Alan Needleman

List of Publications by Year
in descending order

216 papers	27,651 citations	10650 74 h-index	6177 164 g-index
221 all docs	221 docs citations	221 times ranked	9471 citing authors

#	Article	IF	Citations
1	Dislocation Dynamics for Plasticity Boundary Value Problems. , 2022, , 541-551.		1
2	A mechanical model of blastocyst hatching. Extreme Mechanics Letters, 2021, 42, 101132.	2.0	2
3	Characterization of plastically compressible solids via spherical indentation. Journal of the Mechanics and Physics of Solids, 2021, 148, 104283.	2.3	8
4	Constraint and size effects in confined layer plasticity. Journal of the Mechanics and Physics of Solids, 2021, 149, 104328.	2.3	7
5	Dynamic frictional slip along an interface between plastically compressible solids. International Journal of Fracture, 2021, 230, 179.	1.1	0
6	On the identification of power-law creep parameters from conical indentation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20210233.	1.0	1
7	Shear Transformation Zone (STZ) plasticity analysis of constrained shear. Mechanics of Materials, 2021, 160, 103935.	1.7	3
8	Energy dissipation rate and kinetic relations for Eshelby transformations. Journal of the Mechanics and Physics of Solids, 2020, 136, 103699.	2.3	14
9	Influence of Grain Size Distribution on Ductile Intergranular Crack Growth Resistance. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	1.1	5
10	Influence of Assumed Strain Hardening Relation on Plastic Stress-Strain Response Identification From Conical Indentation. Journal of Engineering Materials and Technology, Transactions of the ASME, 2020, 142, .	0.8	4
11	A simple model for size effects in constrained shear. Extreme Mechanics Letters, 2019, 33, 100581.	2.0	14
12	Intergranular fracture prediction and microstructure design. International Journal of Fracture, 2019, 216, 135-148.	1.1	17
13	Limits on Transformation Strains for Non-Negative Dissipation. Journal of Applied Mechanics, Transactions ASME, 2019, 86, 051005.	1.1	4
14	Identification of Plastic Properties From Conical Indentation Using a Bayesian-Type Statistical Approach. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	1.1	14
15	Effect of Properties and Turgor Pressure on the Indentation Response of Plant Cells. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	1.1	5
16	Discrete shear-transformation-zone plasticity modeling of notched bars. Journal of the Mechanics and Physics of Solids, 2018, 111, 18-42.	2.3	20
17	Ductile failure modeling. International Journal of Fracture, 2016, 201, 29-80.	1.1	181
18	Discrete shear transformation zone plasticity. Extreme Mechanics Letters, 2016, 9, 21-29.	2.0	9

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19	Numerical implementation of non-local polycrystal plasticity using fast Fourier transforms. Journal of the Mechanics and Physics of Solids, 2016, 97, 333-351.	2.3	75
20	Grain boundary crack growth in metastable titanium Î² alloys. Acta Materialia, 2015, 82, 167-178.	3.8	57
21	Statistics of ductile fracture surfaces: the effect of material parameters. , 2014, , 137-149.		0
22	Effect of inclusion density on ductile fracture toughness and roughness. Journal of the Mechanics and Physics of Solids, 2014, 63, 62-79.	2.3	95
23	Statistics of ductile fracture surfaces: the effect of material parameters. International Journal of Fracture, 2013, 184, 137-149.	1.1	13
24	Phenomenological modeling of the effect of specimen thickness on the creep response of Ni-based superalloy single crystals. Acta Materialia, 2013, 61, 6506-6516.	3.8	26
25	Void growth versus void collapse in a creeping single crystal. Journal of the Mechanics and Physics of Solids, 2013, 61, 1169-1184.	2.3	55
26	The cohesive band model: a cohesive surface formulation with stress triaxiality. International Journal of Fracture, 2013, 181, 177-188.	1.1	27
27	Local Relative Density Modulates Failure and Strength in Vertically Aligned Carbon Nanotubes. ACS Nano, 2013, 7, 8593-8604.	7.3	33
28	Uniaxial Tension of a Class of Compressible Solids With Plastic Non-Normality. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	12
29	Prediction of Ductile Fracture Surface Roughness Scaling. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	1.1	20
30	Deformation of plastically compressible hardening-softening-hardening solids. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 1115-1124.	1.5	16
31	A microstructurally motivated description of the deformation of vertically aligned carbon nanotube structures. Applied Physics Letters, 2012, 100, .	1.5	15
32	Effect of specimen thickness on the creep response of a Ni-based single-crystal superalloy. Acta Materialia, 2012, 60, 5697-5711.	3.8	96
33	A finite strain, finite band method for modeling ductile fracture. International Journal of Plasticity, 2012, 28, 53-69.	4.1	49
34	Conical indentation of thick elastic spherical shells. Journal of Mechanics of Materials and Structures, 2011, 6, 443-451.	0.4	7
35	Analysis of uniaxial compression of vertically aligned carbon nanotubes. Journal of the Mechanics and Physics of Solids, 2011, 59, 2227-2237.	2.3	80
36	Polymer indentation: Numerical analysis and comparison with a spherical cavity model. Journal of the Mechanics and Physics of Solids, 2011, 59, 1669-1684.	2.3	27

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37	Slip modes and partitioning of energy during dynamic frictional sliding between identical elasticâ€“viscoplastic solids. International Journal of Fracture, 2010, 162, 51-67.	1.1	15
38	Hybrid discrete dislocation models for fatigue crack growth. International Journal of Fatigue, 2010, 32, 1511-1520.	2.8	29
39	Size effects in aluminium alloy castings. Acta Materialia, 2010, 58, 3006-3013.	3.8	31
40	Effect of an interphase region on debonding of a CNT reinforced polymer composite. Composites Science and Technology, 2010, 70, 2207-2215.	3.8	82
41	Convergent beam electron diffraction measurements of relaxation in strained silicon using higher order Laue zone line splitting. Journal of Applied Physics, 2009, 105, 063526.	1.1	3
42	A finite thickness band method for ductile fracture analysis. International Journal of Plasticity, 2009, 25, 2349-2365.	4.1	69
43	Slip modes and partitioning of energy during dynamic frictional sliding between identical elasticâ€“viscoplastic solids. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 51-67.	0.1	1
44	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.	2.3	78
45	The simulation of dynamic crack propagation using the cohesive segments method. Journal of the Mechanics and Physics of Solids, 2008, 56, 70-92.	2.3	187
46	Multi-scale plasticity modeling: Coupled discrete dislocation and continuum crystal plasticity. Journal of the Mechanics and Physics of Solids, 2008, 56, 3167-3180.	2.3	32
47	Dynamic neck development in a polymer tube under internal pressure loading. International Journal of Solids and Structures, 2008, 45, 580-592.	1.3	12
48	An analysis of thickness effects in the Izod test. International Journal of Solids and Structures, 2008, 45, 3951-3966.	1.3	25
49	Discrete dislocation plasticity analysis of the grain size dependence of the flow strength of polycrystals. International Journal of Plasticity, 2008, 24, 2149-2172.	4.1	104
50	Fatigue crack growth from a cracked elastic particle into a ductile matrix. Philosophical Magazine, 2008, 88, 3565-3583.	0.7	26
51	Multi-asperity contact: A comparison between discrete dislocation and crystal plasticity predictions. Philosophical Magazine, 2008, 88, 3713-3729.	0.7	23
52	Bulge formation and necking in a polymer tube under dynamic expansion. Modelling and Simulation in Materials Science and Engineering, 2008, 16, 085003.	0.8	3
53	Effect of Material Parameters in the Izod Test for Polymers. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 297-306.	0.1	0
54	Contact area and size effects in discrete dislocation modeling of wedge indentation. Journal of Materials Research, 2007, 22, 655-663.	1.2	32

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55	Discrete Dislocation Modeling of Plastic Flow Processes. Key Engineering Materials, 2007, 340-341, 31-38.	0.4	1
56	Modeling of Brick Properties for Earth-Based Domes Structures. Materials and Manufacturing Processes, 2007, 22, 163-169.	2.7	0
57	An analysis of dislocation nucleation near a free surface. International Journal of Solids and Structures, 2007, 44, 1719-1732.	1.3	23
58	Discrete dislocation analysis of the wedge indentation of polycrystals. Acta Materialia, 2007, 55, 6408-6415.	3.8	24
59	Surface versus bulk nucleation of dislocations during contact. Journal of the Mechanics and Physics of Solids, 2007, 55, 1120-1144.	2.3	45
60	An Evaluation of the Accuracy of Discontinuous Finite Elements in Explicit Dynamic Calculations. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2007, , 303-322.	0.1	0
61	Three dimensional microstructural effects on plane strain ductile crack growth. International Journal of Solids and Structures, 2006, 43, 6165-6179.	1.3	42
62	Mesh-independent discrete numerical representations of cohesive-zone models. Engineering Fracture Mechanics, 2006, 73, 160-177.	2.0	141
63	Plastic deformation of freestanding thin films: Experiments and modeling. Journal of the Mechanics and Physics of Solids, 2006, 54, 2089-2110.	2.3	197
64	Discrete dislocation plasticity analysis of the wedge indentation of films. Journal of the Mechanics and Physics of Solids, 2006, 54, 2281-2303.	2.3	79
65	Statistical aspects of discrete dislocation plasticity. Scripta Materialia, 2006, 54, 729-733.	2.6	8
66	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.	0.8	95
67	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.	0.8	28
68	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.	2.3	174
69	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.	2.3	57
70	Plasticity size effects in tension and compression of single crystals. Journal of the Mechanics and Physics of Solids, 2005, 53, 2661-2691.	2.3	148
71	Size effects in polycrystalline thin films analyzed by discrete dislocation plasticity. Thin Solid Films, 2005, 479, 329-338.	0.8	52
72	The stored energy of cold work: Predictions from discrete dislocation plasticity. Acta Materialia, 2005, 53, 4765-4779.	3.8	101

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73	Reply to â€œComment on â€˜dislocation dynamics is chaoticâ€â€™. Scripta Materialia, 2005, 52, 429-431.	2.6	2
74	Discrete dislocation modelling of submicron indentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 456-459.	2.6	38
75	Discrete dislocation plasticity analysis of crack-tip fields in polycrystalline materials. Philosophical Magazine, 2005, 85, 3047-3071.	0.7	17
76	Two hardening mechanisms in single crystal thin films studied by discrete dislocation plasticity. Philosophical Magazine, 2005, 85, 1507-1518.	0.7	24
77	Discretevs smeared crack models for concrete fracture: bridging the gap. International Journal for Numerical and Analytical Methods in Geomechanics, 2004, 28, 583-607.	1.7	177
78	3D analyses of the effect of weld orientation in Charpy specimens. Engineering Fracture Mechanics, 2004, 71, 2179-2195.	2.0	27
79	Discrete dislocation plasticity analysis of static friction. Acta Materialia, 2004, 52, 3135-3149.	3.8	47
80	Relaxation of Thermal Stress by Dislocation Motion in Passivated Metal Interconnects. Journal of Materials Research, 2004, 19, 1216-1226.	1.2	4
81	Plastic Response of Thin Films Due to Thermal Cycling. Solid Mechanics and Its Applications, 2004, , 97-104.	0.1	0
82	Discrete Dislocation Predictions for Single Crystal Hardening: Tension VS Bending. Solid Mechanics and Its Applications, 2004, , 235-242.	0.1	0
83	A Cohesive Segments Approach For Dynamic Crack Growth. Solid Mechanics and Its Applications, 2004, , 299-306.	0.1	0
84	Dislocation Plasticity Effects on Interfacial Fracture. Journal of Materials Science, 2003, 11, 291-301.	1.2	8
85	Crack tip fields at a ductile single crystal-rigid material interface. International Journal of Fracture, 2003, 122, 131-159.	1.1	12
86	A cohesive segments method for the simulation of crack growth. Computational Mechanics, 2003, 31, 69-77.	2.2	259
87	Finite strain discrete dislocation plasticity. Journal of the Mechanics and Physics of Solids, 2003, 51, 2057-2083.	2.3	63
88	Stochastic microcrack nucleation in lamellar solids. Engineering Fracture Mechanics, 2003, 70, 1869-1884.	2.0	14
89	A comparison of nonlocal continuum and discrete dislocation plasticity predictions. Journal of the Mechanics and Physics of Solids, 2003, 51, 281-310.	2.3	197
90	Dynamic crack growth along a polymer compositeâ€“Homalite interface. Journal of the Mechanics and Physics of Solids, 2003, 51, 425-460.	2.3	55

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91	Discrete dislocation plasticity modeling of short cracks in single crystals. Acta Materialia, 2003, 51, 1-15.	3.8	93
92	Scaling of discrete dislocation predictions for near-threshold fatigue crack growth. Acta Materialia, 2003, 51, 4637-4651.	3.8	45
93	Discrete Dislocation Plasticity. Key Engineering Materials, 2003, 233-236, 13-24.	0.4	5
94	Discrete dislocation analysis of size effects in thin films. Journal of Applied Physics, 2003, 93, 5920-5928.	1.1	139
95	Plasticity in Polycrystalline Thin Films: a 2D Dislocation Dynamics Approach. Materials Research Society Symposia Proceedings, 2003, 779, 5201.	0.1	1
96	Simulations of Dislocation Dynamics in Aluminum Interconnects. Materials Research Society Symposia Proceedings, 2002, 731, 151.	0.1	2
97	An analysis of inclusion morphology effects on void nucleation. Modelling and Simulation in Materials Science and Engineering, 2002, 10, 163-183.	0.8	54
98	Aspects of boundary-value problem solutions with three-dimensional dislocation dynamics. Modelling and Simulation in Materials Science and Engineering, 2002, 10, 437-468.	0.8	236
99	Micromechanics Simulations of Fracture. Annual Review of Materials Research, 2002, 32, 141-162.	4.3	29
100	Discrete dislocation modeling of fatigue crack propagation. Acta Materialia, 2002, 50, 831-846.	3.8	124
101	Buckling of sandwich beams with compliant interfaces. Computers and Structures, 2002, 80, 1329-1335.	2.4	42
102	Size Effects in the Charpy V-Notch Test. International Journal of Fracture, 2002, 116, 275-296.	1.1	33
103	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.	2.3	177
104	A discrete dislocation analysis of near-threshold fatigue crack growth. Acta Materialia, 2001, 49, 3189-3203.	3.8	102
105	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.	2.6	19
106	Plastic flow in a composite: a comparison of nonlocal continuum and discrete dislocation predictions. International Journal of Solids and Structures, 2001, 38, 833-853.	1.3	86
107	Crack growth in lamellar titanium aluminide. International Journal of Fracture, 2001, 111, 163-189.	1.1	41
108	Smaller is softer: an inverse size effect in a cast aluminum alloy. Acta Materialia, 2001, 49, 3071-3083.	3.8	37

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109	Discrete dislocation plasticity and crack tip fields in single crystals. Journal of the Mechanics and Physics of Solids, 2001, 49, 2133-2153.	2.3	73
110	Micromechanics of Fracture: Connecting Physics to Engineering. MRS Bulletin, 2001, 26, 211-214.	1.7	19
111	Analysis of the Charpy V-notch test for welds. Engineering Fracture Mechanics, 2000, 65, 627-643.	2.0	31
112	Buckling localization in a cylindrical panel under axial compression. International Journal of Solids and Structures, 2000, 37, 6825-6842.	1.3	16
113	Computational mechanics at the mesoscale. Acta Materialia, 2000, 48, 105-124.	3.8	166
114	A discrete dislocation analysis of mode I crack growth. Journal of the Mechanics and Physics of Solids, 2000, 48, 1133-1157.	2.3	150
115	Numerical modeling of the ductile-brittle transition. International Journal of Fracture, 2000, 101, 73-97.	1.1	49
116	Microcrack nucleation and growth in elastic lamellar solids. International Journal of Fracture, 2000, 105, 321-342.	1.1	15
117	Simulated small-angle scattering patterns for a plastically deformed model composite material. Modelling and Simulation in Materials Science and Engineering, 2000, 8, 557-581.	0.8	5
118	Energy dissipation in dynamic fracture of brittle materials. Modelling and Simulation in Materials Science and Engineering, 1999, 7, 573-586.	0.8	40
119	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.	2.3	108
120	A discrete dislocation analysis of bending. International Journal of Plasticity, 1999, 15, 837-868.	4.1	158
121	A micromechanical analysis of the ductile-brittle transition at a weld. Engineering Fracture Mechanics, 1999, 62, 317-338.	2.0	18
122	Modeling and Simulation of Dynamic Fragmentation in Brittle Materials. International Journal of Fracture, 1999, 96, 101-125.	1.1	112
123	The effect of plasticity on dynamic crack growth across an interface. International Journal of Fracture, 1998, 94, 383-399.	1.1	16
124	Sensitivity analysis for failure and damage in dynamically loaded tensile bars. Computer Methods in Applied Mechanics and Engineering, 1998, 151, 461-478.	3.4	13
125	Effect of inhomogeneities on dynamic crack growth in an elastic solid. Modelling and Simulation in Materials Science and Engineering, 1997, 5, 489-516.	0.8	28
126	Dynamic crack growth across an interface. International Journal of Fracture, 1997, 85, 381-402.	1.1	59

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127	Numerical modeling of crack growth under dynamic loading conditions. Computational Mechanics, 1997, 19, 463-469.	2.2	50
128	Comparison of discrete dislocation and continuum plasticity predictions for a composite material. Acta Materialia, 1997, 45, 3163-3179.	3.8	198
129	A numerical study of dynamic crack growth in elastic-viscoplastic solids. International Journal of Solids and Structures, 1997, 34, 769-787.	1.3	71
130	Nonlocal effects on localization in a void-sheet. International Journal of Solids and Structures, 1997, 34, 2221-2238.	1.3	72
131	Effect of interfacial compliance on bifurcation of a layer bonded to a substrate. International Journal of Solids and Structures, 1997, 34, 4305-4326.	1.3	63
132	Three dimensional analysis of dynamic ductile crack growth in a thin plate. Journal of the Mechanics and Physics of Solids, 1996, 44, 439-459.	2.3	67
133	Constraint effects on the ductile-brittle transition in small scale yielding. Journal of the Mechanics and Physics of Solids, 1996, 44, 1255-1282.	2.3	43
134	Numerical simulations of dynamic interfacial crack growth allowing for crack growth away from the bond line. International Journal of Fracture, 1996, 74, 253-275.	1.1	74
135	Numerical simulations of dynamic crack growth along an interface. International Journal of Fracture, 1996, 74, 289-324.	1.1	191
136	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.	2.6	41
137	Effects of nonlocal damage in porous plastic solids. International Journal of Solids and Structures, 1995, 32, 1063-1077.	1.3	216
138	Analysis of a brittle-ductile transition under dynamic shear loading. International Journal of Solids and Structures, 1995, 32, 2571-2590.	1.3	77
139	Void growth due to creep and grain boundary diffusion at high triaxialities. Journal of the Mechanics and Physics of Solids, 1995, 43, 123-165.	2.3	75
140	Effective plastic response of two-phase composites. Acta Metallurgica Et Materialia, 1995, 43, 1701-1722.	1.9	105
141	Mesh effects in the analysis of dynamic ductile crack growth. Engineering Fracture Mechanics, 1994, 47, 75-91.	2.0	70
142	Issues in the finite element modeling of polyphase plasticity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 175, 43-48.	2.6	10
143	Ductile failure analyses on massively parallel computers. Computer Methods in Applied Mechanics and Engineering, 1994, 119, 283-309.	3.4	36
144	Numerical simulations of fast crack growth in brittle solids. Journal of the Mechanics and Physics of Solids, 1994, 42, 1397-1434.	2.3	2,011

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145	Finite element simulations of shear localization in plate impact. Journal of the Mechanics and Physics of Solids, 1994, 42, 423-458.	2.3	105
146	Effective elastic response of two-phase composites. Acta Metallurgica Et Materialia, 1994, 42, 77-97.	1.9	128
147	3D analysis of failure modes in the Charpy impact test. Modelling and Simulation in Materials Science and Engineering, 1994, 2, 617-635.	0.8	52
148	Dynamic 3D analysis of the Charpy V-notch test. Modelling and Simulation in Materials Science and Engineering, 1993, 1, 467-484.	0.8	29
149	Void nucleation by inclusion debonding in a crystal matrix. Modelling and Simulation in Materials Science and Engineering, 1993, 1, 111-132.	0.8	616
150	An analysis of equilibrium dislocation distributions. Acta Metallurgica Et Materialia, 1993, 41, 625-642.	1.9	117
151	Thermally and mechanically induced residual strains in Al-SiC composites. Acta Metallurgica Et Materialia, 1992, 40, 2391-2412.	1.9	85
152	Effect of crack meandering on dynamic, ductile fracture. Journal of the Mechanics and Physics of Solids, 1992, 40, 447-471.	2.3	70
153	The influence of nucleation criterion on shear localization in rate-sensitive porous plastic solids. International Journal of Plasticity, 1992, 8, 315-330.	4.1	13
154	Three-dimensional analysis of creep in a metal matrix composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1992, 158, 129-137.	2.6	24
155	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.	2.6	20
156	Stability of solids with interfaces. Journal of the Mechanics and Physics of Solids, 1992, 40, 613-640.	2.3	55
157	Indentation of porous solids. International Journal of Solids and Structures, 1992, 29, 1613-1636.	1.3	94
158	Micromechanical modelling of interfacial decohesion. Ultramicroscopy, 1992, 40, 203-214.	0.8	161
159	Elastic-Viscoplastic Analysis of Ductile Fracture. , 1992, , 3-14.		5
160	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.	1.9	340
161	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.	2.6	77
162	Effect of boundaries and interfaces on shear-band localization. International Journal of Solids and Structures, 1991, 28, 859-877.	1.3	53

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163	A numerical study of void distribution effects on dynamic, ductile crack growth. Engineering Fracture Mechanics, 1991, 38, 157-173.	2.0	57
164	An analysis of dynamic, ductile crack growth in a double edge cracked specimen. International Journal of Fracture, 1991, 49, 41-67.	1.1	117
165	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.	2.6	70
166	An analysis of tensile decohesion along an interface. Journal of the Mechanics and Physics of Solids, 1990, 38, 289-324.	2.3	524
167	The bauschinger effect in whisker-reinforced metal-matrix composites. Scripta Metallurgica Et Materialia, 1990, 24, 1203-1208.	1.0	42
168	Damage Evolution, Instability and Fracture in Ductile Solids. NATO ASI Series Series B: Physics, 1990, , 219-238.	0.2	0
169	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.	2.6	231
170	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.	3.4	42
171	An analysis of ductile failure by grain boundary void growth. Acta Metallurgica, 1989, 37, 99-120.	2.1	52
172	An experimental and numerical study of deformation in metal-ceramic composites. Acta Metallurgica, 1989, 37, 3029-3050.	2.1	739
173	COMPUTATIONAL MICROMECHANICS. , 1989, , 217-240.		9
174	Void growth and coalescence in porous plastic solids. International Journal of Solids and Structures, 1988, 24, 835-853.	1.3	680
175	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.	1.1	73
176	Material rate dependence and mesh sensitivity in localization problems. Computer Methods in Applied Mechanics and Engineering, 1988, 67, 69-85.	3.4	719
177	Void growth and failure in notched bars. Journal of the Mechanics and Physics of Solids, 1988, 36, 317-351.	2.3	203
178	Continuum mechanics studies of plastic instabilities. Revue De Physique AppliquÃ©e, 1988, 23, 585-593.	0.4	15
179	Void nucleation at fiber ends in Alî—¸SiC composites. Scripta Metallurgica, 1987, 21, 705-710.	1.2	175
180	A finite element method for localized failure analysis. Computer Methods in Applied Mechanics and Engineering, 1987, 61, 189-214.	3.4	510

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181	An analysis of ductile rupture modes at a crack tip. Journal of the Mechanics and Physics of Solids, 1987, 35, 151-183.	2.3	386
182	Finite element analyses of shear localization in rate and temperature dependent solids. Mechanics of Materials, 1986, 5, 339-361.	1.7	128
183	An analysis of shear band development incorporating heat conduction. Mechanics of Materials, 1986, 5, 363-373.	1.7	32
184	Effect of material rate sensitivity on failure modes in the Charpy V-notch test. Journal of the Mechanics and Physics of Solids, 1986, 34, 213-241.	2.3	99
185	A numerical study of localized deformation in bi-crystals. Mechanics of Materials, 1985, 4, 417-435.	1.7	7
186	Finite element analysis of crystalline solids. Computer Methods in Applied Mechanics and Engineering, 1985, 52, 689-708.	3.4	124
187	A comparison of methods for calculating energy release rates. Engineering Fracture Mechanics, 1985, 21, 405-421.	2.0	577
188	Overview no. 42 Texture development and strain hardening in rate dependent polycrystals. Acta Metallurgica, 1985, 33, 923-953.	2.1	1,538
189	An analysis of myocardial infarction. The effect of regional changes in contractility.. Circulation Research, 1984, 55, 805-815.	2.0	31
190	A tangent modulus method for rate dependent solids. Computers and Structures, 1984, 18, 875-887.	2.4	633
191	An analysis of ductile rupture in notched bars. Journal of the Mechanics and Physics of Solids, 1984, 32, 461-490.	2.3	647
192	Analysis of the cup-cone fracture in a round tensile bar. Acta Metallurgica, 1984, 32, 157-169.	2.1	2,787
193	Flow localization in strain hardening crystalline solids. Scripta Metallurgica, 1984, 18, 429-435.	1.2	47
194	Localization of deformation in rate sensitive porous plastic solids. International Journal of Fracture, 1983, 21, 261-278.	1.1	186
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