Jiri Kala

List of Publications by Year
in descending order

47 papers	275 citations	1040056 9 h-index	1058476 14 g-index
47 all docs	47 docs citations	47 times ranked	131 citing authors

#	Article	IF	Citations
1	Flexural buckling of stainless steel CHS columns: Reliability analysis utilizing FEM simulations. Journal of Constructional Steel Research, 2022, 188, 107002.	3.9	15
2	A comparison of various FE modelling methods of concrete slab exposed to impact loads. AIP Conference Proceedings, 2022, , .	0.4	0
3	Validation of Stainless-Steel CHS Columns Finite Element Models. Materials, 2021, 14, 1785.	2.9	10
4	The Influence of Hot-Dip Galvanizing on the Mechanical Properties of High-Strength Steels. Materials, 2021, 14, 5219.	2.9	11
5	A Comparison of Shell and Solid Finite Element Models of Austenitic Stainless Steel Columns in Compression. IOP Conference Series: Materials Science and Engineering, 2021, 1203, 032048.	0.6	0
6	Optimal adjustment of FE model of concrete slab exposed to impact loading. MATEC Web of Conferences, 2020, 313, 00024.	0.2	1
7	Video analysis of response of reinforced concrete beam to impact loading during drop test. MATEC Web of Conferences, 2020, 310, 00049.	0.2	0
8	Algorithmization and application of constitutive equations for modeling the plane stress state of concrete. AIP Conference Proceedings, 2020, , .	0.4	0
9	Non linear FEM analysis Î¿f composite concrete slab exposed Ï„o extreme thermal load. AIP Conference Proceedings, 2020, , .	0.4	0
10	Using the inverse identification of parameters of a nonlinear concrete material model for analysis of RC structural element. AIP Conference Proceedings, 2019, , .	0.4	0
11	Four-Point Bending Test on a High Reinforced Concrete Beam: Nonlinear Numerical Analysis Using Material Parameter Identification. IOP Conference Series: Materials Science and Engineering, 2019, 471, 052052.	0.6	0
12	Using noise to generate the material structure of concrete. AIP Conference Proceedings, 2018, , .	0.4	0
13	Sensitivity analysis and optimization as tools for the inverse concrete material model parameter identification. AIP Conference Proceedings, 2018, , .	0.4	2
14	Concrete Targets with Heterogeneities under Impact Loading. Advances in Military Technology, 2018, 13, 107-118.	0.6	1
15	Identification of Concrete Material Model Parameters Using Optimisation Algorithms. Advances in Military Technology, 2018, 13, 33-45.	0.6	2
16	Identification of the Parameters of a Concrete Damage Material Model. Procedia Engineering, 2017, 172, 578-585.	1.2	16
17	Simulating randomized failure of concrete targets. , 2017, , .		2
18	Pinned joints â€" their design and real behaviour. Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics, 2017, 170, 154-166.	0.4	2

#	ARTICLE	IF	CITATIONS
19	Requirements of technical standards for the dynamic analysis of the load-bearing structures of footbridges. MATEC Web of Conferences, 2017, 107, 00010.	0.2	1
20	Dynamical response of railway switches and crossings. MATEC Web of Conferences, 2017, 107, 00018.	0.2	9
21	Steel Fibre Reinforced Concrete Simulation with the SPH Method. IOP Conference Series: Materials Science and Engineering, 2017, 245, 032070.	0.6	1
22	Concept and numerical simulations of a reactive anti-fragment armour layer. AIP Conference Proceedings, 2017, , .	0.4	0
23	Study on Identification of Material Model Parameters from Compact Tension Test on Concrete Specimens. IOP Conference Series: Materials Science and Engineering, 2017, 245, 032079.	0.6	1
24	Optimization-Based Inverse Identification of the Parameters of a Concrete Cap Material Model. IOP Conference Series: Materials Science and Engineering, 2017, 245, 032078.	0.6	3
25	Conversion of Fractal Fields into Heterogeneities inside SPH Simulations. IOP Conference Series: Materials Science and Engineering, 2017, 245, 032024.	0.6	0
26	Optimization of the material parameters of the continuous surface cap model for concrete. , 2017, , .		4
27	Selecting the objective function during the inverse identification of the parameters of a material model of concrete. Frattura Ed Integrita Strutturale, 2017, 11, 7-16.	0.9	7
28	Inverse identification of the material parameters of a nonlinear concrete constitutive model based on the triaxial compression strength testing. Frattura Ed Integrita Strutturale, 2017, 11, 38-46.	0.9	7
29	Improved Element Erosion Function for Concrete-Like Materials with the SPH Method. Shock and Vibration, 2016, 2016, 1-13.	0.6	28
30	Parameter Identification for a Multivariable Nonlinear Constitutive Model inside ANSYS Workbench. Procedia Engineering, 2016, 161, 892-897.	1.2	13
31	Influence of SPH Regularity and Parameters in Dynamic Fracture Phenomena. Procedia Engineering, 2016, 161, 489-496.	1.2	5
32	Use of design optimization techniques in solving typical structural engineering related design optimization problems. Structural Engineering and Mechanics, 2015, 55, 1121-1137.	1.0	13
33	Analysis of the Shear Failure of a Reinforced Concrete Wall. Applied Mechanics and Materials, 2014, 621, 124-129.	0.2	6
34	Very fast unit selection using Viterbi search with zero-concatenation-cost chains. , 2014, , .		12
35	Quality Improvements of Zero-Concatenation-Cost Chain Based Unit Selection. Lecture Notes in Computer Science, 2014, , 376-385.	1.3	0
36	Assess of the Nuclear Power Plant Structures Residual Life and Earthquake Resistance. Applied Mechanics and Materials, 2013, 284-287, 1247-1250.	0.2	10

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37	The interaction of local buckling and stability loss of a thin-walled column under compression. , 2012, , .		8
38	Lateral-torsional buckling analysis of I-beams using shell finite elements and nonlinear computation methods. , 2012, , .		13
39	Large-deflection-theory Analysis of the Effect of Web Initial Curvature on the Ultimate Strength of Steel Plate Girder. AIP Conference Proceedings, 2011, , .	0.4	16
40	Sensitivity Analysis of Stability Problems of Steel Structures using Shell Finite Elements and Nonlinear Computation Methods. AIP Conference Proceedings, 2011, , .	0.4	25
41	Quality Deterioration Factors in Unit Selection Speech Synthesis. , 2007, , 508-515.		6
42	Sensitivity analysis of the effect of initial imperfections on the (i) ultimate load and (ii) fatigue behaviour of steel plate girders. Journal of Civil Engineering and Management, 2005, 11, 99-107.	3.5	9
43	On Modelling Glottal Stop in Czech Text-to-Speech Synthesis. Lecture Notes in Computer Science, 2005, , 257-264.	1.3	4
44	SENSITIVITY ANALYSIS OF THE EFFECT OF INITIAL IMPERFECTIONS ON THE (I) ULTIMATE LOAD AND (II) FATIGUE BEHAVIOUR OF STEEL PLATE GIRDERS. Journal of Civil Engineering and Management, 2005, 11, 99-107.	3.5	1
45	Calculation of Timber Outlook Tower with Influence of Behavior of â€œSteel-Timberâ€•Connection. Advanced Materials Research, 0, 428, 165-168.	0.3	6
46	Response of Water Tower on Wind Induced Vibration Considering Interaction of Fluid and Structure. Applied Mechanics and Materials, 0, 284-287, 1269-1272.	0.2	5
47	Modelling the Tensile Softening Behaviour of Concrete in LS-Dyna Software. IOP Conference Series: Materials Science and Engineering, 0, 960, 042084.	0.6	0