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List of Publications by Year
in descending order

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243 papers	33,101 citations	7096 78 h-index	3732 179 g-index
244 all docs	244 docs citations	244 times ranked	8660 citing authors

#	Article	IF	Citations
1	Analysis of the cup-cone fracture in a round tensile bar. Acta Metallurgica, 1984, 32, 157-169.	2.1	2,787
2	Numerical simulations of fast crack growth in brittle solids. Journal of the Mechanics and Physics of Solids, 1994, 42, 1397-1434.	4.8	2,011
3	A Continuum Model for Void Nucleation by Inclusion Debonding. Journal of Applied Mechanics, Transactions ASME, 1987, 54, 525-531.	2.2	1,813
4	Overview no. 42 Texture development and strain hardening in rate dependent polycrystals. Acta Metallurgica, 1985, 33, 923-953.	2.1	1,538
5	Material rate dependence and localized deformation in crystalline solids. Acta Metallurgica, 1983, 31, 1951-1976.	2.1	1,355
6	An analysis of nonuniform and localized deformation in ductile single crystals. Acta Metallurgica, 1982, 30, 1087-1119.	2.1	1,210
7	Void Nucleation Effects in Biaxially Stretched Sheets. Journal of Engineering Materials and Technology, Transactions of the ASME, 1980, 102, 249-256.	1.4	1,141
8	Discrete dislocation plasticity: a simple planar model. Modelling and Simulation in Materials Science and Engineering, 1995, 3, 689-735.	2.0	776
9	An experimental and numerical study of deformation in metal-ceramic composites. Acta Metallurgica, 1989, 37, 3029-3050.	2.1	739
10	Material rate dependence and mesh sensitivity in localization problems. Computer Methods in Applied Mechanics and Engineering, 1988, 67, 69-85.	6.6	719
11	Void growth and coalescence in porous plastic solids. International Journal of Solids and Structures, 1988, 24, 835-853.	2.7	680
12	An analysis of ductile rupture in notched bars. Journal of the Mechanics and Physics of Solids, 1984, 32, 461-490.	4.8	647
13	A tangent modulus method for rate dependent solids. Computers and Structures, 1984, 18, 875-887.	4.4	633
14	Void nucleation by inclusion debonding in a crystal matrix. Modelling and Simulation in Materials Science and Engineering, 1993, 1, 111-132.	2.0	616
15	A comparison of methods for calculating energy release rates. Engineering Fracture Mechanics, 1985, 21, 405-421.	4.3	577
16	Plastic creep flow effects in the diffusive cavitation of grain boundaries. Acta Metallurgica, 1980, 28, 1315-1332.	2.1	537
17	An analysis of tensile decohesion along an interface. Journal of the Mechanics and Physics of Solids, 1990, 38, 289-324.	4.8	524
18	An analysis of decohesion along an imperfect interface. International Journal of Fracture, 1990, 42, 21-40.	2.2	434

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19	An analysis of ductile rupture modes at a crack tip. Journal of the Mechanics and Physics of Solids, 1987, 35, 151-183.	4.8	386
20	An analysis of the effects of matrix void growth on deformation and ductility in metal-ceramic composites. Acta Metallurgica Et Materialia, 1991, 39, 2317-2335.	1.8	340
21	Flow localization in the plane strain tensile test. Journal of the Mechanics and Physics of Solids, 1981, 29, 115-142.	4.8	303
22	Void Growth in an Elastic-Plastic Medium. Journal of Applied Mechanics, Transactions ASME, 1972, 39, 964-970.	2.2	292
23	A numerical study of necking in circular cylindrical bar. Journal of the Mechanics and Physics of Solids, 1972, 20, 111-127.	4.8	274
24	A cohesive segments method for the simulation of crack growth. Computational Mechanics, 2003, 31, 69-77.	4.0	259
25	Aspects of boundary-value problem solutions with three-dimensional dislocation dynamics. Modelling and Simulation in Materials Science and Engineering, 2002, 10, 437-468.	2.0	236
26	On microstructural evolution and micromechanical modelling of deformation of a whisker-reinforced metal-matrix composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1989, 107, 49-61.	5.6	231
27	An analysis of the mechanical disadvantage of myocardial infarction in the canine left ventricle.. Circulation Research, 1980, 47, 728-741.	4.5	216
28	Void growth and failure in notched bars. Journal of the Mechanics and Physics of Solids, 1988, 36, 317-351.	4.8	203
29	Comparison of discrete dislocation and continuum plasticity predictions for a composite material. Acta Materialia, 1997, 45, 3163-3179.	7.9	198
30	A comparison of nonlocal continuum and discrete dislocation plasticity predictions. Journal of the Mechanics and Physics of Solids, 2003, 51, 281-310.	4.8	197
31	Plastic deformation of freestanding thin films: Experiments and modeling. Journal of the Mechanics and Physics of Solids, 2006, 54, 2089-2110.	4.8	197
32	Numerical simulations of dynamic crack growth along an interface. International Journal of Fracture, 1996, 74, 289-324.	2.2	191
33	Void nucleation effects on shear localization in porous plastic solids. International Journal of Fracture, 1982, 19, 163-182.	2.2	190
34	The simulation of dynamic crack propagation using the cohesive segments method. Journal of the Mechanics and Physics of Solids, 2008, 56, 70-92.	4.8	187
35	Localization of deformation in rate sensitive porous plastic solids. International Journal of Fracture, 1983, 21, 261-278.	2.2	186
36	Boundary layers in constrained plastic flow: comparison of nonlocal and discrete dislocation plasticity. Journal of the Mechanics and Physics of Solids, 2001, 49, 1361-1395.	4.8	177

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37	Void nucleation at fiber ends in Alî—¸SiC composites. Scripta Metallurgica, 1987, 21, 705-710.	1.2	175
38	Boundary conditions in small-deformation, single-crystal plasticity that account for the Burgers vector. Journal of the Mechanics and Physics of Solids, 2005, 53, 1-31.	4.8	174
39	Computational mechanics at the mesoscale. Acta Materialia, 2000, 48, 105-124.	7.9	166
40	Micromechanical modelling of interfacial decohesion. Ultramicroscopy, 1992, 40, 203-214.	1.9	161
41	A discrete dislocation analysis of bending. International Journal of Plasticity, 1999, 15, 837-868.	8.8	158
42	A discrete dislocation analysis of mode I crack growth. Journal of the Mechanics and Physics of Solids, 2000, 48, 1133-1157.	4.8	150
43	Incorporating three-dimensional mechanisms into two-dimensional dislocation dynamics. Modelling and Simulation in Materials Science and Engineering, 2004, 12, 159-196.	2.0	150
44	Plasticity size effects in tension and compression of single crystals. Journal of the Mechanics and Physics of Solids, 2005, 53, 2661-2691.	4.8	148
45	Limits to Ductility Set by Plastic Flow Localization. , 1978, , 237-267.		137
46	Dynamic Shear Band Development in Plane Strain. Journal of Applied Mechanics, Transactions ASME, 1989, 56, 1-9.	2.2	134
47	Coefficients of thermal expansion of metal-matrix composites for electronic packaging. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1994, 25, 839-850.	2.2	132
48	Finite element analyses of shear localization in rate and temperature dependent solids. Mechanics of Materials, 1986, 5, 339-361.	3.2	128
49	Analyses of Plastic Flow Localization in Metals. Applied Mechanics Reviews, 1992, 45, S3-S18.	10.1	128
50	Effective elastic response of two-phase composites. Acta Metallurgica Et Materialia, 1994, 42, 77-97.	1.8	128
51	Finite element analysis of crystalline solids. Computer Methods in Applied Mechanics and Engineering, 1985, 52, 689-708.	6.6	124
52	Discrete dislocation modeling of fatigue crack propagation. Acta Materialia, 2002, 50, 831-846.	7.9	124
53	Non-normality and bifurcation in plane strain tension and compression. Journal of the Mechanics and Physics of Solids, 1979, 27, 231-254.	4.8	123
54	Distribution of plastic strain and negative pressure in necked steel and copper bars. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1975, 6, 815-824.	1.4	117

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55	Void Growth and Local Necking in Biaxially Stretched Sheets. Journal of Engineering Materials and Technology, Transactions of the ASME, 1978, 100, 164-169.	1.4	117
56	An analysis of dynamic, ductile crack growth in a double edge cracked specimen. International Journal of Fracture, 1991, 49, 41-67.	2.2	117
57	An analysis of equilibrium dislocation distributions. Acta Metallurgica Et Materialia, 1993, 41, 625-642.	1.8	117
58	Micromechanical modeling of reinforcement fracture in particle-reinforced metal-matrix composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1994, 25, 2403-2420.	2.2	117
59	On the Localization of Buckling Patterns. Journal of Applied Mechanics, Transactions ASME, 1980, 47, 613-619.	2.2	114
60	Modeling and Simulation of Dynamic Fragmentation in Brittle Materials. International Journal of Fracture, 1999, 96, 101-125.	2.2	112
61	A critical evaluation of cohesive zone models of dynamic fractur. European Physical Journal Special Topics, 2001, 11, Pr5-43-Pr5-50.	0.2	109
62	The effect of bond strength and loading rate on the conditions governing the attainment of intersonic crack growth along interfaces. Journal of the Mechanics and Physics of Solids, 1999, 47, 2411-2449.	4.8	108
63	An experimental and numerical study of cyclic deformation in metal-matrix composites. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1992, 23, 919-934.	1.4	105
64	Finite element simulations of shear localization in plate impact. Journal of the Mechanics and Physics of Solids, 1994, 42, 423-458.	4.8	105
65	Effective plastic response of two-phase composites. Acta Metallurgica Et Materialia, 1995, 43, 1701-1722.	1.8	105
66	Discrete dislocation plasticity analysis of the grain size dependence of the flow strength of polycrystals. International Journal of Plasticity, 2008, 24, 2149-2172.	8.8	104
67	A discrete dislocation analysis of near-threshold fatigue crack growth. Acta Materialia, 2001, 49, 3189-3203.	7.9	102
68	The stored energy of cold work: Predictions from discrete dislocation plasticity. Acta Materialia, 2005, 53, 4765-4779.	7.9	101
69	Some Issues in Cohesive Surface Modeling. Procedia IUTAM, 2014, 10, 221-246.	1.2	98
70	Effects of triaxial stressing on creep cavitation of grain boundaries. Acta Metallurgica, 1983, 31, 919-926.	2.1	97
71	Effect of specimen thickness on the creep response of a Ni-based single-crystal superalloy. Acta Materialia, 2012, 60, 5697-5711.	7.9	96
72	Size effects in uniaxial deformation of single and polycrystals: a discrete dislocation plasticity analysis. Modelling and Simulation in Materials Science and Engineering, 2006, 14, 409-422.	2.0	95

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73	Effect of inclusion density on ductile fracture toughness and roughness. Journal of the Mechanics and Physics of Solids, 2014, 63, 62-79.	4.8	95
74	Indentation of porous solids. International Journal of Solids and Structures, 1992, 29, 1613-1636.	2.7	94
75	Discrete dislocation plasticity modeling of short cracks in single crystals. Acta Materialia, 2003, 51, 1-15.	7.9	93
76	Plastic flow in a composite: a comparison of nonlocal continuum and discrete dislocation predictions. International Journal of Solids and Structures, 2001, 38, 833-853.	2.7	86
77	Thermally and mechanically induced residual strains in Al-SiC composites. Acta Metallurgica Et Materialia, 1992, 40, 2391-2412.	1.8	85
78	On the development of shear bands in pure bending. International Journal of Solids and Structures, 1982, 18, 121-138.	2.7	83
79	Effect of an interphase region on debonding of a CNT reinforced polymer composite. Composites Science and Technology, 2010, 70, 2207-2215.	7.8	82
80	Effect of Yield Surface Curvature on Necking and Failure in Porous Plastic Solids. Journal of Applied Mechanics, Transactions ASME, 1986, 53, 491-499.	2.2	79
81	Discrete dislocation plasticity analysis of the wedge indentation of films. Journal of the Mechanics and Physics of Solids, 2006, 54, 2281-2303.	4.8	79
82	Necking of biaxially stretched elastic-plastic circular plates. Journal of the Mechanics and Physics of Solids, 1977, 25, 159-183.	4.8	78
83	An Analysis of Intersonic Crack Growth Under Shear Loading. Journal of Applied Mechanics, Transactions ASME, 1999, 66, 847-857.	2.2	78
84	Properties of dynamic rupture and energy partition in a solid with a frictional interface. Journal of the Mechanics and Physics of Solids, 2008, 56, 5-24.	4.8	78
85	An analysis of the effect of residual stresses on deformation and damage mechanisms in Alî—¸SiC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 132, 31-38.	5.6	77
86	Analysis of a brittle-ductile transition under dynamic shear loading. International Journal of Solids and Structures, 1995, 32, 2571-2590.	2.7	77
87	Void growth due to creep and grain boundary diffusion at high triaxialities. Journal of the Mechanics and Physics of Solids, 1995, 43, 123-165.	4.8	75
88	An analysis of decohesion along an imperfect interface. , 1990, , 21-40.		75
89	Fully Plastic Crack Problems, Part 1: Solutions by a Penalty Method. Journal of Applied Mechanics, Transactions ASME, 1984, 51, 48-56.	2.2	74
90	Numerical simulations of dynamic interfacial crack growth allowing for crack growth away from the bond line. International Journal of Fracture, 1996, 74, 253-275.	2.2	74

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91	An analysis of the temperature and rate dependence of Charpy V-notch energies for a high nitrogen steel. International Journal of Fracture, 1988, 37, 197-215.	2.2	73
92	Discrete dislocation plasticity and crack tip fields in single crystals. Journal of the Mechanics and Physics of Solids, 2001, 49, 2133-2153.	4.8	73
93	Nonlocal effects on localization in a void-sheet. International Journal of Solids and Structures, 1997, 34, 2221-2238.	2.7	72
94	A numerical study of dynamic crack growth in elastic-viscoplastic solids. International Journal of Solids and Structures, 1997, 34, 769-787.	2.7	71
95	An analysis of residual stress formation in whisker-reinforced Alî—¸SiC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1990, 125, 129-140.	5.6	70
96	Effect of crack meandering on dynamic, ductile fracture. Journal of the Mechanics and Physics of Solids, 1992, 40, 447-471.	4.8	70
97	Mesh effects in the analysis of dynamic ductile crack growth. Engineering Fracture Mechanics, 1994, 47, 75-91.	4.3	70
98	A finite thickness band method for ductile fracture analysis. International Journal of Plasticity, 2009, 25, 2349-2365.	8.8	69
99	Instability and failure of internally pressurized ductile metal cylinders. Journal of the Mechanics and Physics of Solids, 1982, 30, 121-154.	4.8	67
100	Three dimensional analysis of dynamic ductile crack growth in a thin plate. Journal of the Mechanics and Physics of Solids, 1996, 44, 439-459.	4.8	67
101	Discrete dislocation modeling in three-dimensional confined volumes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 309-310, 420-424.	5.6	64
102	Effect of interfacial compliance on bifurcation of a layer bonded to a substrate. International Journal of Solids and Structures, 1997, 34, 4305-4326.	2.7	63
103	Finite strain discrete dislocation plasticity. Journal of the Mechanics and Physics of Solids, 2003, 51, 2057-2083.	4.8	63
104	Dynamic crack growth across an interface. International Journal of Fracture, 1997, 85, 381-402.	2.2	59
105	A numerical study of void distribution effects on dynamic, ductile crack growth. Engineering Fracture Mechanics, 1991, 38, 157-173.	4.3	57
106	Frictional sliding modes along an interface between identical elastic plates subject to shear impact loading. Journal of the Mechanics and Physics of Solids, 2005, 53, 884-922.	4.8	57
107	Grain boundary crack growth in metastable titanium Î² alloys. Acta Materialia, 2015, 82, 167-178.	7.9	57
108	Stability of solids with interfaces. Journal of the Mechanics and Physics of Solids, 1992, 40, 613-640.	4.8	55

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109	Void growth versus void collapse in a creeping single crystal. Journal of the Mechanics and Physics of Solids, 2013, 61, 1169-1184.	4.8	55
110	An analysis of inclusion morphology effects on void nucleation. Modelling and Simulation in Materials Science and Engineering, 2002, 10, 163-183.	2.0	54
111	Effect of boundaries and interfaces on shear-band localization. International Journal of Solids and Structures, 1991, 28, 859-877.	2.7	53
112	An analysis of ductile failure by grain boundary void growth. Acta Metallurgica, 1989, 37, 99-120.	2.1	52
113	3D analysis of failure modes in the Charpy impact test. Modelling and Simulation in Materials Science and Engineering, 1994, 2, 617-635.	2.0	52
114	On finite element formulations for large elastic-plastic deformations. Computers and Structures, 1985, 20, 247-257.	4.4	51
115	Finite Element Simulations of Fiber Pull-Out. Journal of Engineering Materials and Technology, Transactions of the ASME, 1993, 115, 286-291.	1.4	51
116	Comparison of Crystal Plasticity and Isotropic Hardening Predictions for Metal-Matrix Composites. Journal of Applied Mechanics, Transactions ASME, 1993, 60, 70-76.	2.2	51
117	A discrete dislocation analysis of residual stresses in a composite material. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 893-920.	0.6	51
118	An analysis of the brittle-ductile transition in dynamic crack growth. International Journal of Fracture, 1993, 59, 53-67.	2.2	51
119	Numerical modeling of crack growth under dynamic loading conditions. Computational Mechanics, 1997, 19, 463-469.	4.0	50
120	Discrete dislocation and continuum descriptions of plastic flow. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 309-310, 1-13.	5.6	50
121	Numerical modeling of the ductile-brittle transition. International Journal of Fracture, 2000, 101, 73-97.	2.2	49
122	A finite strain, finite band method for modeling ductile fracture. International Journal of Plasticity, 2012, 28, 53-69.	8.8	49
123	Flow localization in strain hardening crystalline solids. Scripta Metallurgica, 1984, 18, 429-435.	1.2	47
124	Void nucleation by inclusion cracking. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 1745-1755.	2.2	47
125	Discrete dislocation plasticity analysis of static friction. Acta Materialia, 2004, 52, 3135-3149.	7.9	47
126	A discrete dislocation plasticity analysis of grain-size strengthening. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 186-190.	5.6	47

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127	Effect of crystal orientation on porosity evolution in a creeping single crystal. Mechanics of Materials, 2015, 90, 10-29.	3.2	46
128	Scaling of discrete dislocation predictions for near-threshold fatigue crack growth. Acta Materialia, 2003, 51, 4637-4651.	7.9	45
129	Surface versus bulk nucleation of dislocations during contact. Journal of the Mechanics and Physics of Solids, 2007, 55, 1120-1144.	4.8	45
130	Engineering the crack path by controlling the microstructure. Journal of the Mechanics and Physics of Solids, 2017, 100, 1-20.	4.8	45
131	An Analysis of Wrinkling in the Swift Cup Test. Journal of Engineering Materials and Technology, Transactions of the ASME, 1980, 102, 241-248.	1.4	44
132	Constraint effects on the ductile-brittle transition in small scale yielding. Journal of the Mechanics and Physics of Solids, 1996, 44, 1255-1282.	4.8	43
133	A finite element method for analyzing localization in rate dependent solids at finite strains. Computer Methods in Applied Mechanics and Engineering, 1989, 73, 235-258.	6.6	42
134	The bauschinger effect in whisker-reinforced metal-matrix composites. Scripta Metallurgica Et Materialia, 1990, 24, 1203-1208.	1.0	42
135	Buckling of sandwich beams with compliant interfaces. Computers and Structures, 2002, 80, 1329-1335.	4.4	42
136	Three dimensional microstructural effects on plane strain ductile crack growth. International Journal of Solids and Structures, 2006, 43, 6165-6179.	2.7	42
137	Effects of reinforcement orientation on the tensile response of metal-matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 197, 1-10.	5.6	41
138	Crack growth in lamellar titanium aluminide. International Journal of Fracture, 2001, 111, 163-189.	2.2	41
139	Energy dissipation in dynamic fracture of brittle materials. Modelling and Simulation in Materials Science and Engineering, 1999, 7, 573-586.	2.0	40
140	The effect of loading rate on ductile fracture toughness and fracture surface roughness. Journal of the Mechanics and Physics of Solids, 2015, 76, 20-46.	4.8	40
141	Postbifurcation behavior and imperfection sensitivity of elastic-plastic circular plates. International Journal of Mechanical Sciences, 1975, 17, 1-13.	6.7	39
142	Void Growth in Plastic Solids. , 1992, , 145-178.		39
143	Ductile failure analyses on massively parallel computers. Computer Methods in Applied Mechanics and Engineering, 1994, 119, 283-309.	6.6	36
144	Size Effects in the Charpy V-Notch Test. International Journal of Fracture, 2002, 116, 275-296.	2.2	33

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145	An analysis of shear band development incorporating heat conduction. Mechanics of Materials, 1986, 5, 363-373.	3.2	32
146	Dynamic crack growth in a nonlocal progressively cavitating solid. European Journal of Mechanics, A/Solids, 1998, 17, 421-438.	3.7	32
147	Multi-scale plasticity modeling: Coupled discrete dislocation and continuum crystal plasticity. Journal of the Mechanics and Physics of Solids, 2008, 56, 3167-3180.	4.8	32
148	A finite element method for plane strain deformations of incompressible solids. Computer Methods in Applied Mechanics and Engineering, 1978, 15, 223-240.	6.6	31
149	An analysis of myocardial infarction. The effect of regional changes in contractility.. Circulation Research, 1984, 55, 805-815.	4.5	31
150	Analysis of the Charpy V-notch test for welds. Engineering Fracture Mechanics, 2000, 65, 627-643.	4.3	31
151	Necking of pressurized spherical membranes. Journal of the Mechanics and Physics of Solids, 1976, 24, 339-359.	4.8	30
152	Porosity evolution in a creeping single crystal. Modelling and Simulation in Materials Science and Engineering, 2012, 20, 035010.	2.0	30
153	Dynamic 3D analysis of the Charpy V-notch test. Modelling and Simulation in Materials Science and Engineering, 1993, 1, 467-484.	2.0	29
154	Dislocation dynamics is chaotic. Scripta Materialia, 2001, 45, 1047-1053.	5.2	29
155	Micromechanics Simulations of Fracture. Annual Review of Materials Research, 2002, 32, 141-162.	9.3	29
156	Hybrid discrete dislocation models for fatigue crack growth. International Journal of Fatigue, 2010, 32, 1511-1520.	5.7	29
157	Effect of inhomogeneities on dynamic crack growth in an elastic solid. Modelling and Simulation in Materials Science and Engineering, 1997, 5, 489-516.	2.0	28
158	Effect of the number and orientation of active slip systems on plane strain single crystal indentation. Modelling and Simulation in Materials Science and Engineering, 2006, 14, 1105-1125.	2.0	28
159	3D analyses of the effect of weld orientation in Charpy specimens. Engineering Fracture Mechanics, 2004, 71, 2179-2195.	4.3	27
160	Polymer indentation: Numerical analysis and comparison with a spherical cavity model. Journal of the Mechanics and Physics of Solids, 2011, 59, 1669-1684.	4.8	27
161	Fatigue crack growth from a cracked elastic particle into a ductile matrix. Philosophical Magazine, 2008, 88, 3565-3583.	1.6	26
162	Phenomenological modeling of the effect of specimen thickness on the creep response of Ni-based superalloy single crystals. Acta Materialia, 2013, 61, 6506-6516.	7.9	26

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163	An analysis of thickness effects in the Izod test. International Journal of Solids and Structures, 2008, 45, 3951-3966.	2.7	25
164	Aspects of Plastic Postbuckling Behavior. , 1982, , 453-498.		25
165	Three-dimensional analysis of creep in a metal matrix composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1992, 158, 129-137.	5.6	24
166	Two hardening mechanisms in single crystal thin films studied by discrete dislocation plasticity. Philosophical Magazine, 2005, 85, 1507-1518.	1.6	24
167	The effect of indenter shape on sub-micron indentation according to discrete dislocation plasticity. Modelling and Simulation in Materials Science and Engineering, 2007, 15, S121-S131.	2.0	24
168	Computational Modeling of Material Failure. Applied Mechanics Reviews, 1994, 47, S34-S42.	10.1	23
169	GNDs in nonlocal plasticity theories: lessons from discrete dislocation simulations. Scripta Materialia, 2003, 48, 127-132.	5.2	23
170	Multi-asperity contact: A comparison between discrete dislocation and crystal plasticity predictions. Philosophical Magazine, 2008, 88, 3713-3729.	1.6	23
171	A finite element model of the infarcted left ventricle. Journal of Biomechanics, 1983, 16, 45-58.	2.1	22
172	Discrete dislocation simulations and size dependent hardening in single slip. European Physical Journal Special Topics, 1998, 08, Pr4-83-Pr4-92.	0.2	22
173	Oscillatory crack growth in glass. Scripta Materialia, 1999, 41, 275-281.	5.2	21
174	2D dislocation dynamics in thin metal layers. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 309-310, 274-277.	5.6	21
175	Indentation of elastically soft and plastically compressible solids. Acta Mechanica Sinica/Lixue Xuebao, 2015, 31, 473-480.	3.4	21
176	LIMITS TO FORMABILITY IN RATE-SENSITIVE METAL SHEETS. , 1984, , 51-65.		21
177	Summary report: computational issues in the mechanical behavior of metals and intermetallics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1992, 159, 1-34.	5.6	20
178	Crack growth across colony boundaries in binary lamellar TiAl. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 329-331, 532-537.	5.6	20
179	A discrete dislocation analysis of rate effects on mode I crack growth. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 317, 37-43.	5.6	19
180	Micromechanics of Fracture: Connecting Physics to Engineering. MRS Bulletin, 2001, 26, 211-214.	3.5	19

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181	Bifurcation of elastic-plastic spherical shells subject to internal pressure. Journal of the Mechanics and Physics of Solids, 1975, 23, 357-367.	4.8	18
182	A micromechanical analysis of the ductile-brittle transition at a weld. Engineering Fracture Mechanics, 1999, 62, 317-338.	4.3	18
183	Discrete dislocation plasticity analysis of crack-tip fields in polycrystalline materials. Philosophical Magazine, 2005, 85, 3047-3071.	1.6	17
184	Size effects in single asperity frictional contacts. Modelling and Simulation in Materials Science and Engineering, 2007, 15, S97-S108.	2.0	17
185	Effect of size on necking of dynamically loaded notched bars. Mechanics of Materials, 2018, 116, 180-188.	3.2	17
186	The effect of plasticity on dynamic crack growth across an interface. International Journal of Fracture, 1998, 94, 383-399.	2.2	16
187	Deformation of plastically compressible hardening-softening-hardening solids. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 1115-1124.	3.4	16
188	Microcrack nucleation and growth in elastic lamellar solids. International Journal of Fracture, 2000, 105, 321-342.	2.2	15
189	Continuum mechanics studies of plastic instabilities. Revue De Physique AppliquÃ©e, 1988, 23, 585-593.	0.4	15
190	Mechanically induced residual stresses in Al/SiC composites. Scripta Metallurgica Et Materialia, 1991, 25, 1883-1888.	1.0	14
191	Stochastic microcrack nucleation in lamellar solids. Engineering Fracture Mechanics, 2003, 70, 1869-1884.	4.3	14
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