

# Alan Needleman

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4644393/publications.pdf>

Version: 2024-02-01

216  
papers

27,651  
citations

9264

74  
h-index

5394

164  
g-index

221  
all docs

221  
docs citations

221  
times ranked

8370  
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.	4.1	2
3	Characterization of plastically compressible solids via spherical indentation. Journal of the Mechanics and Physics of Solids, 2021, 148, 104283.	4.8	8
4	Constraint and size effects in confined layer plasticity. Journal of the Mechanics and Physics of Solids, 2021, 149, 104328.	4.8	7
5	Dynamic frictional slip along an interface between plastically compressible solids. International Journal of Fracture, 2021, 230, 179.	2.2	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.	2.1	1
7	Shear Transformation Zone (STZ) plasticity analysis of constrained shear. Mechanics of Materials, 2021, 160, 103935.	3.2	3
8	Energy dissipation rate and kinetic relations for Eshelby transformations. Journal of the Mechanics and Physics of Solids, 2020, 136, 103699.	4.8	14
9	Influence of Grain Size Distribution on Ductile Intergranular Crack Growth Resistance. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	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, .	1.4	4
11	A simple model for size effects in constrained shear. Extreme Mechanics Letters, 2019, 33, 100581.	4.1	14
12	Intergranular fracture prediction and microstructure design. International Journal of Fracture, 2019, 216, 135-148.	2.2	17
13	Limits on Transformation Strains for Non-Negative Dissipation. Journal of Applied Mechanics, Transactions ASME, 2019, 86, 051005.	2.2	4
14	Identification of Plastic Properties From Conical Indentation Using a Bayesian-Type Statistical Approach. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	2.2	14
15	Effect of Properties and Turgor Pressure on the Indentation Response of Plant Cells. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	2.2	5
16	Discrete shear-transformation-zone plasticity modeling of notched bars. Journal of the Mechanics and Physics of Solids, 2018, 111, 18-42.	4.8	20
17	Ductile failure modeling. International Journal of Fracture, 2016, 201, 29-80.	2.2	181
18	Discrete shear transformation zone plasticity. Extreme Mechanics Letters, 2016, 9, 21-29.	4.1	9

#	ARTICLE	IF	CITATIONS
19	Numerical implementation of non-local polycrystal plasticity using fast Fourier transforms. Journal of the Mechanics and Physics of Solids, 2016, 97, 333-351.	4.8	75
20	Grain boundary crack growth in metastable titanium $\hat{\Gamma}^2$ alloys. Acta Materialia, 2015, 82, 167-178.	7.9	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.	4.8	95
23	Statistics of ductile fracture surfaces: the effect of material parameters. International Journal of Fracture, 2013, 184, 137-149.	2.2	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.	7.9	26
25	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
26	The cohesive band model: a cohesive surface formulation with stress triaxiality. International Journal of Fracture, 2013, 181, 177-188.	2.2	27
27	Local Relative Density Modulates Failure and Strength in Vertically Aligned Carbon Nanotubes. ACS Nano, 2013, 7, 8593-8604.	14.6	33
28	Uniaxial Tension of a Class of Compressible Solids With Plastic Non-Normality. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	12
29	Prediction of Ductile Fracture Surface Roughness Scaling. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	2.2	20
30	Deformation of plastically compressible hardening-softening-hardening solids. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 1115-1124.	3.4	16
31	A microstructurally motivated description of the deformation of vertically aligned carbon nanotube structures. Applied Physics Letters, 2012, 100, .	3.3	15
32	Effect of specimen thickness on the creep response of a Ni-based single-crystal superalloy. Acta Materialia, 2012, 60, 5697-5711.	7.9	96
33	A finite strain, finite band method for modeling ductile fracture. International Journal of Plasticity, 2012, 28, 53-69.	8.8	49
34	Conical indentation of thick elastic spherical shells. Journal of Mechanics of Materials and Structures, 2011, 6, 443-451.	0.6	7
35	Analysis of uniaxial compression of vertically aligned carbon nanotubes. Journal of the Mechanics and Physics of Solids, 2011, 59, 2227-2237.	4.8	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.	4.8	27

#	ARTICLE	IF	CITATIONS
37	Slip modes and partitioning of energy during dynamic frictional sliding between identical elastic-viscoplastic solids. International Journal of Fracture, 2010, 162, 51-67.	2.2	15
38	Hybrid discrete dislocation models for fatigue crack growth. International Journal of Fatigue, 2010, 32, 1511-1520.	5.7	29
39	Size effects in aluminium alloy castings. Acta Materialia, 2010, 58, 3006-3013.	7.9	31
40	Effect of an interphase region on debonding of a CNT reinforced polymer composite. Composites Science and Technology, 2010, 70, 2207-2215.	7.8	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.	2.5	3
42	A finite thickness band method for ductile fracture analysis. International Journal of Plasticity, 2009, 25, 2349-2365.	8.8	69
43	Slip modes and partitioning of energy during dynamic frictional sliding between identical elastic-viscoplastic solids. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 51-67.	0.2	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.	4.8	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.	4.8	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.	4.8	32
47	Dynamic neck development in a polymer tube under internal pressure loading. International Journal of Solids and Structures, 2008, 45, 580-592.	2.7	12
48	An analysis of thickness effects in the Izod test. International Journal of Solids and Structures, 2008, 45, 3951-3966.	2.7	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.	8.8	104
50	Fatigue crack growth from a cracked elastic particle into a ductile matrix. Philosophical Magazine, 2008, 88, 3565-3583.	1.6	26
51	Multi-asperity contact: A comparison between discrete dislocation and crystal plasticity predictions. Philosophical Magazine, 2008, 88, 3713-3729.	1.6	23
52	Bulge formation and necking in a polymer tube under dynamic expansion. Modelling and Simulation in Materials Science and Engineering, 2008, 16, 085003.	2.0	3
53	Effect of Material Parameters in the Izod Test for Polymers. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 297-306.	0.2	0
54	Contact area and size effects in discrete dislocation modeling of wedge indentation. Journal of Materials Research, 2007, 22, 655-663.	2.6	32

#	ARTICLE	IF	CITATIONS
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.	4.7	0
57	An analysis of dislocation nucleation near a free surface. International Journal of Solids and Structures, 2007, 44, 1719-1732.	2.7	23
58	Discrete dislocation analysis of the wedge indentation of polycrystals. Acta Materialia, 2007, 55, 6408-6415.	7.9	24
59	Surface versus bulk nucleation of dislocations during contact. Journal of the Mechanics and Physics of Solids, 2007, 55, 1120-1144.	4.8	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.	0.2	0
61	Three dimensional microstructural effects on plane strain ductile crack growth. International Journal of Solids and Structures, 2006, 43, 6165-6179.	2.7	42
62	Mesh-independent discrete numerical representations of cohesive-zone models. Engineering Fracture Mechanics, 2006, 73, 160-177.	4.3	141
63	Plastic deformation of freestanding thin films: Experiments and modeling. Journal of the Mechanics and Physics of Solids, 2006, 54, 2089-2110.	4.8	197
64	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
65	Statistical aspects of discrete dislocation plasticity. Scripta Materialia, 2006, 54, 729-733.	5.2	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.	2.0	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.	2.0	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.	4.8	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.	4.8	57
70	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
71	Size effects in polycrystalline thin films analyzed by discrete dislocation plasticity. Thin Solid Films, 2005, 479, 329-338.	1.8	52
72	The stored energy of cold work: Predictions from discrete dislocation plasticity. Acta Materialia, 2005, 53, 4765-4779.	7.9	101

#	ARTICLE	IF	CITATIONS
73	Reply to "Comment on "dislocation dynamics is chaotic"™. Scripta Materialia, 2005, 52, 429-431.	5.2	2
74	Discrete dislocation modelling of submicron indentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 456-459.	5.6	38
75	Discrete dislocation plasticity analysis of crack-tip fields in polycrystalline materials. Philosophical Magazine, 2005, 85, 3047-3071.	1.6	17
76	Two hardening mechanisms in single crystal thin films studied by discrete dislocation plasticity. Philosophical Magazine, 2005, 85, 1507-1518.	1.6	24
77	Discrete vs smeared crack models for concrete fracture: bridging the gap. International Journal for Numerical and Analytical Methods in Geomechanics, 2004, 28, 583-607.	3.3	177
78	3D analyses of the effect of weld orientation in Charpy specimens. Engineering Fracture Mechanics, 2004, 71, 2179-2195.	4.3	27
79	Discrete dislocation plasticity analysis of static friction. Acta Materialia, 2004, 52, 3135-3149.	7.9	47
80	Relaxation of Thermal Stress by Dislocation Motion in Passivated Metal Interconnects. Journal of Materials Research, 2004, 19, 1216-1226.	2.6	4
81	Plastic Response of Thin Films Due to Thermal Cycling. Solid Mechanics and Its Applications, 2004, , 97-104.	0.2	0
82	Discrete Dislocation Predictions for Single Crystal Hardening: Tension VS Bending. Solid Mechanics and Its Applications, 2004, , 235-242.	0.2	0
83	A Cohesive Segments Approach For Dynamic Crack Growth. Solid Mechanics and Its Applications, 2004, , 299-306.	0.2	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.	2.2	12
86	A cohesive segments method for the simulation of crack growth. Computational Mechanics, 2003, 31, 69-77.	4.0	259
87	Finite strain discrete dislocation plasticity. Journal of the Mechanics and Physics of Solids, 2003, 51, 2057-2083.	4.8	63
88	Stochastic microcrack nucleation in lamellar solids. Engineering Fracture Mechanics, 2003, 70, 1869-1884.	4.3	14
89	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
90	Dynamic crack growth along a polymer composite"Homalite interface. Journal of the Mechanics and Physics of Solids, 2003, 51, 425-460.	4.8	55

#	ARTICLE	IF	CITATIONS
91	Discrete dislocation plasticity modeling of short cracks in single crystals. <i>Acta Materialia</i> , 2003, 51, 1-15.	7.9	93
92	Scaling of discrete dislocation predictions for near-threshold fatigue crack growth. <i>Acta Materialia</i> , 2003, 51, 4637-4651.	7.9	45
93	Discrete Dislocation Plasticity. <i>Key Engineering Materials</i> , 2003, 233-236, 13-24.	0.4	5
94	Discrete dislocation analysis of size effects in thin films. <i>Journal of Applied Physics</i> , 2003, 93, 5920-5928.	2.5	139
95	Plasticity in Polycrystalline Thin Films: a 2D Dislocation Dynamics Approach. <i>Materials Research Society Symposia Proceedings</i> , 2003, 779, 5201.	0.1	1
96	Simulations of Dislocation Dynamics in Aluminum Interconnects. <i>Materials Research Society Symposia Proceedings</i> , 2002, 731, 151.	0.1	2
97	An analysis of inclusion morphology effects on void nucleation. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2002, 10, 163-183.	2.0	54
98	Aspects of boundary-value problem solutions with three-dimensional dislocation dynamics. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2002, 10, 437-468.	2.0	236
99	Micromechanics Simulations of Fracture. <i>Annual Review of Materials Research</i> , 2002, 32, 141-162.	9.3	29
100	Discrete dislocation modeling of fatigue crack propagation. <i>Acta Materialia</i> , 2002, 50, 831-846.	7.9	124
101	Buckling of sandwich beams with compliant interfaces. <i>Computers and Structures</i> , 2002, 80, 1329-1335.	4.4	42
102	Size Effects in the Charpy V-Notch Test. <i>International Journal of Fracture</i> , 2002, 116, 275-296.	2.2	33
103	Boundary layers in constrained plastic flow: comparison of nonlocal and discrete dislocation plasticity. <i>Journal of the Mechanics and Physics of Solids</i> , 2001, 49, 1361-1395.	4.8	177
104	A discrete dislocation analysis of near-threshold fatigue crack growth. <i>Acta Materialia</i> , 2001, 49, 3189-3203.	7.9	102
105	A discrete dislocation analysis of rate effects on mode I crack growth. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 317, 37-43.	5.6	19
106	Plastic flow in a composite: a comparison of nonlocal continuum and discrete dislocation predictions. <i>International Journal of Solids and Structures</i> , 2001, 38, 833-853.	2.7	86
107	Crack growth in lamellar titanium aluminide. <i>International Journal of Fracture</i> , 2001, 111, 163-189.	2.2	41
108	Smaller is softer: an inverse size effect in a cast aluminum alloy. <i>Acta Materialia</i> , 2001, 49, 3071-3083.	7.9	37

#	ARTICLE	IF	CITATIONS
109	Discrete dislocation plasticity and crack tip fields in single crystals. <i>Journal of the Mechanics and Physics of Solids</i> , 2001, 49, 2133-2153.	4.8	73
110	Micromechanics of Fracture: Connecting Physics to Engineering. <i>MRS Bulletin</i> , 2001, 26, 211-214.	3.5	19
111	Analysis of the Charpy V-notch test for welds. <i>Engineering Fracture Mechanics</i> , 2000, 65, 627-643.	4.3	31
112	Buckling localization in a cylindrical panel under axial compression. <i>International Journal of Solids and Structures</i> , 2000, 37, 6825-6842.	2.7	16
113	Computational mechanics at the mesoscale. <i>Acta Materialia</i> , 2000, 48, 105-124.	7.9	166
114	A discrete dislocation analysis of mode I crack growth. <i>Journal of the Mechanics and Physics of Solids</i> , 2000, 48, 1133-1157.	4.8	150
115	Numerical modeling of the ductile-brittle transition. <i>International Journal of Fracture</i> , 2000, 101, 73-97.	2.2	49
116	Microcrack nucleation and growth in elastic lamellar solids. <i>International Journal of Fracture</i> , 2000, 105, 321-342.	2.2	15
117	Simulated small-angle scattering patterns for a plastically deformed model composite material. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2000, 8, 557-581.	2.0	5
118	Energy dissipation in dynamic fracture of brittle materials. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1999, 7, 573-586.	2.0	40
119	The effect of bond strength and loading rate on the conditions governing the attainment of intersonic crack growth along interfaces. <i>Journal of the Mechanics and Physics of Solids</i> , 1999, 47, 2411-2449.	4.8	108
120	A discrete dislocation analysis of bending. <i>International Journal of Plasticity</i> , 1999, 15, 837-868.	8.8	158
121	A micromechanical analysis of the ductile-brittle transition at a weld. <i>Engineering Fracture Mechanics</i> , 1999, 62, 317-338.	4.3	18
122	Modeling and Simulation of Dynamic Fragmentation in Brittle Materials. <i>International Journal of Fracture</i> , 1999, 96, 101-125.	2.2	112
123	The effect of plasticity on dynamic crack growth across an interface. <i>International Journal of Fracture</i> , 1998, 94, 383-399.	2.2	16
124	Sensitivity analysis for failure and damage in dynamically loaded tensile bars. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998, 151, 461-478.	6.6	13
125	Effect of inhomogeneities on dynamic crack growth in an elastic solid. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1997, 5, 489-516.	2.0	28
126	Dynamic crack growth across an interface. <i>International Journal of Fracture</i> , 1997, 85, 381-402.	2.2	59



#	ARTICLE	IF	CITATIONS
127	Numerical modeling of crack growth under dynamic loading conditions. Computational Mechanics, 1997, 19, 463-469.	4.0	50
128	Comparison of discrete dislocation and continuum plasticity predictions for a composite material. Acta Materialia, 1997, 45, 3163-3179.	7.9	198
129	A numerical study of dynamic crack growth in elastic-viscoplastic solids. International Journal of Solids and Structures, 1997, 34, 769-787.	2.7	71
130	Nonlocal effects on localization in a void-sheet. International Journal of Solids and Structures, 1997, 34, 2221-2238.	2.7	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.	2.7	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.	4.8	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.	4.8	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.	2.2	74
135	Numerical simulations of dynamic crack growth along an interface. International Journal of Fracture, 1996, 74, 289-324.	2.2	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, 1-10.	5.6	41
137	Effects of nonlocal damage in porous plastic solids. International Journal of Solids and Structures, 1995, 32, 1063-1077.	2.7	216
138	Analysis of a brittle-ductile transition under dynamic shear loading. International Journal of Solids and Structures, 1995, 32, 2571-2590.	2.7	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.	4.8	75
140	Effective plastic response of two-phase composites. Acta Metallurgica Et Materialia, 1995, 43, 1701-1722.	1.8	105
141	Mesh effects in the analysis of dynamic ductile crack growth. Engineering Fracture Mechanics, 1994, 47, 75-91.	4.3	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.	5.6	10
143	Ductile failure analyses on massively parallel computers. Computer Methods in Applied Mechanics and Engineering, 1994, 119, 283-309.	6.6	36
144	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

#	ARTICLE	IF	CITATIONS
145	Finite element simulations of shear localization in plate impact. <i>Journal of the Mechanics and Physics of Solids</i> , 1994, 42, 423-458.	4.8	105
146	Effective elastic response of two-phase composites. <i>Acta Metallurgica Et Materialia</i> , 1994, 42, 77-97.	1.8	128
147	3D analysis of failure modes in the Charpy impact test. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1994, 2, 617-635.	2.0	52
148	Dynamic 3D analysis of the Charpy V-notch test. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1993, 1, 467-484.	2.0	29
149	Void nucleation by inclusion debonding in a crystal matrix. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1993, 1, 111-132.	2.0	616
150	An analysis of equilibrium dislocation distributions. <i>Acta Metallurgica Et Materialia</i> , 1993, 41, 625-642.	1.8	117
151	Thermally and mechanically induced residual strains in Al-SiC composites. <i>Acta Metallurgica Et Materialia</i> , 1992, 40, 2391-2412.	1.8	85
152	Effect of crack meandering on dynamic, ductile fracture. <i>Journal of the Mechanics and Physics of Solids</i> , 1992, 40, 447-471.	4.8	70
153	The influence of nucleation criterion on shear localization in rate-sensitive porous plastic solids. <i>International Journal of Plasticity</i> , 1992, 8, 315-330.	8.8	13
154	Three-dimensional analysis of creep in a metal matrix composite. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1992, 158, 129-137.	5.6	24
155	Summary report: computational issues in the mechanical behavior of metals and intermetallics. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1992, 159, 1-34.	5.6	20
156	Stability of solids with interfaces. <i>Journal of the Mechanics and Physics of Solids</i> , 1992, 40, 613-640.	4.8	55
157	Indentation of porous solids. <i>International Journal of Solids and Structures</i> , 1992, 29, 1613-1636.	2.7	94
158	Micromechanical modelling of interfacial decohesion. <i>Ultramicroscopy</i> , 1992, 40, 203-214.	1.9	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. <i>Acta Metallurgica Et Materialia</i> , 1991, 39, 2317-2335.	1.8	340
161	An analysis of the effect of residual stresses on deformation and damage mechanisms in Al <sub>i</sub> -SiC composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1991, 132, 31-38.	5.6	77
162	Effect of boundaries and interfaces on shear-band localization. <i>International Journal of Solids and Structures</i> , 1991, 28, 859-877.	2.7	53

#	ARTICLE	IF	CITATIONS
163	A numerical study of void distribution effects on dynamic, ductile crack growth. <i>Engineering Fracture Mechanics</i> , 1991, 38, 157-173.	4.3	57
164	An analysis of dynamic, ductile crack growth in a double edge cracked specimen. <i>International Journal of Fracture</i> , 1991, 49, 41-67.	2.2	117
165	An analysis of residual stress formation in whisker-reinforced Al <sub>2</sub> O <sub>3</sub> /SiC composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1990, 125, 129-140.	5.6	70
166	An analysis of tensile decohesion along an interface. <i>Journal of the Mechanics and Physics of Solids</i> , 1990, 38, 289-324.	4.8	524
167	The baushinger effect in whisker-reinforced metal-matrix composites. <i>Scripta Metallurgica Et Materialia</i> , 1990, 24, 1203-1208.	1.0	42
168	Damage Evolution, Instability and Fracture in Ductile Solids. <i>NATO ASI Series Series B: Physics</i> , 1990, , 219-238.	0.2	0
169	On microstructural evolution and micromechanical modelling of deformation of a whisker-reinforced metal-matrix composite. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1989, 107, 49-61.	5.6	231
170	A finite element method for analyzing localization in rate dependent solids at finite strains. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1989, 73, 235-258.	6.6	42
171	An analysis of ductile failure by grain boundary void growth. <i>Acta Metallurgica</i> , 1989, 37, 99-120.	2.1	52
172	An experimental and numerical study of deformation in metal-ceramic composites. <i>Acta Metallurgica</i> , 1989, 37, 3029-3050.	2.1	739
173	COMPUTATIONAL MICROMECHANICS. , 1989, , 217-240.		9
174	Void growth and coalescence in porous plastic solids. <i>International Journal of Solids and Structures</i> , 1988, 24, 835-853.	2.7	680
175	An analysis of the temperature and rate dependence of Charpy V-notch energies for a high nitrogen steel. <i>International Journal of Fracture</i> , 1988, 37, 197-215.	2.2	73
176	Material rate dependence and mesh sensitivity in localization problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1988, 67, 69-85.	6.6	719
177	Void growth and failure in notched bars. <i>Journal of the Mechanics and Physics of Solids</i> , 1988, 36, 317-351.	4.8	203
178	Continuum mechanics studies of plastic instabilities. <i>Revue De Physique Appliquée</i> , 1988, 23, 585-593.	0.4	15
179	Void nucleation at fiber ends in Al <sub>2</sub> O <sub>3</sub> /SiC composites. <i>Scripta Metallurgica</i> , 1987, 21, 705-710.	1.2	175
180	A finite element method for localized failure analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1987, 61, 189-214.	6.6	510

#	ARTICLE	IF	CITATIONS
181	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
182	Finite element analyses of shear localization in rate and temperature dependent solids. Mechanics of Materials, 1986, 5, 339-361.	3.2	128
183	An analysis of shear band development incorporating heat conduction. Mechanics of Materials, 1986, 5, 363-373.	3.2	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.	4.8	99
185	A numerical study of localized deformation in bi-crystals. Mechanics of Materials, 1985, 4, 417-435.	3.2	7
186	Finite element analysis of crystalline solids. Computer Methods in Applied Mechanics and Engineering, 1985, 52, 689-708.	6.6	124
187	A comparison of methods for calculating energy release rates. Engineering Fracture Mechanics, 1985, 21, 405-421.	4.3	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.	4.5	31
190	A tangent modulus method for rate dependent solids. Computers and Structures, 1984, 18, 875-887.	4.4	633
191	An analysis of ductile rupture in notched bars. Journal of the Mechanics and Physics of Solids, 1984, 32, 461-490.	4.8	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.	2.2	186
195	Material rate dependence and localized deformation in crystalline solids. Acta Metallurgica, 1983, 31, 1951-1976.	2.1	1,355
196	Effects of triaxial stressing on creep cavitation of grain boundaries. Acta Metallurgica, 1983, 31, 919-926.	2.1	97
197	A finite element model of the infarcted left ventricle. Journal of Biomechanics, 1983, 16, 45-58.	2.1	22
198	An analysis of nonuniform and localized deformation in ductile single crystals. Acta Metallurgica, 1982, 30, 1087-1119.	2.1	1,210

#	ARTICLE	IF	CITATIONS
199	On the development of shear bands in pure bending. International Journal of Solids and Structures, 1982, 18, 121-138.	2.7	83
200	Instability and failure of internally pressurized ductile metal cylinders. Journal of the Mechanics and Physics of Solids, 1982, 30, 121-154.	4.8	67
201	Void nucleation effects on shear localization in porous plastic solids. International Journal of Fracture, 1982, 19, 163-182.	2.2	190
202	On localized thermal track buckling. International Journal of Mechanical Sciences, 1981, 23, 577-587.	6.7	47
203	Flow localization in the plane strain tensile test. Journal of the Mechanics and Physics of Solids, 1981, 29, 115-142.	4.8	303
204	An analysis of the mechanical disadvantage of myocardial infarction in the canine left ventricle.. Circulation Research, 1980, 47, 728-741.	4.5	216
205	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
206	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
207	Inflation of spherical rubber balloons. International Journal of Solids and Structures, 1977, 13, 409-421.	2.7	120
208	Necking of biaxially stretched elastic-plastic circular plates. Journal of the Mechanics and Physics of Solids, 1977, 25, 159-183.	4.8	78
209	An analysis of the imperfection sensitivity of square elastic-plastic plates under axial compression. International Journal of Solids and Structures, 1976, 12, 185-201.	2.7	34
210	Necking of pressurized spherical membranes. Journal of the Mechanics and Physics of Solids, 1976, 24, 339-359.	4.8	30
211	On the buckling of elastic-plastic columns with asymmetric cross-sections. International Journal of Mechanical Sciences, 1975, 17, 419-424.	6.7	23
212	Postbifurcation behavior and imperfection sensitivity of elastic-plastic circular plates. International Journal of Mechanical Sciences, 1975, 17, 1-13.	6.7	39
213	Buckling of eccentrically stiffened elastic-plastic panels on two simple supports or multiply supported. International Journal of Solids and Structures, 1975, 11, 647-663.	2.7	23
214	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
215	Axisymmetric Buckling of Elastic-Plastic Annular Plates. AIAA Journal, 1974, 12, 1594-1596.	2.6	3
216	A numerical study of necking in circular cylindrical bar. Journal of the Mechanics and Physics of Solids, 1972, 20, 111-127.	4.8	274