

Jacques Besson

List of Publications by Year in descending order

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160
papers

7,343
citations

44042

48
h-index

62565

80
g-index

166
all docs

166
docs citations

166
times ranked

3624
citing authors

#	ARTICLE	IF	CITATIONS
1	Continuum Models of Ductile Fracture: A Review. International Journal of Damage Mechanics, 2010, 19, 3-52.	2.4	442
2	Plastic potentials for anisotropic porous solids. European Journal of Mechanics, A/Solids, 2001, 20, 397-434.	2.1	288
3	A yield function for anisotropic materials Application to aluminum alloys. International Journal of Plasticity, 2004, 20, 937-963.	4.1	274
4	Anisotropic ductile fracture. Acta Materialia, 2004, 52, 4623-4638.	3.8	230
5	Mechanisms and modeling of cleavage fracture in simulated heat-affected zone microstructures of a high-strength low alloy steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 1039-1053.	1.1	227
6	Anisotropic ductile fracture. Acta Materialia, 2004, 52, 4639-4650.	3.8	225
7	Large scale object-oriented finite element code design. Computer Methods in Applied Mechanics and Engineering, 1997, 142, 165-187.	3.4	209
8	Mullins effect and cyclic stress softening of filled elastomers by internal sliding and friction thermodynamics model. International Journal of Solids and Structures, 2009, 46, 2255-2264.	1.3	194
9	Study of the microstructure of the Grade 91 steel after more than 100,000h of creep exposure at 600°C. International Journal of Pressure Vessels and Piping, 2010, 87, 326-335.	1.2	185
10	Modeling of crack growth in round bars and plane strain specimens. International Journal of Solids and Structures, 2001, 38, 8259-8284.	1.3	163
11	Ductile to brittle transition of an A508 steel characterized by Charpy impact test. Engineering Fracture Mechanics, 2005, 72, 49-72.	2.0	152
12	Coalescence-Controlled Anisotropic Ductile Fracture. Journal of Engineering Materials and Technology, Transactions of the ASME, 1999, 121, 221-229.	0.8	143
13	Ductile to brittle transition of an A508 steel characterized by Charpy impact test. Engineering Fracture Mechanics, 2005, 72, 413-434.	2.0	121
14	Plastic and damage behaviour of a high strength X100 pipeline steel: Experiments and modelling. International Journal of Pressure Vessels and Piping, 2008, 85, 322-335.	1.2	118
15	Modeling of plane strain ductile rupture. International Journal of Plasticity, 2003, 19, 1517-1541.	4.1	113
16	Non-Linear Mechanics of Materials. Solid Mechanics and Its Applications, 2010, , .	0.1	108
17	A yield function for single crystals containing voids. International Journal of Solids and Structures, 2013, 50, 2115-2131.	1.3	97
18	An extension of the Green and Gurson models to kinematic hardening. Mechanics of Materials, 2003, 35, 1-18.	1.7	94

#	ARTICLE	IF	CITATIONS
19	Ductile rupture in thin sheets of two grades of 2024 aluminum alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 380, 356-364.	2.6	83
20	Temperature dependent mechanical behaviour of PVDF: Experiments and numerical modelling. <i>International Journal of Plasticity</i> , 2009, 25, 1301-1324.	4.1	83
21	Damage of ductile materials deforming under multiple plastic or viscoplastic mechanisms. <i>International Journal of Plasticity</i> , 2009, 25, 2204-2221.	4.1	81
22	Ductile tearing of pipeline-steel wide plates. <i>Engineering Fracture Mechanics</i> , 2001, 68, 347-364.	2.0	79
23	Grain growth enhancement in alumina during hot isostatic pressing. <i>Acta Metallurgica Et Materialia</i> , 1991, 39, 2225-2234.	1.9	74
24	The second Sandia Fracture Challenge: predictions of ductile failure under quasi-static and moderate-rate dynamic loading. <i>International Journal of Fracture</i> , 2016, 198, 5-100.	1.1	73
25	Title is missing!. <i>International Journal of Fracture</i> , 1997, 88, 1-18.	1.1	71
26	Object-Oriented Programming Applied to the Finite Element Method Part II. Application to Material Behaviors. <i>Revue Europeenne Des Elements</i> , 1998, 7, 567-588.	0.1	71
27	Synergistic effects of plastic anisotropy and void coalescence on fracture mode in plane strain. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2002, 10, 73-102.	0.8	71
28	Damage and fracture of polyvinylidene fluoride (PVDF) at 20°C: Experiments and modelling. <i>Engineering Fracture Mechanics</i> , 2006, 73, 79-90.	2.0	71
29	Behavior and failure of uniformly hydrided Zircaloy-4 fuel claddings between 25°C and 480°C under various stress states, including RIA loading conditions. <i>Engineering Failure Analysis</i> , 2010, 17, 683-700.	1.8	71
30	Measurement of serum IgG4 levels by a competitive immunoenzymatic assay with monoclonal antibodies. <i>Journal of Immunological Methods</i> , 1984, 74, 151-162.	0.6	69
31	Experimental investigations and modeling of volume change induced by void growth in polyamide 11. <i>International Journal of Solids and Structures</i> , 2011, 48, 2642-2654.	1.3	69
32	An elastoviscoplastic model for porous single crystals at finite strains and its assessment based on unit cell simulations. <i>International Journal of Plasticity</i> , 2016, 84, 58-87.	4.1	67
33	Ductile tearing of pipeline-steel wide plates. <i>Engineering Fracture Mechanics</i> , 2001, 68, 329-345.	2.0	64
34	Rheology of Porous Alumina and Simulation of Hot Isostatic Pressing. <i>Journal of the American Ceramic Society</i> , 1992, 75, 2165-2172.	1.9	63
35	Anisotropic behavior and rupture of hydrided ZIRCALOY-4 sheets. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000, 31, 679-690.	1.1	63
36	A model for ductile damage prediction at low stress triaxialities incorporating void shape change and void rotation. <i>International Journal of Solids and Structures</i> , 2015, 63, 240-263.	1.3	63

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37	Polymorphic constitutive equations in finite element codes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1997, 141, 355-372.	3.4	59
38	Fracture of 6056 aluminum sheet materials: effect of specimen thickness and hardening behavior on strain localization and toughness. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 395, 186-194.	2.6	59
39	An anisotropic Gurson type model to represent the ductile rupture of hydrided Zircaloy-4 sheets. <i>International Journal of Fracture</i> , 2000, 105, 273-293.	1.1	58
40	Interaction between anisotropic plastic deformation and damage evolution in Al 2198 sheet metal. <i>Engineering Fracture Mechanics</i> , 2010, 77, 3501-3518.	2.0	58
41	Numerical aspects in the finite element simulation of the Portevinâ€“Le Chatelier effect. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 734-754.	3.4	55
42	Plastic flow and ductile rupture of a 2198 Alâ€“Cuâ€“Li aluminum alloy. <i>Computational Materials Science</i> , 2011, 50, 1365-1371.	1.4	55
43	Experimental and numerical analysis of toughness anisotropy in AA2139 Al-alloy sheet. <i>Acta Materialia</i> , 2009, 57, 3902-3915.	3.8	54
44	Notch fracture toughness of a cast duplex stainless steel: modelling of experimental scatter and size effect. <i>Nuclear Engineering and Design</i> , 1997, 168, 211-225.	0.8	53
45	A reduced micromorphic single crystal plasticity model at finite deformations. Application to strain localization and void growth in ductile metals. <i>International Journal of Solids and Structures</i> , 2018, 134, 43-69.	1.3	52
46	Simulation of the ductile tearing for two grades of 2024 aluminum alloy thin sheets. <i>Engineering Fracture Mechanics</i> , 2006, 73, 1531-1552.	2.0	50
47	Modeling of scatter and size effect in ductile fracture: application to thermal embrittlement of duplex stainless steels. <i>Engineering Fracture Mechanics</i> , 2000, 67, 169-190.	2.0	49
48	The effect of reinforcements on the densification of a metal powder. <i>Acta Metallurgica Et Materialia</i> , 1992, 40, 2247-2255.	1.9	48
49	Microstructure and mechanical characteristics of alpha-alumina-based fibres. <i>Journal of Materials Science</i> , 1995, 30, 4215-4225.	1.7	48
50	Microstructure and damage initiation in duplex stainless steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 317, 32-36.	2.6	47
51	Anisotropic ductile failure of a high-strength line pipe steel. <i>International Journal of Fracture</i> , 2016, 197, 127-145.	1.1	45
52	Predicting crack growth resistance of aluminium sheets. <i>Computational Materials Science</i> , 2003, 26, 1-12.	1.4	44
53	Numerical simulation of ductile fracture with the Rousselier constitutive law. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2008, 197, 1965-1982.	3.4	44
54	Flat to slant ductile fracture transition: Tomography examination and simulations using shear-controlled void nucleation. <i>Scripta Materialia</i> , 2011, 65, 1002-1005.	2.6	44

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55	Composite layered materials: Anisotropic nonlocal damage models. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2007, 196, 4272-4282.	3.4	43
56	Effect of shear cutting on ductility of a dual phase steel. <i>Engineering Fracture Mechanics</i> , 2009, 76, 1411-1424.	2.0	43
57	A model to describe the anisotropic viscoplastic mechanical behavior of fresh and irradiated Zircaloy-4 fuel claddings under RIA loading conditions. <i>Journal of Nuclear Materials</i> , 2008, 378, 60-69.	1.3	42
58	Effects of local stress, strain, and hydrogen content on hydrogen-related fracture behavior in low-carbon martensitic steel. <i>Acta Materialia</i> , 2021, 210, 116828.	3.8	42
59	Microstructural Characterization of Internal Welding Defects and Their Effect on the Tensile Behavior of FSW Joints of AA2198 Al-Cu-Li Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 5531-5544.	1.1	41
60	Evolution of the 3D plastic anisotropy of HCP metals: Experiments and modeling. <i>International Journal of Plasticity</i> , 2019, 117, 71-92.	4.1	41
61	Overspeed burst of elastoviscoplastic rotating disks – Part I: Analytical and numerical stability analyses. <i>European Journal of Mechanics, A/Solids</i> , 2009, 28, 36-44.	2.1	40
62	Processing of functional-gradient WC-Co cermets by powder metallurgy. <i>International Journal of Refractory Metals and Hard Materials</i> , 1993, 12, 145-152.	1.7	39
63	Ductile damage modelling with locking-free regularised GTN model. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 113, 1871-1903.	1.5	39
64	Object-Oriented Programming Applied to the Finite Element Method Part I. General Concepts. <i>Revue Europeenne Des Elements</i> , 1998, 7, 535-566.	0.1	38
65	Micromechanical modeling of the behavior of duplex stainless steels. <i>Computational Materials Science</i> , 1999, 16, 158-166.	1.4	38
66	Ductile fracture of an ultra-high strength steel under low to moderate stress triaxiality. <i>Engineering Fracture Mechanics</i> , 2018, 194, 301-318.	2.0	38
67	Behavior and rupture of hydrided ZIRCALOY-4 tubes and sheets. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1998, 29, 1643-1651.	1.1	34
68	Global and local approaches to fracture normal to interfaces. <i>International Journal of Solids and Structures</i> , 1999, 36, 1845-1864.	1.3	34
69	High temperature creep flow and damage properties of 9Cr1MoNbV steels: Base metal and weldment. <i>Nuclear Engineering and Design</i> , 2005, 235, 2547-2562.	0.8	34
70	Creep failure model of a tempered martensitic stainless steel integrating multiple deformation and damage mechanisms. <i>International Journal of Fracture</i> , 2005, 133, 139-166.	1.1	34
71	Mechanism-based modelling of plastic deformation in magnesium alloys. <i>European Journal of Mechanics, A/Solids</i> , 2016, 55, 289-303.	2.1	34
72	Overspeed burst of elastoviscoplastic rotating disks: Part II – Burst of a superalloy turbine disk. <i>European Journal of Mechanics, A/Solids</i> , 2009, 28, 428-432.	2.1	32

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73	Mechanical and microstructural analysis on hydrogen-related fracture in a martensitic steel. International Journal of Hydrogen Energy, 2019, 44, 29034-29046.	3.8	32
74	Modeling flat to slant fracture transition using the computational cell methodology. Engineering Fracture Mechanics, 2013, 104, 80-95.	2.0	31
75	Comment on "Effect of carbide distribution on the fracture toughness in the transition temperature region of an SA 508 steel". Scripta Materialia, 2003, 49, 191-197.	2.6	30
76	Beremin model: Methodology and application to the prediction of the Euro toughness data set. Engineering Fracture Mechanics, 2012, 95, 102-117.	2.0	30
77	Formation and characterization of hydride blisters in Zircaloy-4 cladding tubes. Journal of Nuclear Materials, 2014, 449, 132-147.	1.3	29
78	Effect of hardening on toughness captured by stress-based damage nucleation in 6061 aluminum alloy. Acta Materialia, 2019, 180, 349-365.	3.8	29
79	Local approach to fracture based prediction of the $\hat{\sigma}$ T56J and shifts due to irradiation for an A508 pressure vessel steel. Engineering Fracture Mechanics, 2006, 73, 191-206.	2.0	28
80	A non-local finite element based on volumetric strain gradient: Application to ductile fracture. Computational Materials Science, 2009, 45, 762-767.	1.4	28
81	Elastic and Creep Properties of Alumina-Based Single Fibers. Journal of the American Ceramic Society, 1995, 78, 3081-3087.	1.9	27
82	High Temperature Creep Flow and Damage Properties of the Weakest Area of 9Cr1Mo-NbV Martensitic Steel Weldments. ISIJ International, 2005, 45, 1915-1924.	0.6	27
83	An extension of the Rousselier model to viscoplastic temperature dependent materials. International Journal of Fracture, 2002, 116, 81-101.	1.1	26
84	Fracture of Zircaloy-4 cladding tubes with or without hydride blisters in uniaxial to plane strain conditions with standard and optimized expansion due to compression tests. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 604, 57-66.	2.6	25
85	Strain gradient crystal plasticity with evolving length scale: Application to voided irradiated materials. European Journal of Mechanics, A/Solids, 2019, 77, 103768.	2.1	25
86	Crack initiation and propagation in small-scale yielding using a nonlocal GTN model. International Journal of Plasticity, 2020, 130, 102701.	4.1	25
87	A methodology to model the complex morphology of rough interfaces. International Journal of Solids and Structures, 2014, 51, 3293-3302.	1.3	24
88	Simulation of laminate composites degradation using mesoscopic non-local damage model and non-local layered shell element. Modelling and Simulation in Materials Science and Engineering, 2007, 15, S425-S434.	0.8	22
89	Behaviour of cylindrical hip containers. International Journal of Solids and Structures, 1991, 28, 691-702.	1.3	21
90	Void growth and coalescence in triaxial stress fields in irradiated FCC single crystals. Journal of Nuclear Materials, 2017, 492, 157-170.	1.3	21

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91	Analysis of the air-bending test using finite-element simulation: Application to steel sheets. International Journal of Mechanical Sciences, 2012, 57, 43-53.	3.6	20
92	Cleavage fracture of RPV steel following warm pre-stressing: micromechanical analysis and interpretation through a new model. Fatigue and Fracture of Engineering Materials and Structures, 2006, 29, 799-816.	1.7	19
93	Multi-mechanism damage-plasticity model for semi-crystalline polymer: Creep damage of notched specimen of PA6. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1087-1093.	2.6	19
94	Bimodal Beremin-type model for brittle fracture of inhomogeneous ferritic steels: Theory and applications. Engineering Fracture Mechanics, 2012, 95, 84-101.	2.0	19
95	A model to describe the mechanical behavior and the ductile failure of hydrided Zircaloy-4 fuel claddings between 25°C and 480°C. Journal of Nuclear Materials, 2015, 466, 43-55.	1.3	18
96	Thermoelastic properties of microcracked polycrystals. Part I: Adequacy of Fourier-based methods for cracked elastic bodies. International Journal of Solids and Structures, 2018, 155, 248-256.	1.3	18
97	Microstructural changes in alumina during hot isostatic pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1989, 109, 37-43.	2.6	17
98	Analysis of creep lifetime of a ASME Grade 91 welded pipe. Engineering Fracture Mechanics, 2009, 76, 1460-1473.	2.0	17
99	Lagrange multiplier based vs micromorphic gradient-enhanced rate-(in)dependent crystal plasticity modelling and simulation. Computer Methods in Applied Mechanics and Engineering, 2020, 372, 113426.	3.4	17
100	3D in situ study of damage during a shear to tension load path change in an aluminium alloy. Acta Materialia, 2022, 231, 117842.	3.8	17
101	Statistical analysis of strength distribution of alumina based single fibres accounting for fibre diameter variations. Journal of Materials Science, 1995, 30, 2042-2048.	1.7	16
102	A robust adaptive model reduction method for damage simulations. Computational Materials Science, 2011, 50, 1597-1605.	1.4	16
103	Fracture of Zircaloy-4 Fuel Cladding Tubes with Hydride Blisters. , 2014, 3, 233-238.		16
104	A combined phenomenological model for the representation of anisotropic hardening behavior in high strength steel line pipes. European Journal of Mechanics, A/Solids, 2010, 29, 917-927.	2.1	15
105	Finite Element Analysis of Damage in Ductile Structures Using a Nonlocal Model Combined with a Three-field Formulation. International Journal of Damage Mechanics, 2011, 20, 655-680.	2.4	15
106	A strain gradient plasticity model of porous single crystal ductile fracture. Journal of the Mechanics and Physics of Solids, 2021, 156, 104606.	2.3	15
107	Fracture behaviour of a Fe-22Mn-0.6C-0.2V austenitic TWIP steel. International Journal of Mechanical Sciences, 2015, 101-102, 99-113.	3.6	14
108	Cold Compaction and Solid-State Sintering of WC-Co-Based Structures: Experiments and Modeling. Journal of the American Ceramic Society, 1999, 82, 1153-1161.	1.9	13

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109	A new marching ridges algorithm for crack path tracking in regularized media. International Journal of Solids and Structures, 2015, 71, 57-69.	1.3	13
110	Plastic and fracture behavior of a dual phase steel sheet under quasi-static and dynamic loadings. Engineering Fracture Mechanics, 2020, 235, 107165.	2.0	13
111	Effect of prestrain on ductility and toughness in a high-strength line pipe steel. International Journal of Fracture, 2020, 224, 15-29.	1.1	13
112	Strain localization analysis in materials containing randomly distributed voids: Competition between extension and shear failure modes. Journal of the Mechanics and Physics of Solids, 2022, 166, 104933.	2.3	13
113	CRACK GROWTH BEHAVIOUR IN A THERMAL FATIGUE TEST. EXPERIMENTS AND CALCULATIONS. Fatigue and Fracture of Engineering Materials and Structures, 1989, 12, 123-133.	1.7	11
114	Densification of titanium diboride by hot isostatic pressing and production of near-net-shape components. Journal of Materials Engineering and Performance, 1992, 1, 637-649.	1.2	11
115	Crack initiation and propagation close to the interface in a ferrite-austenite joint. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 397, 84-91.	2.6	11
116	Simulation of ductile tearing during a full size test using a non local Gurson-Tvergaard-Needleman (GTN) model. Engineering Fracture Mechanics, 2022, 261, 108226.	2.0	11
117	Prediction of the effects of neutron irradiation on the Charpy ductile to brittle transition curve of an A508 pressure vessel steel. Computational Materials Science, 2005, 32, 294-300.	1.4	10
118	High-performance parallel simulation of structure degradation using non-local damage models. International Journal for Numerical Methods in Engineering, 2007, 71, 253-276.	1.5	10
119	Experimental study of the interaction of magnesium with the reinforcement in Al-Mg-Si alloy/±-alumina platelet composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 191, 267-276.	2.6	9
120	Numerical modelling of the Portevin-Le Chatelier effect. European Journal of Computational Mechanics, 2008, 17, 761-772.	0.6	9
121	Local approach to fracture applied to the analysis of a full size test on a pipe containing a girth weld defect. Engineering Failure Analysis, 2017, 82, 404-419.	1.8	9
122	Multi-scale three-dimensional analysis on local arrestability of intergranular crack in high-strength martensitic steel. Acta Materialia, 2022, 234, 118053.	3.8	9
123	An object-oriented simulation-optimization interface. Computers and Structures, 2003, 81, 1689-1701.	2.4	8
124	Impact of machine stiffness on pop-in crack propagation instabilities. Engineering Fracture Mechanics, 2018, 202, 405-422.	2.0	8
125	A leakage model to design seals for solid oxide fuel and electrolyser cell stacks. International Journal of Hydrogen Energy, 2014, 39, 7109-7119.	3.8	7
126	A non-local damage approach compatible with dynamic explicit simulations and parallel computing. International Journal of Solids and Structures, 2021, 228, 110999.	1.3	7

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127	Modelling high temperature creep flow, damage and fracture behaviour of 9Cr1MoNb steel weldments. <i>Materials at High Temperatures</i> , 2008, 25, 159-167.	0.5	6
128	Creep rupture of a 9Cr1MoNbV steel at 500°C: Base metal and welded joint. <i>Nuclear Engineering and Design</i> , 2010, 240, 2704-2709.	0.8	6
129	The effect of strain biaxiality on the fracture of zirconium alloy fuel cladding. <i>Journal of Nuclear Materials</i> , 2021, 554, 153070.	1.3	6
130	A two characteristic length nonlocal GTN model: Application to cup-cone and slant fracture. <i>Mechanics of Materials</i> , 2022, 171, 104350.	1.7	6
131	Fracture behaviour and microstructure of MoSi ₂ reinforced with ductile ellipsoidal Nb particles. <i>Journal of Materials Science</i> , 1992, 27, 4160-4166.	1.7	5
132	Effect of inclusion shape and volume fraction on the densification of particulate composites. <i>Mechanics of Materials</i> , 1995, 19, 103-117.	1.7	5
133	Ductile rupture of aluminum sheet materials. <i>Revue Europeenne Des Elements</i> , 2001, 10, 401-415.	0.1	5
134	Numerical modeling of Charpy V-notch tests. <i>European Structural Integrity Society</i> , 2002, , 461-468.	0.1	5
135	Truncated Integration for Simultaneous Simulation of Sintering Using a Separated Representation. <i>Archives of Computational Methods in Engineering</i> , 2010, 17, 455-463.	6.0	5
136	On the Origin of the Anisotropic Damage of X100 Line Pipe Steel: Part I In Situ Synchrotron Tomography Experiments. <i>Integrating Materials and Manufacturing Innovation</i> , 2019, 8, 570-596.	1.2	5
137	Ductile fracture of materials with randomly distributed voids. <i>International Journal of Fracture</i> , 2021, 230, 193.	1.1	5
138	Deep multimodal autoencoder for crack criticality assessment. <i>International Journal for Numerical Methods in Engineering</i> , 2022, 123, 1456-1480.	1.5	5
139	Edge tracing technique to study post-necking behavior and failure in Al alloys and anisotropic plasticity in line pipe steels. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2022, 45, 2427-2442.	1.7	5
140	Viscoplastic behavior of a FeCrAl alloy for high temperature steam electrolysis (HTSE) sealing applications between 700°C and 900°C. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 4092-4097.	2.6	4
141	Temperature increase of Zircaloy-4 cladding tubes due to plastic heat dissipation during tensile tests at 0.1-10 s ⁻¹ strain rates. <i>Journal of Nuclear Materials</i> , 2014, 454, 247-254.	1.3	4
142	Modeling plasticity of an aluminum 2024T351 thick rolled plate for cold forming applications. <i>International Journal of Solids and Structures</i> , 2020, 202, 463-474.	1.3	4
143	Prediction of deformation and failure anisotropy for thin magnesium sheets under mixed-mode loading. <i>Mechanics of Materials</i> , 2021, 163, 104064.	1.7	4
144	Anisotropic constitutive model and FE simulation of the sintering process of slip cast traditional porcelain. <i>AIP Conference Proceedings</i> , 2010, , .	0.3	3

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145	Numerical Simulation of the Portevin â€“ Le Chatelier Effect in Various Material and at Different Scales. Materials Science Forum, 2010, 638-642, 2670-2675.	0.3	3
146	Mechanical assessment of defects in welded joints: morphological classification and data augmentation. Journal of Mathematics in Industry, 2021, 11, .	0.7	3
147	Finite element simulation of thermomechanical stress evolution in cu/low-k interconnects during manufacturing and subsequent thermal cycling. , 0, , .		2
148	Modeling Creep Behaviour of Boiler Grade Steels - Application to Grade 92 Steel. Procedia Engineering, 2013, 55, 735-741.	1.2	2
149	Analysis of metal- ceramic bonding by frettage. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1992, 23, 2791-2801.	1.4	1
150	Comparison of Predicted Transition Temperature Shifts Between Static Fracture Toughness and Charpy-V Impact Properties Due to Irradiation for an A508 Pressure Vessel Steel. , 2004, , 39.		1
151	Modeling the 3D Plastic Anisotropy of a Magnesium Alloy Processed Using Severe Plastic Deformation. Minerals, Metals and Materials Series, 2019, , 283-287.	0.3	1
152	Ductile Rupture Integrating Inhomogeneities in Materials (DRIIM). , 2001, , 587-596.		1
153	Fracture Behaviour of Mis-Matched Dissimilar Welds: Numerical Simulation Using Local Approach. , 2002, , 11.		0
154	Anisotropic Plastic Deformation and Damage in Commercial Al 2198 T8 Sheet Metal. Key Engineering Materials, 0, 452-453, 97-100.	0.4	0
155	Effect of Plastic Constraint on Anisotropic Crack Extension in a Grade X63 Line Pipe Steel. , 2012, , .		0
156	A mechanism-driven plasticity model for deformation by glide and twinning and its application to magnesium alloys. Journal of Physics: Conference Series, 2018, 1063, 012046.	0.3	0
157	Implementation of constitutive equations for single crystals in finite element codes. , 2022, , 473-494.		0
158	Modeling tension-compression asymmetry and failure anisotropy in bending operations of a magnesium alloy. IOP Conference Series: Materials Science and Engineering, 2022, 1238, 012043.	0.3	0
159	Prediction of Deformation and Failure Anisotropy for Magnesium Sheets Under Mixed-Mode Loading. Minerals, Metals and Materials Series, 2022, , 607-615.	0.3	0
160	Effects of neutron irradiation and post-irradiation annealing on pop-in crack propagation instabilities in 6061 aluminium alloy. Journal of Nuclear Materials, 2022, , 153909.	1.3	0