## Simon Sedmak

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Finite Element Modeling of Hip Implant Static Loading. Procedia Engineering, 2016, 149, 257-262.	1.2	48
2	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
3	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
4	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
5	Structural integrity and life assessment of rotating equipment. Engineering Failure Analysis, 2020, 113, 104561.	4.0	14
6	Numerical Simulation of Fatigue Crack Growth in Hip Implants. Procedia Engineering, 2016, 149, 229-235.	1.2	12
7	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
8	Stringer effect on fatigue crack propagation in A2024-T351 aluminum alloy welded joint. International Journal of Fatigue, 2017, 105, 276-282.	5.7	11
9	Engineering critical assessment of steel shell structure elements welded joints under high cycle fatigue. Engineering Failure Analysis, 2020, 114, 104578.	4.0	10
10	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
11	Microstructure Changes of Nickel-Base Superalloys Induced by Interaction with Femtosecond Laser Beam. Acta Physica Polonica A, 2009, 116, 550-552.	0.5	8
12	Numerical simulation of crack propagation in high-strength low-alloyed welded steel. Procedia Structural Integrity, 2018, 13, 483-488.	0.8	7
13	The impact of the temperature and exploitation time on the tensile properties and plain strain fracture toughness, Klc in characteristic areas of welded joint. Frattura Ed Integrita Strutturale, 2018, 12, 371-382.	0.9	7
14	Fatigue crack growth in locking compression plates. International Journal of Fatigue, 2022, 157, 106727.	5.7	7
15	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
16	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
17	Butt welded joints assessment after fire exposure. Engineering Failure Analysis, 2019, 106, 104144.	4.0	6
18	Risk based analysis of RHPP penstock structural integrity. Frattura Ed Integrita Strutturale, 2020, 14, 345-352.	0.9	6

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19	Extended FEM analysis of fatigue crack growth in Ti-6Al-4V orthopaedic plates. Procedia Structural Integrity, 2020, 28, 555-560.	0.8	6
20	Elastic-plastic behaviour of welded joints during loading and unloading of pressure vessels. Procedia Structural Integrity, 2016, 2, 3546-3553.	0.8	5
21	Structural integrity assurance of casing pipes in the oil and gas industry. , 2013, , .		5
22	Integrity and life estimation of turbine runner cover in a hydro power plant. Frattura Ed Integrita Strutturale, 2016, 10, 63-68.	0.9	5
23	Digital image correlation analysis of biomaterials. , 2011, , .		4
24	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
25	Experimental examination of fatigue life of welded joint with stress concentration. Frattura Ed Integrita Strutturale, 2016, 10, 27-35.	0.9	4
26	Repair Welding of Crane Wheels in Steelworks Smederevo. Advanced Materials Research, 0, 1138, 180-185.	0.3	3
27	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
28	Structural integrity of butt welded connection after fire exposure. Procedia Structural Integrity, 2018, 13, 1082-1087.	0.8	3
29	Creep crack growth behavior of P91 steel weldments. Thermal Science, 2019, 23, 1203-1209.	1.1	3
30	IoT based early warning system for torrential floods. FME Transactions, 2020, 48, 511-515.	1.4	3
31	Fatigue life assessment of orthopedic plates made of Ti6Al4V. Engineering Failure Analysis, 2022, 137, 106259.	4.0	3
32	Micromechanical Coupled Study of Crack Growth Initiation Criterion in Pressure Vessel Steel. Strength of Materials, 2004, 36, 33-36.	0.5	2
33	Analysis of fatigue behaviour of a bridge welded structure. Procedia Structural Integrity, 2022, 37, 269-273.	0.8	2
34	3D Experimental optical analysis of titanium alloys for biomedical applications. , 2011, , .		1
35	Numerical simulation of fatigue crack growth in AA6156 T6 panels. Procedia Structural Integrity, 2022, 39, 786-791.	0.8	1
36	Numerical simulation of fatigue crack paths in orthopedic plates. Procedia Structural Integrity, 2022, 39, 808-814.	0.8	1

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37	Calculation of Maximum Tensile and Shear Forces in Restorative Materials Using Finite Element Method. Key Engineering Materials, 0, 601, 151-154.	0.4	Ο
38	Stress Analysis of Hyperbaric Chambers of Different Geometries. Key Engineering Materials, 0, 601, 112-115.	0.4	0
39	Geotechnical aspects on seismic retrofit. Procedia Structural Integrity, 2018, 13, 410-414.	0.8	0
40	Crack growth resistance of weldment constituents. Procedia Structural Integrity, 2018, 13, 420-423.	0.8	0
41	Effects of welding technology on the occurrence of fracture in welded joints. Procedia Structural Integrity, 2018, 13, 1682-1688.	0.8	0
42	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
43	Thermomechanics of soft inelastics bodies with application to asphalt behavior. Thermal Science, 2014, 18, 221-228.	1.1	0
44	Numerical simulation of tensile testing of PE 80 polymer specimens. Thermal Science, 2018, 22, 641-649.	1.1	0
45	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

Damage Occurrence in Welded Structures of the Bucket-Wheel Boom. , 0, 2, 41-48.