Simon Sedmak

List of Publications by Year
in descending order

46 papers	291 citations	1040056 9 h-index	996975 15 g-index
48 all docs	48 docs citations	48 times ranked	209 citing authors

#	Article	IF	Citations
1	Fatigue crack growth in locking compression plates. International Journal of Fatigue, 2022, 157, 106727.	5.7	7
2	Numerical simulation of fatigue crack growth in AA6156 T6 panels. Procedia Structural Integrity, 2022, 39, 786-791.	0.8	1
3	Numerical simulation of fatigue crack paths in orthopedic plates. Procedia Structural Integrity, 2022, 39, 808-814.	0.8	1
4	Fatigue life assessment of orthopedic plates made of Ti6Al4V. Engineering Failure Analysis, 2022, 137, 106259.	4.0	3
5	Analysis of fatigue behaviour of a bridge welded structure. Procedia Structural Integrity, 2022, 37, 269-273.	0.8	2
6	Engineering critical assessment of steel shell structure elements welded joints under high cycle fatigue. Engineering Failure Analysis, 2020, 114, 104578.	4.0	10
7	Structural integrity and life assessment of rotating equipment. Engineering Failure Analysis, 2020, 113, 104561.	4.0	14
8	IoT based early warning system for torrential floods. FME Transactions, 2020, 48, 511-515.	1.4	3
9	Risk based analysis of RHPP penstock structural integrity. Frattura Ed Integrita Strutturale, 2020, 14, 345-352.	0.9	6
10	An overview of application of micromechanical models in ductile fracture analysis of welded joints. Theoretical and Applied Mechanics, 2020, 47, 33-62.	0.3	0
11	Extended FEM analysis of fatigue crack growth in Ti-6Al-4V orthopaedic plates. Procedia Structural Integrity, 2020, 28, 555-560.	0.8	6
12	Integrity assessment and determination of residual fatigue life of vital parts of bucket-wheel excavator operating under dynamic loads. Engineering Failure Analysis, 2019, 105, 182-195.	4.0	18
13	Butt welded joints assessment after fire exposure. Engineering Failure Analysis, 2019, 106, 104144.	4.0	6
14	Influence of welded joint microstructures on fatigue behaviour of specimens with a notch in the heat affected zone. Engineering Failure Analysis, 2019, 106, 104162.	4.0	12
15	XFEM simulation of fatigue crack growth in a welded joint of a pressure vessel with a reinforcement ring. Archive of Applied Mechanics, 2019, 89, 919-926.	2.2	4
16	Creep crack growth behavior of P91 steel weldments. Thermal Science, 2019, 23, 1203-1209.	1.1	3
17	Effect of temperature and exploitation time on tensile properties and plain strain fracture toughness, KIc, in a welded joint. Procedia Structural Integrity, 2018, 9, 279-286.	0.8	3
18	Determination of Residual Fatigue Life of Welded Structures at Bucket-Wheel Excavators through the Use of Fracture Mechanics. Procedia Structural Integrity, 2018, 13, 79-84.	0.8	6

#	Article	IF	Citations
19	Geotechnical aspects on seismic retrofit. Procedia Structural Integrity, 2018, 13, 410-414.	0.8	0
20	Crack growth resistance of weldment constituents. Procedia Structural Integrity, 2018, 13, 420-423.	0.8	0
21	Structural integrity of butt welded connection after fire exposure. Procedia Structural Integrity, 2018, 13, 1082-1087.	0.8	3
22	Effects of welding technology on the occurrence of fracture in welded joints. Procedia Structural Integrity, 2018, 13, 1682-1688.	0.8	0
23	Numerical simulation of crack propagation in high-strength low-alloyed welded steel. Procedia Structural Integrity, 2018, 13, 483-488.	0.8	7
24	Influence of temperature and exploitation time on hardness and micro-structure of a welded joint in a reactor mantle. Procedia Structural Integrity, 2018, 13, 2249-2254.	0.8	0
25	The impact of the temperature and exploitation time on the tensile properties and plain strain fracture toughness, KIc in characteristic areas of welded joint. Frattura Ed Integrita Strutturale, 2018, 12, 371-382.	0.9	7
26	Numerical simulation of tensile testing of PE 80 polymer specimens. Thermal Science, 2018, 22, 641-649.	1.1	0
27	Creep crack growth properties of P91 and P22 welded joints. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 1267-1275.	3.4	6
28	Effect of material heterogeneity and constraint conditions on ductile fracture resistance of welded joint zones - Micromechanical assessment. Engineering Failure Analysis, 2017, 82, 435-445.	4.0	17
29	Stringer effect on fatigue crack propagation in A2024-T351 aluminum alloy welded joint. International Journal of Fatigue, 2017, 105, 276-282.	5.7	11
30	Experimental-Numerical Study of Tensile Strength of the High-Strength Steel S690QL at Elevated Temperatures. Strength of Materials, 2016, 48, 687-695.	0.5	8
31	Numerical Simulation of Fatigue Crack Growth in Hip Implants. Procedia Engineering, 2016, 149, 229-235.	1.2	12
32	Finite Element Modeling of Hip Implant Static Loading. Procedia Engineering, 2016, 149, 257-262.	1.2	48
33	Elastic-plastic behaviour of welded joints during loading and unloading of pressure vessels. Procedia Structural Integrity, 2016, 2, 3546-3553.	0.8	5
34	Experimental examination of fatigue life of welded joint with stress concentration. Frattura Ed Integrita Strutturale, 2016, 10, 27-35.	0.9	4
35	Integrity and life estimation of turbine runner cover in a hydro power plant. Frattura Ed Integrita Strutturale, 2016, 10, 63-68.	0.9	5
36	Thermomechanics of soft inelastics bodies with application to asphalt behavior. Thermal Science, 2014, 18, 221-228.	1.1	0

#	Article	IF	Citations
37	Micromechanical assessment of mismatch effects on fracture of high-strength low alloyed steel welded joints. Engineering Fracture Mechanics, 2013, 109, 221-235.	4.3	29
38	Structural integrity assurance of casing pipes in the oil and gas industry. , 2013, , .		5
39	Digital image correlation analysis of biomaterials. , 2011, , .		4
40	3D Experimental optical analysis of titanium alloys for biomedical applications. , 2011, , .		1
41	Microstructure Changes of Nickel-Base Superalloys Induced by Interaction with Femtosecond Laser Beam. Acta Physica Polonica A, 2009, 116, 550-552.	0.5	8
42	Micromechanical Coupled Study of Crack Growth Initiation Criterion in Pressure Vessel Steel. Strength of Materials, 2004, 36, 33-36.	0.5	2
43	Calculation of Maximum Tensile and Shear Forces in Restorative Materials Using Finite Element Method. Key Engineering Materials, 0, 601, 151-154.	0.4	0
44	Stress Analysis of Hyperbaric Chambers of Different Geometries. Key Engineering Materials, 0, 601, 112-115.	0.4	0
45	Repair Welding of Crane Wheels in Steelworks Smederevo. Advanced Materials Research, 0, 1138, 180-185.	0.3	3
46	Damage Occurrence in Welded Structures of the Bucket-Wheel Boom. , 0, 2, 41-48.		0