

# Jiri Kala

## List of Publications by Year in descending order

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47  
papers

275  
citations

1040056

9  
h-index

1058476

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g-index

47  
all docs

47  
docs citations

47  
times ranked

131  
citing authors

#	ARTICLE	IF	CITATIONS
1	Improved Element Erosion Function for Concrete-Like Materials with the SPH Method. Shock and Vibration, 2016, 2016, 1-13.	0.6	28
2	Sensitivity Analysis of Stability Problems of Steel Structures using Shell Finite Elements and Nonlinear Computation Methods. AIP Conference Proceedings, 2011, , .	0.4	25
3	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
4	Identification of the Parameters of a Concrete Damage Material Model. Procedia Engineering, 2017, 172, 578-585.	1.2	16
5	Flexural buckling of stainless steel CHS columns: Reliability analysis utilizing FEM simulations. Journal of Constructional Steel Research, 2022, 188, 107002.	3.9	15
6	Lateral-torsional buckling analysis of I-beams using shell finite elements and nonlinear computation methods. , 2012, , .		13
7	Parameter Identification for a Multivariable Nonlinear Constitutive Model inside ANSYS Workbench. Procedia Engineering, 2016, 161, 892-897.	1.2	13
8	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
9	Very fast unit selection using Viterbi search with zero-concatenation-cost chains. , 2014, , .		12
10	The Influence of Hot-Dip Galvanizing on the Mechanical Properties of High-Strength Steels. Materials, 2021, 14, 5219.	2.9	11
11	Assess of the Nuclear Power Plant Structures Residual Life and Earthquake Resistance. Applied Mechanics and Materials, 2013, 284-287, 1247-1250.	0.2	10
12	Validation of Stainless-Steel CHS Columns Finite Element Models. Materials, 2021, 14, 1785.	2.9	10
13	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
14	Dynamical response of railway switches and crossings. MATEC Web of Conferences, 2017, 107, 00018.	0.2	9
15	The interaction of local buckling and stability loss of a thin-walled column under compression. , 2012, , .		8
16	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
17	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
18	Calculation of Timber Outlook Tower with Influence of Behavior of "Steel-Timber" Connection. Advanced Materials Research, 0, 428, 165-168.	0.3	6

#	ARTICLE	IF	CITATIONS
19	Analysis of the Shear Failure of a Reinforced Concrete Wall. Applied Mechanics and Materials, 2014, 621, 124-129.	0.2	6
20	Quality Deterioration Factors in Unit Selection Speech Synthesis. , 2007, , 508-515.		6
21	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
22	Influence of SPH Regularity and Parameters in Dynamic Fracture Phenomena. Procedia Engineering, 2016, 161, 489-496.	1.2	5
23	On Modelling Glottal Stop in Czech Text-to-Speech Synthesis. Lecture Notes in Computer Science, 2005, , 257-264.	1.3	4
24	Optimization of the material parameters of the continuous surface cap model for concrete. , 2017, , .		4
25	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
26	Simulating randomized failure of concrete targets. , 2017, , .		2
27	Pinned joints – their design and real behaviour. Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics, 2017, 170, 154-166.	0.4	2
28	Sensitivity analysis and optimization as tools for the inverse concrete material model parameter identification. AIP Conference Proceedings, 2018, , .	0.4	2
29	Identification of Concrete Material Model Parameters Using Optimisation Algorithms. Advances in Military Technology, 2018, 13, 33-45.	0.6	2
30	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
31	Steel Fibre Reinforced Concrete Simulation with the SPH Method. IOP Conference Series: Materials Science and Engineering, 2017, 245, 032070.	0.6	1
32	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
33	Optimal adjustment of FE model of concrete slab exposed to impact loading. MATEC Web of Conferences, 2020, 313, 00024.	0.2	1
34	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
35	Concrete Targets with Heterogeneities under Impact Loading. Advances in Military Technology, 2018, 13, 107-118.	0.6	1
36	Concept and numerical simulations of a reactive anti-fragment armour layer. AIP Conference Proceedings, 2017, , .	0.4	0

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37	Conversion of Fractal Fields into Heterogeneities inside SPH Simulations. IOP Conference Series: Materials Science and Engineering, 2017, 245, 032024.	0.6	0
38	Using noise to generate the material structure of concrete. AIP Conference Proceedings, 2018, , .	0.4	0
39	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
40	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
41	Video analysis of response of reinforced concrete beam to impact loading during drop test. MATEC Web of Conferences, 2020, 310, 00049.	0.2	0
42	Quality Improvements of Zero-Concatenation-Cost Chain Based Unit Selection. Lecture Notes in Computer Science, 2014, , 376-385.	1.3	0
43	Modelling the Tensile Softening Behaviour of Concrete in LS-Dyna Software. IOP Conference Series: Materials Science and Engineering, 0, 960, 042084.	0.6	0
44	Algorithmization and application of constitutive equations for modeling the plane stress state of concrete. AIP Conference Proceedings, 2020, , .	0.4	0
45	Non linear FEM analysis of composite concrete slab exposed to extreme thermal load. AIP Conference Proceedings, 2020, , .	0.4	0
46	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
47	A comparison of various FE modelling methods of concrete slab exposed to impact loads. AIP Conference Proceedings, 2022, , .	0.4	0