Josip Brnic

List of Publications by Year
in descending order

107 papers	969 citations	471371 17 h-index	552653 26 g-index
109 all docs	109 docs citations	109 times ranked	596 citing authors

#	Article	IF	Citations
1	Comparison of the creep-fatigue cyclic life saturation effect for three different superalloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 842, 143086.	2.6	2
2	Influence of the Process Input Parameters on the Cross-Wire Weld Breaking Force. TehniÄki Glasnik, 2022, 16, 227-230.	0.4	0
3	Revealing the influential mechanism of strain ranges on cyclic-life saturation during creep-fatigue in Nickel-based superalloy DZ445. International Journal of Plasticity, 2022, 155, 103320.	4.1	12
4	Saturation effect of creep-fatigue cyclic-life for Nickel-based superalloy DZ445 under long-term tensile dwell periods at 900ÂÂ°C. Journal of Materials Research and Technology, 2022, 19, 3216-3230.	2.6	5
5	Comparison of responses of different types of steel alloys under the same loading and environmental conditions. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2021, 235, 1194-1202.	0.7	0
6	Virtual Crack Closure as a Method for Calculating Stress Intensity Factor of Cracks in Metallic Specimens. Advanced Structured Materials, 2021, , 29-45.	0.3	0
7	Hydrolysis-Based Hydrogen Generation Investigation of Aluminum System Adding Low-Melting Metals. Energies, 2021, 14, 1433.	1.6	7
8	Rotating Bending Fatigue Analysis of Printed Specimens from Assorted Polymer Materials. Polymers, 2021, 13, 1020.	2.0	12
9	S235JRC+C Steel Response Analysis Subjected to Uniaxial Stress Tests in the Area of High Temperatures and Material Fatigue. Sustainability, 2021, 13, 5675.	1.6	2
10	Long-Term Marine Environment Exposure Effect on Butt-Welded Shipbuilding Steel. Journal of Marine Science and Engineering, 2021, 9, 491.	1.2	14
11	Analysis of the fully-reversed creep-fatigue behavior with tensile-dwell periods of superalloy DZ445 at 900ÂÂ°C. Engineering Fracture Mechanics, 2021, 250, 107781.	2.0	6
12	Sintering Bonding of SiC Particulate Reinforced Aluminum Metal Matrix Composites by Using Cu Nanoparticles and Liquid Ga in Air. Nanomaterials, 2021, 11, 1800.	1.9	2
13	Accuracy of the predicting for creep-fatigue cyclic life based on parameters in a characteristic cycle. Engineering Fracture Mechanics, 2021, 255, 107955.	2.0	3
14	Mechanical Behavior Analysis of Stainless Steels Subjected to Uniaxial Stress Tests. IOP Conference Series: Materials Science and Engineering, 2020, 840, 012012.	0.3	0
15	Prediction of Fatigue Crack Growth in Metallic Specimens under Constant Amplitude Loading Using Virtual Crack Closure and Forman Model. Metals, 2020, 10, 977.	1.0	4
16	Deformation Behavior of C15E + C Steel under Different Uniaxial Stress Tests. Metals, 2020, 10, 1445.	1.0	1
17	Flux-Free Diffusion Joining of SiCp/6063 Al Matrix Composites Using Liquid Gallium with Nano-Copper Particles in Atmosphere Environment. Nanomaterials, 2020, 10, 437.	1.9	10
18	Joining of Silicon Particle-Reinforced Aluminum Matrix Composites to Kovar Alloys Using Active Melt-Spun Ribbons in Vacuum Conditions. Materials, 2020, 13, 2965.	1.3	5

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19	Analysis of the mechanical response of materials used in design for highly stressed components. IOP Conference Series: Materials Science and Engineering, 2019, 625, 012003.	0.3	0
20	Analysis of Materials of Similar Mechanical Behavior and Similar Industrial Assignment. Procedia Manufacturing, 2019, 37, 207-213.	1.9	4
21	Equivalent beam model of single walled carbon nanotube with imperfections. IOP Conference Series: Materials Science and Engineering, 2019, 625, 012004.	0.3	0
22	Equivalent beam model of SWNT and DWNT with imperfections. Procedia Manufacturing, 2019, 37, 417-424.	1.9	0
23	THERMODYNAMICALLY CONSISTENT HOMOGENIZATION IN FINITE STRAIN THERMOPLASTICITY. International Journal for Multiscale Computational Engineering, 2019, 17, 99-120.	0.8	0
24	A shear-deformable beam model for stability analysis of orthotropic composite semi-rigid frames. Composite Structures, 2018, 189, 648-660.	3.1	3
25	Thermo-Mechanical Multiscale Modeling in Plasticity of Metals Using Small Strain Theory. Journal of Mechanics, 2018, 34, 579-589.	0.7	1
26	Influence of imperfections on double walled carbon nanotube mechanical properties. Materials Today: Proceedings, 2018, 5, 17397-17403.	0.9	4
27	Comparison of the mechanical behavior of materials subjected to specific operating conditions. IOP Conference Series: Materials Science and Engineering, 2018, 378, 012007.	0.3	1
28	Imperfections in carbon nanotubes structure and their impact on the basic mechanical properties. IOP Conference Series: Materials Science and Engineering, 2018, 378, 012006.	0.3	1
29	Steel 51CrV4 under high temperatures, short-time creep and high cycle fatigue. Journal of Constructional Steel Research, 2018, 147, 468-476.	1.7	8
30	Uniaxial Properties versus Temperature, Creep and Impact Energy of an Austenitic Steel. High Temperature Materials and Processes, 2017, 36, 135-143.	0.6	0
31	Application of gradient elasticity to armchair carbon nanotubes: Size effects and constitutive parameters assessment. European Journal of Mechanics, A/Solids, 2017, 65, 1-13.	2.1	68
32	Numerical Prediction of Fracture Behavior for Austenitic and Martensitic Stainless Steels. International Journal of Applied Mechanics, 2017, 09, 1750052.	1.3	6
33	Development of a high temperature material model for grade s275jr steel. Journal of Constructional Steel Research, 2017, 137, 161-168.	1.7	8
34	Elastic properties of nanocomposite materials: influence of carbon nanotube imperfections and interface bonding. Meccanica, 2017, 52, 1655-1668.	1.2	7
35	Analysis of the Mechanical Behavior, Creep Resistance and Uniaxial Fatigue Strength of Martensitic Steel X46Cr13. Materials, 2017, 10, 388.	1.3	8
36	Experimental Analysis of the Behaviour of Aluminium Alloy EN 6082AW T6 at High Temperature. Metals, 2017, 7, 126.	1.0	25

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37	10.34: Creep properties of grade S275JR steel at high temperature. Ce/Papers, 2017, 1, 2806-2810.	0.1	1
38	Marine Shaft Steels (AISI 4140 and AISI 5120) Predicted Fracture Toughness by FE Simulation. Medziagotyra, 2017, 23, .	0.1	1
39	Finite Element Stress Analysis of Elastic Beams under Non-Uniform Torsion. Transactions of Famena, 2016, 40, 71-82.	0.3	5
40	Mechanical Properties, Short Time Creep, and Fatigue of an Austenitic Steel. Materials, 2016, 9, 298.	1.3	16
41	Predicted Fracture Behavior of Shaft Steels with Improved Corrosion Resistance. Metals, 2016, 6, 40.	1.0	9
42	Analysis of austenitic stainless steels (AISI 303 and AISI 316Ti) regarding crack driving forces and creep responses. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2016, 230, 699-704.	0.7	0
43	Nonlinear buckling behaviours of thin-walled functionally graded open section beams. Composite Structures, 2016, 152, 829-839.	3.1	41
44	A multiscale approach to thermoplastic deformation. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 435-436.	0.2	0
45	Changes in the Material Properties of Steel 1.4762 Depending on the Temperature. High Temperature Materials and Processes, 2016, 35, 761-767.	0.6	0
46	Structure and properties of welded joint of high-strength wear-resistant steel NM360. Materials Science and Technology, 2016, 32, 299-302.	0.8	1
47	Short-time creep, fatigue and mechanical properties of 42CrMo4 - Low alloy structural steel. Steel and Composite Structures, 2016, 22, 875-888.	1.3	7
48	Study of the Effects of High Temperatures on the Engineering Properties of Steel 42CrMo4. High Temperature Materials and Processes, 2015, 34, .	0.6	11
49	Deformation behaviour and material properties of austenitic heat-resistant steel X15CrNiSi25-20 subjected to high temperatures and creep. Materials & Design, 2015, 69, 219-229.	5.1	18
50	Influence of Waviness and Vacancy Defects on Carbon Nanotubes Properties. Procedia Engineering, 2015, 100, 213-219.	1.2	18
51	Prediction of Fracture Behavior of 20MnCr5 and S275JR Steel Based on Numerical Crack Driving Force Assessment. Journal of Materials in Civil Engineering, 2015, 27, 04014132.	1.3	2
52	A beam formulation for large displacement analysis of composite frames with semi-rigid connections. Composite Structures, 2015, 134, 237-246.	3.1	13
53	Comparison of Mechanical Properties and Resistance to Creep of 20MnCr5 Steel and X10CrAlSi25 Steel. Procedia Engineering, 2015, 100, 84-89.	1.2	6
54	Information relevant for the design of structure: Ferritic â€“ Heat resistant high chromium steel X10CrAlSi25. Materials & Design, 2014, 63, 508-518.	5.1	13

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55	Experimental determination and prediction of the mechanical properties of steel 1.7225. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 600, 47-52.	2.6	10
56	Low cycle fatigue and mechanical properties of magnesium alloy Mgâ€“6Znâ€“1Yâ€“0.6Ceâ€“0.6Zr at different temperatures. Materials & Design, 2014, 59, 287-295.	5.1	20
57	Significance of experimental data in the design of structures made from 1.4057 steel. Journal Wuhan University of Technology, Materials Science Edition, 2014, 29, 131-136.	0.4	3
58	Comparison of material properties: Steel 20MnCr5 and similar steels. Journal of Constructional Steel Research, 2014, 95, 81-89.	1.7	32
59	Mechanical testing of the behavior of steel 1.7147 at different temperatures. Steel and Composite Structures, 2014, 17, 549-560.	1.3	4
60	Estimation of material properties of nanocomposite structures. Meccanica, 2013, 48, 2209-2220.	1.2	18
61	Analysis of experimental data on the behavior of steel S275JR â€“ Reliability of modern design. Materials & Design, 2013, 47, 497-504.	5.1	33
62	Testing and analysis of X39CrMo17-1 steel properties. Construction and Building Materials, 2013, 44, 293-301.	3.2	9
63	Experimental Research and Analysis of Non-alloy Structural Steel Response Exposed to High Temperature Conditions. High Temperature Materials and Processes, 2013, 32, 163-169.	0.6	0
64	Analysis of the Dependence of Material Properties on Temperature â€“ Steel 1.4122. High Temperature Materials and Processes, 2012, 31, .	0.6	3
65	Vacuum brazing of aluminium metal matrix composite (55vol.% SiCp/A356) using aluminium-based filler alloy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 1707-1711.	1.7	30
66	UPDATED LAGRANGIAN FORMULATION FOR NONLINEAR STABILITY ANALYSIS OF THIN-WALLED FRAMES WITH SEMI-RIGID CONNECTIONS. International Journal of Structural Stability and Dynamics, 2012, 12, 1250013.	1.5	8
67	Pressure vessel steels crack driving force assessment using different models. Journal of Constructional Steel Research, 2012, 72, 29-34.	1.7	7
68	Responses of Austenitic Stainless Steel American Iron and Steel Institute (AISI) 303 (1.4305) Subjected to Different Environmental Conditions. Journal of Testing and Evaluation, 2012, 40, 319-328.	0.4	8
69	Importance of Experimental Research in the Design of Structures. Annals of DAAAM & Proceedings, 2012, , 0147-0150.	0.1	2
70	Crack driving force prediction based on finite element analysis using standard models. Structural Engineering and Mechanics, 2012, 44, 601-609.	1.0	1
71	Martensitic stainless steel AISI 420â€"mechanical properties, creep and fracture toughness. Mechanics of Time-Dependent Materials, 2011, 15, 341-352.	2.3	38
72	AISI 316Ti (1.4571) steelâ€"Mechanical, creep and fracture properties versus temperature. Journal of Constructional Steel Research, 2011, 67, 1948-1952.	1.7	36

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73	A beam model for large displacement analysis of flexibly connected thin-walled beam-type structures. Thin-Walled Structures, 2011, 49, 1007-1016.	2.7	14
74	Loading and Responses of Austenitic Stainless Steels at Elevated Temperatures. High Temperature Materials and Processes, 2011, 30, .	0.6	0
75	Effect of Elevated Temperatures on Behavior of Structural Steel 50CrMo4. High Temperature Materials and Processes, 2011, 30, .	0.6	2
76	Experimental determination of mechanical properties and short-time creep of AISI 304 stainless steel at elevated temperatures. International Journal of Minerals, Metallurgy and Materials, 2010, 17, 39-45.	2.4	6
77	Behavior of HSLA A709 steel under different environmental conditions. Journal Wuhan University of Technology, Materials Science Edition, 2010, 25, 897-902.	0.4	2
78	Behaviour of S 355JO steel subjected to uniaxial stress at lowered and elevated temperatures and creep. Bulletin of Materials Science, 2010, 33, 475-481.	0.8	15
79	Shear stress analysis in engineering beams using deplanation field of special 2-D finite elements. Meccanica, 2010, 45, 227-235.	1.2	9
80	A dissipation model for cyclic non-associative thermoplasticity at finite strains. Mechanics Research Communications, 2010, 37, 510-514.	1.0	5
81	Structural Steel ASTM A709â€"Behavior at Uniaxial Tests Conducted at Lowered and Elevated Temperatures, Short-Time Creep Response, and Fracture Toughness Calculation. Journal of Engineering Mechanics - ASCE, 2010, 136, 1083-1089.	1.6	24
82	50CrMo4 Steel-Determination of Mechanical Properties at Lowered and Elevated Temperatures, Creep Behavior, and Fracture Toughness Calculation. Journal of Engineering Materials and Technology, Transactions of the ASME, 2010, 132, .	0.8	13
83	LARGE DISPLACEMENT BEAM MODEL FOR CREEP BUCKLING ANALYSIS OF FRAMED STRUCTURES. International Journal of Structural Stability and Dynamics, 2009, 09, 61-83.	1.5	8
84	Large-displacement analysis of beam-type structures considering elasticâ€"plastic material behavior. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 499, 142-146.	2.6	2
85	Nonlinear kinematic hardening in coupled thermoplasticity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 499, 275-278.	2.6	5
86	Creep behavior of high-strength low-alloy steel at elevated temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 499, 23-27.	2.6	33
87	Numerical simulation of instability behaviour of thin-walled frames with flexible connections. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 499, 74-77.	2.6	3
88	Tool Material Behavior at Elevated Temperatures. Materials and Manufacturing Processes, 2009, 24, 758-762.	2.7	23
89	FE modelling of multi-walled carbon nanotubes. Estonian Journal of Engineering, 2009, 15, 77.	0.3	15
90	Comparison of Both Creep Resistance and Material Properties of High-Strength Low-Alloy Steel and Stainless Steel. Journal of Testing and Evaluation, 2009, 37, 358-363.	0.4	0

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91	Finite-element modelling and shear stress analysis of engineering structural elements. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2008, 222, 861-872.	0.7	1
92	Numerical Model for Buckling Analysis of Flexibly Connected Beam-type Structures. , 2008, , 353-360.		0
93	Large Displacement Analysis of Spatial Frames under Creep Regime. , 2008, , 229-236.		0
94	Finite-element model for creep buckling analysis of beam-type structures. Communications in Numerical Methods in Engineering, 2007, 24, 989-1008.	1.3	4
95	NONLINEAR STABILITY ANALYSIS OF THIN-WALLED FRAMES USING ULâ€"ESA FORMULATION. International Journal of Structural Stability and Dynamics, 2004, 04, 45-67.	1.5	17
96	Associative coupled thermoplasticity at finite strain with temperature-dependent material parameters. International Journal of Plasticity, 2004, 20, 1851-1874.	4.1	48
97	ESA formulation for large displacement analysis of framed structures with elasticâ€"plasticity. Computers and Structures, 2004, 82, 2001-2013.	2.4	18
98	Large rotation analysis of elastic thin-walled beam-type structures using ESA approach. Computers and Structures, 2003, 81, 1851-1864.	2.4	42
99	Finite Elastoplasticity in Plane Strain Cold Rolling Problem. , 2002, , 425-432.		0
100	Comparison of Measured and Computed Contact Pressure Distribution in Cold Sheet Rolling Process. , 1999, , 337-344.		0
101	Multiscale Modeling of Nanocomposite Structures with Defects. Key Engineering Materials, 0, 577-578, 141-144.	0.4	0
102	Comparison of Material Properties and Creep Behavior of 20MnCr5 and S275JR Steels. Materials Science Forum, 0, 762, 47-54.	0.3	3
103	Numerically predicted J-integral as a measure of crack driving force for steels 1.7147 and 1.4762. Journal of Theoretical and Applied Mechanics, 0, , 659.	0.2	3
104	Updated Lagrangian Formulation using ESA Approach in Large Rotation Problems of Thin-Walled Beam-Type Structures. , 0, , .		0
105	Updated Lagrangian Formulation for Nonlinear Stability Analysis of Flexibly Connected Thin-Walled Frames. , 0, , .		0
106	External Stiffness Approach for Thin-Walled Frames with Elastic-Plasticity. , 0, , .		0
107	Beam Element for Creep Analysis for a Large Displacement Regime. , 0, , .		0