

Jacques Besson

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158
papers

6,018
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44
h-index

73
g-index

166
ext. papers

6,634
ext. citations

3.8
avg, IF

6.04
L-index

#	Paper	IF	Citations
158	Continuum Models of Ductile Fracture: A Review. <i>International Journal of Damage Mechanics</i> , 2010 , 19, 3-52	3	359
157	Plastic potentials for anisotropic porous solids. <i>European Journal of Mechanics, A/Solids</i> , 2001 , 20, 397-434	3.7	243
156	A yield function for anisotropic materials Application to aluminum alloys. <i>International Journal of Plasticity</i> , 2004 , 20, 937-963	7.6	221
155	Anisotropic ductile fracture. <i>Acta Materialia</i> , 2004 , 52, 4639-4650	8.4	200
154	Mechanisms and modeling of cleavage fracture in simulated heat-affected zone microstructures of a high-strength low alloy steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004 , 35, 1039-1053	2.3	192
153	Large scale object-oriented finite element code design. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1997 , 142, 165-187	5.7	188
152	Anisotropic ductile fracture. <i>Acta Materialia</i> , 2004 , 52, 4623-4638	8.4	188
151	Mullins effect and cyclic stress softening of filled elastomers by internal sliding and friction thermodynamics model. <i>International Journal of Solids and Structures</i> , 2009 , 46, 2255-2264	3.1	151
150	Study of the microstructure of the Grade 91 steel after more than 100,000h of creep exposure at 600°C. <i>International Journal of Pressure Vessels and Piping</i> , 2010 , 87, 326-335	2.4	151
149	Modeling of crack growth in round bars and plane strain specimens. <i>International Journal of Solids and Structures</i> , 2001 , 38, 8259-8284	3.1	149
148	Ductile to brittle transition of an A508 steel characterized by Charpy impact test. <i>Engineering Fracture Mechanics</i> , 2005 , 72, 49-72	4.2	125
147	Coalescence-Controlled Anisotropic Ductile Fracture. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 1999 , 121, 221-229	1.8	122
146	Plastic and damage behaviour of a high strength X100 pipeline steel: Experiments and modelling. <i>International Journal of Pressure Vessels and Piping</i> , 2008 , 85, 322-335	2.4	102
145	Modeling of plane strain ductile rupture. <i>International Journal of Plasticity</i> , 2003 , 19, 1517-1541	7.6	100
144	Ductile to brittle transition of an A508 steel characterized by Charpy impact test. <i>Engineering Fracture Mechanics</i> , 2005 , 72, 413-434	4.2	96
143	An extension of the Green and Gurson models to kinematic hardening. <i>Mechanics of Materials</i> , 2003 , 35, 1-18	3.3	79
142	A yield function for single crystals containing voids. <i>International Journal of Solids and Structures</i> , 2013 , 50, 2115-2131	3.1	77

141	Non-Linear Mechanics of Materials. <i>Solid Mechanics and Its Applications</i> , 2010 ,	0.4	77
140	Damage of ductile materials deforming under multiple plastic or viscoplastic mechanisms. <i>International Journal of Plasticity</i> , 2009 , 25, 2204-2221	7.6	75
139	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	5.3	72
138	Grain growth enhancement in alumina during hot isostatic pressing. <i>Acta Metallurgica Et Materialia</i> , 1991 , 39, 2225-2234		72
137	Ductile tearing of pipeline-steel wide plates. <i>Engineering Fracture Mechanics</i> , 2001 , 68, 347-364	4.2	69
136	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		69
135	Temperature dependent mechanical behaviour of PVDF: Experiments and numerical modelling. <i>International Journal of Plasticity</i> , 2009 , 25, 1301-1324	7.6	67
134	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	3.1	64
133	Size and geometry effects on ductile rupture of notched bars in a C-Mn steel: experiments and modelling. <i>International Journal of Fracture</i> , 1997 , 88, 1-18	2.3	64
132	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	2	63
131	Damage and fracture of polyvinylidene fluoride (PVDF) at 20°C: Experiments and modelling. <i>Engineering Fracture Mechanics</i> , 2006 , 73, 79-90	4.2	61
130	Ductile tearing of pipeline-steel wide plates. <i>Engineering Fracture Mechanics</i> , 2001 , 68, 329-345	4.2	58
129	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	3.2	56
128	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	2.3	55
127	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	5.3	55
126	Measurement of serum IgG4 levels by a competitive immunoenzymatic assay with monoclonal antibodies. <i>Journal of Immunological Methods</i> , 1984 , 74, 151-62	2.5	55
125	Polymorphic constitutive equations in finite element codes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1997 , 141, 355-372	5.7	53
124	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	2.3	53

123	Rheology of Porous Alumina and Simulation of Hot Isostatic Pressing. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 2165-2172	3.8	53
122	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	3.1	52
121	Interaction between anisotropic plastic deformation and damage evolution in Al 2198 sheet metal. <i>Engineering Fracture Mechanics</i> , 2010 , 77, 3501-3518	4.2	51
120	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	7.6	50
119	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	1.8	48
118	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	2.3	48
117	Plastic flow and ductile rupture of a 2198 Al-Cu-Mg aluminum alloy. <i>Computational Materials Science</i> , 2011 , 50, 1365-1371	3.2	47
116	Simulation of the ductile tearing for two grades of 2024 aluminum alloy thin sheets. <i>Engineering Fracture Mechanics</i> , 2006 , 73, 1531-1552	4.2	47
115	The effect of reinforcements on the densification of a metal powder. <i>Acta Metallurgica Et Materialia</i> , 1992 , 40, 2247-2255		45
114	Experimental and numerical analysis of toughness anisotropy in AA2139 Al-alloy sheet. <i>Acta Materialia</i> , 2009 , 57, 3902-3915	8.4	44
113	Numerical aspects in the finite element simulation of the Portevin-Le Chatelier effect. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010 , 199, 734-754	5.7	44
112	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	4.2	44
111	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	3.1	42
110	Microstructure and damage initiation in duplex stainless steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 317, 32-36	5.3	42
109	Numerical simulation of ductile fracture with the Rousselier constitutive law. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2008 , 197, 1965-1982	5.7	41
108	Flat to slant ductile fracture transition: Tomography examination and simulations using shear-controlled void nucleation. <i>Scripta Materialia</i> , 2011 , 65, 1002-1005	5.6	40
107	Microstructure and mechanical characteristics of alpha-alumina-based fibres. <i>Journal of Materials Science</i> , 1995 , 30, 4215-4225	4.3	39
106	Composite layered materials: Anisotropic nonlocal damage models. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2007 , 196, 4272-4282	5.7	37

105	Predicting crack growth resistance of aluminium sheets. <i>Computational Materials Science</i> , 2003 , 26, 1-12	3.2	37
104	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	3.3	36
103	Processing of functional-gradient WC-Co cermets by powder metallurgy. <i>International Journal of Refractory Metals and Hard Materials</i> , 1993 , 12, 145-152	4.1	36
102	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	2.3	35
101	Effect of shear cutting on ductility of a dual phase steel. <i>Engineering Fracture Mechanics</i> , 2009 , 76, 1411-1424	4.24	34
100	Object-Oriented Programming Applied to the Finite Element Method Part I. General Concepts. <i>Revue Europeenne Des Elements</i> , 1998 , 7, 535-566		34
99	Anisotropic ductile failure of a high-strength line pipe steel. <i>International Journal of Fracture</i> , 2016 , 197, 127-145	2.3	32
98	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	3.7	32
97	Micromechanical modeling of the behavior of duplex stainless steels. <i>Computational Materials Science</i> , 1999 , 16, 158-166	3.2	32
96	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	2.3	31
95	High temperature creep flow and damage properties of 9Cr1MoNbV steels: Base metal and weldment. <i>Nuclear Engineering and Design</i> , 2005 , 235, 2547-2562	1.8	31
94	Global and local approaches to fracture normal to interfaces. <i>International Journal of Solids and Structures</i> , 1999 , 36, 1845-1864	3.1	31
93	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	2.3	30
92	Evolution of the 3D plastic anisotropy of HCP metals: Experiments and modeling. <i>International Journal of Plasticity</i> , 2019 , 117, 71-92	7.6	29
91	Ductile damage modelling with locking-free regularised GTN model. <i>International Journal for Numerical Methods in Engineering</i> , 2018 , 113, 1871-1903	2.4	28
90	A non-local finite element based on volumetric strain gradient: Application to ductile fracture. <i>Computational Materials Science</i> , 2009 , 45, 762-767	3.2	27
89	Mechanism-based modelling of plastic deformation in magnesium alloys. <i>European Journal of Mechanics, A/Solids</i> , 2016 , 55, 289-303	3.7	26
88	High Temperature Creep Flow and Damage Properties of the Weakest Area of 9Cr1Mo-NbV Martensitic Steel Weldments. <i>ISIJ International</i> , 2005 , 45, 1915-1924	1.7	26

87	Elastic and Creep Properties of Alumina-Based Single Fibers. <i>Journal of the American Ceramic Society</i> , 1995 , 78, 3081-3087	3.8	26
86	Modeling flat to slant fracture transition using the computational cell methodology. <i>Engineering Fracture Mechanics</i> , 2013 , 104, 80-95	4.2	25
85	Local approach to fracture based prediction of the σ_{56J} and $\sigma_{K_{Ic}}$ shifts due to irradiation for an A508 pressure vessel steel. <i>Engineering Fracture Mechanics</i> , 2006 , 73, 191-206	4.2	25
84	Comment on Effect of carbide distribution on the fracture toughness in the transition temperature region of an SA 508 steel. <i>Scripta Materialia</i> , 2003 , 49, 191-197	5.6	25
83	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	3.7	24
82	An extension of the Rousselier model to viscoplastic temperature dependent materials. <i>International Journal of Fracture</i> , 2002 , 116, 81-101	2.3	24
81	Ductile fracture of an ultra-high strength steel under low to moderate stress triaxiality. <i>Engineering Fracture Mechanics</i> , 2018 , 194, 301-318	4.2	23
80	Formation and characterization of hydride blisters in Zircaloy-4 cladding tubes. <i>Journal of Nuclear Materials</i> , 2014 , 449, 132-147	3.3	23
79	Beremin model: Methodology and application to the prediction of the Euro toughness data set. <i>Engineering Fracture Mechanics</i> , 2012 , 95, 102-117	4.2	22
78	Simulation of laminate composites degradation using mesoscopic non-local damage model and non-local layered shell element. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2007 , 15, S425-S434	2	20
77	Behaviour of cylindrical hip containers. <i>International Journal of Solids and Structures</i> , 1991 , 28, 691-702	3.1	20
76	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. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 604, 57-66	5.3	19
75	A methodology to model the complex morphology of rough interfaces. <i>International Journal of Solids and Structures</i> , 2014 , 51, 3293-3302	3.1	17
74	Multi-mechanism damage-plasticity model for semi-crystalline polymer: Creep damage of notched specimen of PA6. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 1087-1093	5.3	17
73	Cleavage fracture of RPV steel following warm pre-stressing: micromechanical analysis and interpretation through a new model. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2006 , 29, 799-816	3	17
72	Mechanical and microstructural analysis on hydrogen-related fracture in a martensitic steel. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 29034-29046	6.7	16
71	Analysis of the air-bending test using finite-element simulation: Application to steel sheets. <i>International Journal of Mechanical Sciences</i> , 2012 , 57, 43-53	5.5	16
70	Microstructural changes in alumina during hot isostatic pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1989 , 109, 37-43	5.3	16

69	Analysis of creep lifetime of a ASME Grade 91 welded pipe. <i>Engineering Fracture Mechanics</i> , 2009 , 76, 1460-1473	4.2	14
68	A combined phenomenological model for the representation of anisotropic hardening behavior in high strength steel line pipes. <i>European Journal of Mechanics, A/Solids</i> , 2010 , 29, 917-927	3.7	14
67	Statistical analysis of strength distribution of alumina based single fibres accounting for fibre diameter variations. <i>Journal of Materials Science</i> , 1995 , 30, 2042-2048	4.3	14
66	Void growth and coalescence in triaxial stress fields in irradiated FCC single crystals. <i>Journal of Nuclear Materials</i> , 2017 , 492, 157-170	3.3	13
65	Strain gradient crystal plasticity with evolving length scale: Application to voided irradiated materials. <i>European Journal of Mechanics, A/Solids</i> , 2019 , 77, 103768	3.7	13
64	A model to describe the mechanical behavior and the ductile failure of hydrided Zircaloy-4 fuel claddings between 25°C and 480°C. <i>Journal of Nuclear Materials</i> , 2015 , 466, 43-55	3.3	13
63	Fracture behaviour of a Fe _{0.2} Mn _{0.6} Co _{0.2} V austenitic TWIP steel. <i>International Journal of Mechanical Sciences</i> , 2015 , 101-102, 99-113	5.5	13
62	Thermoelastic properties of microcracked polycrystals. Part I: Adequacy of Fourier-based methods for cracked elastic bodies. <i>International Journal of Solids and Structures</i> , 2018 , 155, 248-256	3.1	13
61	Effect of hardening on toughness captured by stress-based damage nucleation in 6061 aluminum alloy. <i>Acta Materialia</i> , 2019 , 180, 349-365	8.4	13
60	Fracture of Zircaloy-4 Fuel Cladding Tubes with Hydride Blisters 2014 , 3, 233-238		13
59	Bimodal Beremin-type model for brittle fracture of inhomogeneous ferritic steels: Theory and applications. <i>Engineering Fracture Mechanics</i> , 2012 , 95, 84-101	4.2	13
58	A robust adaptive model reduction method for damage simulations. <i>Computational Materials Science</i> , 2011 , 50, 1597-1605	3.2	13
57	Finite Element Analysis of Damage in Ductile Structures Using a Nonlocal Model Combined with a Three-field Formulation. <i>International Journal of Damage Mechanics</i> , 2011 , 20, 655-680	3	13
56	Crack initiation and propagation in small-scale yielding using a nonlocal GTN model. <i>International Journal of Plasticity</i> , 2020 , 130, 102701	7.6	12
55	Crack initiation and propagation close to the interface in a ferrite-bustenite joint. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 397, 84-91	5.3	10
54	Lagrange multiplier based vs micromorphic gradient-enhanced rate-(in)dependent crystal plasticity modelling and simulation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020 , 372, 113426	5.7	10
53	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	8.4	10
52	High-performance parallel simulation of structure degradation using non-local damage models. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 71, 253-276	2.4	9

51	Prediction of the effects of neutron irradiation on the Charpy ductile to brittle transition curve of an A508 pressure vessel steel. <i>Computational Materials Science</i> , 2005 , 32, 294-300	3.2	9
50	Cold Compaction and Solid-State Sintering of WC-Co-Based Structures: Experiments and Modeling. <i>Journal of the American Ceramic Society</i> , 2004 , 82, 1153-1161	3.8	9
49	Densification of titanium diboride by hot isostatic pressing and production of near-net-shape components. <i>Journal of Materials Engineering and Performance</i> , 1992 , 1, 637-649	1.6	9
48	CRACK GROWTH BEHAVIOUR IN A THERMAL FATIGUE TEST. EXPERIMENTS AND CALCULATIONS. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 1989 , 12, 123-133	3	9
47	Numerical modelling of the Portevin-Le Chatelier effect. <i>European Journal of Computational Mechanics</i> , 2008 , 17, 761-772	0.5	8
46	Experimental study of the interaction of magnesium with the reinforcement in Al/Mg/Si alloy/alumina platelet composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1995 , 191, 267-276	5.3	8
45	Plastic and fracture behavior of a dual phase steel sheet under quasi-static and dynamic loadings. <i>Engineering Fracture Mechanics</i> , 2020 , 235, 107165	4.2	8
44	A new marching ridges algorithm for crack path tracking in regularized media. <i>International Journal of Solids and Structures</i> , 2015 , 71, 57-69	3.1	7
43	An object-oriented simulation-optimization interface. <i>Computers and Structures</i> , 2003 , 81, 1689-1701	4.5	7
42	A strain gradient plasticity model of porous single crystal ductile fracture. <i>Journal of the Mechanics and Physics of Solids</i> , 2021 , 156, 104606	5	7
41	Effect of prestrain on ductility and toughness in a high-strength line pipe steel. <i>International Journal of Fracture</i> , 2020 , 224, 15-29	2.3	6
40	A leakage model to design seals for solid oxide fuel and electrolyser cell stacks. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 7109-7119	6.7	6
39	Creep rupture of a 9Cr1MoNbV steel at 500 °C: Base metal and welded joint. <i>Nuclear Engineering and Design</i> , 2010 , 240, 2704-2709	1.8	6
38	Modelling high temperature creep flow, damage and fracture behaviour of 9Cr1MoNbV steel weldments. <i>Materials at High Temperatures</i> , 2008 , 25, 159-167	1.1	5
37	Fracture behaviour and microstructure of MoSi ₂ reinforced with ductile ellipsoidal Nb particles. <i>Journal of Materials Science</i> , 1992 , 27, 4160-4166	4.3	5
36	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	5.3	4
35	Ductile rupture of aluminum sheet materials. <i>Revue Europeenne Des Elements</i> , 2001 , 10, 401-415		4
34	Numerical modeling of Charpy V-notch tests. <i>European Structural Integrity Society</i> , 2002 , 461-468		4

33	Effect of inclusion shape and volume fraction on the densification of particulate composites. <i>Mechanics of Materials</i> , 1995 , 19, 103-117	3.3	4
32	Impact of machine stiffness on pop-in/crack propagation instabilities. <i>Engineering Fracture Mechanics</i> , 2018 , 202, 405-422	4.2	3
31	Local approach to fracture applied to the analysis of a full size test on a pipe containing a girth weld defect. <i>Engineering Failure Analysis</i> , 2017 , 82, 404-419	3.2	3
30	Temperature increase of Zircaloy-4 cladding tubes due to plastic heat dissipation during tensile tests at 0.1 s ⁻¹ strain rates. <i>Journal of Nuclear Materials</i> , 2014 , 454, 247-254	3.3	3
29	Truncated Integration for Simultaneous Simulation of Sintering Using a Separated Representation. <i>Archives of Computational Methods in Engineering</i> , 2010 , 17, 455-463	7.8	3
28	Ductile fracture of materials with randomly distributed voids. <i>International Journal of Fracture</i> , 2021 , 230, 193	2.3	3
27	Simulation of ductile tearing during a full size test using a non local Gurson-Tvergaard-Needleman (GTN) model. <i>Engineering Fracture Mechanics</i> , 2022 , 261, 108226	4.2	2
26	On the Origin of the Anisotropic Damage of X100 Line Pipe Steel: Part II In Situ Synchrotron Tomography Experiments. <i>Integrating Materials and Manufacturing Innovation</i> , 2019 , 8, 570-596	2.9	2
25	A non-local damage approach compatible with dynamic explicit simulations and parallel computing. <i>International Journal of Solids and Structures</i> , 2021 , 228, 110999	3.1	2
24	The effect of strain biaxiality on the fracture of zirconium alloy fuel cladding. <i>Journal of Nuclear Materials</i> , 2021 , 554, 153070	3.3	2
23	Modeling Creep Behaviour of Boiler Grade Steels - Application to Grade 92 Steel. <i>Procedia Engineering</i> , 2013 , 55, 735-741		1
22	Numerical Simulation of the Portevin Le Chatelier Effect in Various Material and at Different Scales. <i>Materials Science Forum</i> , 2010 , 638-642, 2670-2675	0.4	1
21	Anisotropic constitutive model and FE simulation of the sintering process of slip cast traditional porcelain 2010 ,		1
20	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
19	Analysis of metal- ceramic bonding by fretting. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1992 , 23, 2791-2801		1
18	Ductile Rupture Integrating Inhomogeneities in Materials (DRIIM) 2001 , 587-596		1
17	In-situ synchrotron-radiation computed laminography observation of ductile fracture. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2011 , 19-25	0.3	1
16	Modeling the 3D Plastic Anisotropy of a Magnesium Alloy Processed Using Severe Plastic Deformation. <i>Minerals, Metals and Materials Series</i> , 2019 , 283-287	0.3	1

15	Prediction of deformation and failure anisotropy for thin magnesium sheets under mixed-mode loading. <i>Mechanics of Materials</i> , 2021 , 163, 104064	3.3	1
14	3D in situ study of damage during a shear to tension load path change in an aluminium alloy. <i>Acta Materialia</i> , 2022 , 231, 117842	8.4	1
13	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	3.1	0
12	Deep multimodal autoencoder for crack criticality assessment. <i>International Journal for Numerical Methods in Engineering</i> , 2022 , 123, 1456-1480	2.4	0
11	A two characteristic length nonlocal GTN model: Application to cup and slant fracture. <i>Mechanics of Materials</i> , 2022 , 104350	3.3	0
10	Strain localization analysis in materials containing randomly distributed voids: Competition between extension and shear failure modes. <i>Journal of the Mechanics and Physics of Solids</i> , 2022 , 104933 ⁵		0
9	Multi-scale three-dimensional analysis on local arrestability of intergranular crack in high-strength martensitic steel. <i>Acta Materialia</i> , 2022 , 234, 118053	8.4	0
8	Anisotropic Plastic Deformation and Damage in Commercial Al 2198 T8 Sheet Metal. <i>Key Engineering Materials</i> , 2010 , 452-453, 97-100	0.4	
7	Fracture Behaviour of Mis-Matched Dissimilar Welds: Numerical Simulation Using Local Approach 2002 , 11		
6	Unified Constitutive Equations to Describe Elastoplastic and Damage Behavior of X100 Pipeline Steel 831-832		
5	Thermal Embrittlement of Cast Duplex Stainless Steels: Observations and Modeling 161-208		
4	A mechanism-driven plasticity model for deformation by glide and twinning and its application to magnesium alloys. <i>Journal of Physics: Conference Series</i> , 2018 , 1063, 012046	0.3	
3	Implementation of constitutive equations for single crystals in finite element codes 2022 , 473-494		
2	Modeling tension-compression asymmetry and failure anisotropy in bending operations of a magnesium alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2022 , 1238, 012043	0.4	
1	Prediction of Deformation and Failure Anisotropy for Magnesium Sheets Under Mixed-Mode Loading. <i>Minerals, Metals and Materials Series</i> , 2022 , 607-615	0.3	