical properties and durability. Perspectives in Science, 2016, 7, 190-194.	0.6	19
11	Cement Kiln By-Pass Dust: An Effective Alkaline Activator for Pozzolanic Materials. Materials, 2018, 11, 1770.	2.9	19
12	Frost Resistance of Alkali-Activated Concreteâ€”An Important Pillar of Their Sustainability. Sustainability, 2021, 13, 473.	3.2	19
13	Comparative Evaluation ofÂMechanical Properties ofÂFibre-Reinforced Concrete and Approach to Modelling ofÂBearing Capacity Ground Slab. Periodica Polytechnica: Civil Engineering, 0, , .	0.6	18
14	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
15	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
16	Comparative Study of High-Performance Concrete Characteristics and Loading Test of Pretensioned Experimental Beams. Crystals, 2021, 11, 427.	2.2	13
17	Durability and Testing â€“ Degradation via Mass Transport. RILEM State-of-the-Art Reports, 2014, , 223-276.	0.7	12
18	Assessment of fatigue resistance of concrete: S-N curves to the Parisâ€™ law curves. Construction and Building Materials, 2022, 341, 127811.	7.2	12

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19	Experimental Study of Slag Changes during the Very Early Stages of Its Alkaline Activation. Materials, 2022, 15, 231.	2.9	10
20	Hexavalent Chromium Reduction by Ferrous Sulphate Heptahydrate Addition into the Portland Clinker. Procedia Engineering, 2016, 151, 73-79.	1.2	9
21	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
22	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
23	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
24	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
25	Hybrid Alkali Activated Concretes - Conception and Development for Practical Application. Solid State Phenomena, 0, 249, 3-7.	0.3	6
26	Polypropylene Glycols as Effective Shrinkage-Reducing Admixtures in Alkali-Activated Materials. ACI Materials Journal, 2018, 115, .	0.2	6
27	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
28	Fatigue Parameters of Cement-Based Composites with Various Types of Fibres. Key Engineering Materials, 0, 417-418, 129-132.	0.4	4
29	Cement based composites for thin building elements: Fracture and fatigue parameters. Procedia Engineering, 2010, 2, 911-916.	1.2	4
30	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
31	Comparison of Fracture Resistance of the Normal and High Strength Concrete Evaluated by Brazilian Disc Test. Proceedings (mdpi), 2018, 2, .	0.2	4
32	Fracture Resistance of Alkali Activated Concrete under the Mixed Mode I/II Load Conditions. Procedia Structural Integrity, 2019, 17, 610-617.	0.8	4
33	AAM for Structure Beams and Analysis of Beam without Shear Reinforcement. Solid State Phenomena, 0, 292, 3-8.	0.3	4
34	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
35	Durability and Testing â€“ Physical Processes. RILEM State-of-the-Art Reports, 2014, , 277-307.	0.7	4
36	Hybrid Cements with Non Silicate Activators. Solid State Phenomena, 2017, 259, 30-34.	0.3	3

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37	High Performance Concrete with Ternary Binders. Key Engineering Materials, 2018, 761, 120-123.	0.4	3
38	Blastfurnace Hybrid Cement with Waste Water Glass Activator: Alkaliâ€“Silica Reaction Study. Materials, 2020, 13, 3646.	2.9	3
39	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
40	Analysis of Fiber-Reinforced Concrete Slabs under Centric and Eccentric Load. Materials, 2021, 14, 7152.	2.9	3
41	Mechanical and Fatigue Parameters of Two Types of Alkali-Activated Concrete. Key Engineering Materials, 0, 665, 129-132.	0.4	2
42	Structural Design and Experimental Verification of Precast Columns from High Performance Concrete. Advanced Materials Research, 0, 1106, 110-113.	0.3	2
43	Fracture properties of concrete specimens made from alkali activated binders. IOP Conference Series: Materials Science and Engineering, 2017, 236, 012068.	0.6	2
44	Two Options of Self-Curing of High Performance Concrete. Solid State Phenomena, 2018, 272, 88-93.	0.3	2
45	Calculation of Resistance and Non-Linear Analysis of Reinforced Concrete Beams. Solid State Phenomena, 0, 292, 140-145.	0.3	2
46	Aspects of Testing and Material Properties of Fiber Concrete. Solid State Phenomena, 0, 292, 9-14.	0.3	2
47	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
48	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
49	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
50	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
51	Evolution from High Strength Concrete to High Performance Concrete. Key Engineering Materials, 0, 629-630, 49-54.	0.4	0
52	High Performance Fine Grained Concrete with Content of Pumice. Solid State Phenomena, 2020, 309, 21-25.	0.3	0
53	Fatigue and fracture mechanical properties of selected concrete for subtle precast structural elements. MATEC Web of Conferences, 2020, 310, 00033.	0.2	0