Petr Lehner

List of Publications by Year
in descending order

60 papers	451 citations	687363 13 h-index	839539 18 g-index
61 all docs	61 docs citations	61 times ranked	350 citing authors

#	Article	IF	Citations
1	Fatigue damage analysis of a riveted steel overhead crane support truss. International Journal of Fatigue, 2019, 128, 105190.	5.7	25
2	Comparison of Material Properties of SCC Concrete with Steel Fibres Related to Ingress of Chlorides. Crystals, 2020, 10, 220.	2.2	23
3	Relationship of Surface and Bulk Resistivity in the Case of Mechanically Damaged Fibre Reinforced Red Ceramic Waste Aggregate Concrete. Materials, 2020, 13, 5501.	2.9	22
4	Investigation of Fracture Properties by Inverse Analysis on Selected SCC Concrete Beams with Different Amount of Fibres. Procedia Structural Integrity, 2018, 13, 1533-1538.	0.8	20
5	Statistical analysis of time dependent variation of diffusion coefficient for various binary and ternary based concrete mixtures. Construction and Building Materials, 2018, 183, 75-87.	7.2	20
6	Effect of cracking and randomness of inputs on corrosion initiation of reinforced concrete bridge decks exposed to chlorides. Frattura Ed Integrita Strutturale, 2017, 11, 29-37.	0.9	20
7	Effective methodology of sustainability assessment of concrete mixtures. Materials and Structures/Materiaux Et Constructions, 2020, 53, 1.	3.1	19
8	Sustainability Levels in Comparison with Mechanical Properties and Durability of Pumice High-Performance Concrete. Applied Sciences (Switzerland), 2021, 11, 4964.	2.5	19
9	Comparison of Chloride Diffusion Coefficient Evaluation Based on Electrochemical Methods. Procedia Engineering, 2017, 190, 193-198.	1.2	18
10	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
11	Comparison of procedures for the evaluation of time dependent concrete diffusion coefficient model. Construction and Building Materials, 2020, 258, 119535.	7.2	16
12	Durability assessment of concrete bridge deck considering waterproof membrane and epoxy-coated reinforcement. Perspectives in Science, 2016, 7, 222-227.	0.6	15
13	Effect of Amount of Fibre and Damage Level on Service Life of SFR Recycled Concrete in Aggressive Environment. Buildings, 2021, 11, 489.	3.1	15
14	Mechanical Properties and Gamma Radiation Transmission Rate of Heavyweight Concrete Containing Barite Aggregates. Materials, 2022, 15, 2173.	2.9	13
15	Influence of crack propagation on electrical resistivity and ultrasonic characteristics of normal concrete assessed by sequential TPB fracture test. Theoretical and Applied Fracture Mechanics, 2015, 80, 2-13.	4.7	12
16	Probabilistic time-dependent sensitivity analysis of HPC bridge deck exposed to chlorides. Computers and Concrete, 2017, 19, 305-313.	0.7	11
17	Stochastic analysis for short edge cracks under selected loads. AIP Conference Proceedings, 2018, , .	0.4	10
18	Correlation between surface concentration of chloride ions and chloride deposition rate in concrete. Construction and Building Materials, 2022, 320, 126183.	7.2	10

#	Article	IF	Citations
19	Durability Characteristics of Concrete Mixture Based on Red Ceramic Waste Aggregate. Sustainability, 2020, 12, 8890.	3.2	9
20	Variation of Durability and Strength Parameters of Pumice Based Mixtures. Materials, 2021, 14, 3674.	2.9	9
21	Sensitivity Analysis of Stochastic Calculation of SCC Regarding Aggressive Environment. Materials, 2021, 14, 6838.	2.9	9
22	Relationship of Time-Dependent Parameters from Destructive and Non-Destructive Tests of Structural Concrete. Mathematics, 2022, 10, 460.	2.2	9
23	Probabilistic Modeling of Chloride Penetration with Respect to Concrete Heterogeneity and Epoxy-Coating on the Reinforcement. Materials, 2019, 12, 4068.	2.9	8
24	Analysis of Measured Parameters in Relation to the Amount of Fibre in Lightweight Red Ceramic Waste Aggregate Concrete. Mathematics, 2022, 10, 229.	2.2	8
25	Using DOProC method in reliability assessment of steel elements exposed to fatigue. MATEC Web of Conferences, 2017, 107, 00046.	0.2	7
26	Electrical resistivity and ultrasonic measurements during sequential fracture test of cementitious composite. Frattura Ed Integrita Strutturale, 2014, 8, 263-272.	0.9	6
27	Stochastic Service Life Prediction of Existing Steel Structure Loaded by Overhead Cranes. Procedia Structural Integrity, 2018, 13, 1539-1544.	0.8	6
28	Determination of Time Dependent Diffusion Coefficient Aging Factor of HPC Mixtures. Key Engineering Materials, 2020, 832, 11-20.	0.4	6
29	Experimental and Numerical Evaluation of Clinch Connections of Thin-Walled Building Structures. Sustainability, 2020, 12, 5691.	3.2	6
30	Variation of Diffusion Coefficient for Selected Binary and Ternary Concrete Mixtures Considering Concrete Aging Effect. Key Engineering Materials, 2018, 761, 144-147.	0.4	5
31	Advanced Model of Chloride Penetration Considering Concrete Heterogeneity. Procedia Structural Integrity, 2018, 13, 1702-1707.	0.8	5
32	Temperature and Structural Analysis of Omega Clip. International Journal of Steel Structures, 2019, 19, 1295-1301.	1.3	5
33	Experimental and numerical evaluation of SCC concrete durability related to ingress of chlorides. AIP Conference Proceedings, 2018, , .	0.4	4
34	Durability of structural lightweight waste aggregate concrete â€" electrical resistivity. MATEC Web of Conferences, 2020, 310, 00015.	0.2	4
35	Relationship of Different Properties from Non-Destructive Testing of Heavy Concrete from Magnetite and Serpentinite. Materials, 2021, 14, 4288.	2.9	4
36	Physical Tests of Alternative Connections of Different High Roof Purlins Regarding Upward Loading. Buildings, 2021, 11, 512.	3.1	4

#	Article	IF	Citations
37	Numerical Models of the Connection of Thin-Walled Z-Profile Roof Purlins. Materials, 2021, 14, 6573.	2.9	4
38	Investigation of Selected Physical Parameters of Cementitious Composite during Sequential Fracture Test. Advanced Materials Research, 0, 969, 228-233.	0.3	3
39	Fatigue damage prediction of short edge crack under various load: Direct Optimized Probabilistic Calculation. Procedia Structural Integrity, 2017, 5, 1283-1290.	0.8	3
40	Numerical approximation of time-dependent chloride diffusion model parameters via probabilistic Monte Carlo method. AIP Conference Proceedings, 2020, , .	0.4	3
41	Electrical Resistivity and Strength Parameters of Prismatic Mortar Samples Based on Standardized Sand and Lunar Aggregate Simulant. Buildings, 2022, 12, 423.	3.1	3
42	Investigation of Fracture and Electrical Resistivity Parameters of Cementitious Composite for their Utilization in Deterioration Models. Key Engineering Materials, 0, 577-578, 265-268.	0.4	2
43	Numerical Validation of Concrete Corrosion Initiation Model Considering Crack Effect Model and Aging Effect. Procedia Engineering, 2017, 190, 154-161.	1.2	2
44	Numerical analysis of double C profile connected by clinching technology. AIP Conference Proceedings, 2019, , .	0.4	2
45	Reinforced Concrete Bridge Deck Model Considering Delayed Exposure to Chlorides. Periodica Polytechnica: Civil Engineering, 2019, , .	0.6	2
46	Model uncertainty in diffusion coefficient for chloride ingress into concrete. Procedia Structural Integrity, 2021, 31, 147-153.	0.8	2
47	Utilization of Monte Carlo method for modelling of the loading history of cyclically stressed structure. AIP Conference Proceedings, 2020, , .	0.4	2
48	Experimental Investigation of Two Test Setups on Straw Bales Used as Load-Bearing Elements of Buildings. Buildings, 2021, 11, 539.	3.1	2
49	Numerical analysis of flexural behavior of concrete element with 3-D printed formwork. AIP Conference Proceedings, 2022, , .	0.4	1
50	Influence of the Extent of Fracture on the Resistance against Chloride Penetration into Cementitious Composite. Key Engineering Materials, 2016, 713, 224-227.	0.4	0
51	Approximation of the bridge deck diffusion coefficient and surface chloride concentration from field data. IOP Conference Series: Materials Science and Engineering, 2019, 659, 012048.	0.6	0
52	Study of bearing capacity of support connection of thin-walled roof purlins Z350. AIP Conference Proceedings, 2019, , .	0.4	0
53	Effect of different concrete material parameters on the accuracy of FEM model of diffusion. AIP Conference Proceedings, 2019, , .	0.4	0
54	The Effect of the Variation of Input Parameters on the Onset of Corrosion of the Bridge Deck Exposed to Chlorides Considering Selected Reinforcement Protection. Key Engineering Materials, 2020, 832, 147-157.	0.4	0

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55	Example of analysis of climatic data series with respect to the testing of reinforcement concrete corrosion in a climate chamber. MATEC Web of Conferences, 2020, 313, 00037.	0.2	0
56	Numerical model of time-dependent diffusion of chlorides in the concrete based on 2D four-node isoparametric element. MATEC Web of Conferences, 2020, 310, 00020.	0.2	0
57	Probabilistic fatigue analysis of existing steel structure. MATEC Web of Conferences, 2020, 310, 00012.	0.2	0
58	The general procedure of numerical analysis related to a fatigue damage on the cyclically loaded construction. MATEC Web of Conferences, 2020, 310, 00016.	0.2	0
59	Statistical analysis of experimental chloride profiles resulted from LIBS. AIP Conference Proceedings, 2022, , .	0.4	0
60	Speed-up in chloride ingress analysis. , 0, , .		0