List of Publications by Year in descending order

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		61857	56606
138	7,310	43	83
papers	citations	h-index	g-index
142	142	142	2450
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Variational estimates for the effective properties and field statistics of composites with variable particle interaction strengths. Journal of the Mechanics and Physics of Solids, 2022, 167, 104996.	2.3	6
2	Differential variational estimates for the macroscopic response and field statistics of elasto-viscoplastic polycrystals. Journal of the Mechanics and Physics of Solids, 2021, 147, 104202.	2.3	3
3	Tangent second-order homogenisation estimates for incompressible hyperelastic composites with fibrous microstructures and anisotropic phases. Journal of the Mechanics and Physics of Solids, 2021, 147, 104251.	2.3	7
4	Macroscopic response and microstructure evolution in viscoplastic polycrystals with pressurized pores. International Journal of Fracture, 2021, 230, 43.	1.1	0
5	Statistics of the stress, strain-rate and spin fields in viscoplastic polycrystals. International Journal of Solids and Structures, 2021, 217-218, 193-214.	1.3	3
6	Field statistics in linearized elastic and viscous composites and polycrystals. International Journal of Solids and Structures, 2021, 224, 111030.	1.3	5
7	Anisotropic Oldroyd-type models for non-colloidal suspensions of viscoelastic particles in Newtonian and yield-stress fluids via homogenization. Journal of Non-Newtonian Fluid Mechanics, 2021, 295, 104625.	1.0	7
8	Fiber-constrained dielectric elastomer composites: Finite deformation response and instabilities under non-aligned loadings. International Journal of Solids and Structures, 2020, 184, 73-98.	1.3	6
9	Reinforced elastomers: Homogenization, macroscopic stability and relaxation. Journal of the Mechanics and Physics of Solids, 2020, 136, 103689.	2.3	5
10	A differential homogenization method for estimating the macroscopic response and field statistics of particulate viscoelastic composites. International Journal of Solids and Structures, 2020, 204-205, 199-219.	1.3	16
11	Theoretical predictions for the rheology of dispersions of highly deformable particles under large amplitude oscillatory shear. Journal of Fluid Mechanics, 2020, 897, .	1.4	6
12	On the optimality of the variational linear comparison bounds for porous viscoplastic materials. Journal of the Mechanics and Physics of Solids, 2020, 138, 103898.	2.3	1
13	Exact results for weakly nonlinear composites and implications for homogenization methods. Comptes Rendus - Mecanique, 2020, 348, 893-909.	0.3	1
14	Modeling Sea Ice. Notices of the American Mathematical Society, 2020, 67, 1.	0.1	13
15	A microstructurally-based, multi-scale, continuum-mechanical model for the passive behaviour of skeletal muscle tissue. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 97, 171-186.	1.5	40
16	Constitutive models for anisotropic dielectric elastomer composites: Finite deformation response and instabilities. Mechanics Research Communications, 2019, 96, 75-86.	1.0	7
17	A MULTIPHASE HOMOGENIZATION MODEL FOR THE VISCOPLASTIC RESPONSE OF INTACT SEA ICE: THE EFFECT OF POROSITY AND CRYSTALLOGRAPHIC TEXTURE. International Journal for Multiscale Computational Engineering, 2019, 17, 121-150.	0.8	2
18	A multi-scale homogenization model for fine-grained porous viscoplastic polycrystals: I – Finite-strain theory Journal of the Mechanics and Physics of Solids, 2018, 115, 102-122	2.3	19

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19	A multi-scale homogenization model for fine-grained porous viscoplastic polycrystals: II – Applications to FCC and HCP materials. Journal of the Mechanics and Physics of Solids, 2018, 115, 77-101.	2.3	10
20	A symmetric fully optimized secondâ€order method for nonlinear homogenization. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2018, 98, 222-254.	0.9	11
21	Fully optimized second-order homogenization estimates for the macroscopic response and texture evolution of low-symmetry viscoplastic polycrystals. International Journal of Plasticity, 2018, 110, 272-293.	4.1	16
22	Macroscopic instabilities and domain formation in neo-Hookean laminates. Journal of the Mechanics and Physics of Solids, 2018, 118, 98-114.	2.3	12
23	A finite-strain homogenization model for viscoplastic porous single crystals: I – Theory. Journal of the Mechanics and Physics of Solids, 2017, 107, 560-579.	2.3	33
24	A finite-strain homogenization model for viscoplastic porous single crystals: II – Applications. Journal of the Mechanics and Physics of Solids, 2017, 107, 580-602.	2.3	15
25	Macroscopic response of strongly anisotropic porous viscoplastic single crystals and applications to ice. Extreme Mechanics Letters, 2017, 10, 41-49.	2.0	7
26	A homogenisation method for the multiscale modelling of transversely isotropic skeletal muscle tissue. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 183-184.	0.2	0
27	Macroscopic rheological behavior of suspensions of soft solid particles in yield stress fluids. Journal of Non-Newtonian Fluid Mechanics, 2016, 234, 139-161.	1.0	14
28	Incremental variational procedure for elasto-viscoplastic composites and application to polymer- and metal-matrix composites reinforced by spheroidal elastic particles. International Journal of Solids and Structures, 2016, 97-98, 668-686.	1.3	32
29	Macroscopic response of particle-reinforced elastomers subjected to prescribed torques or rotations on the particles. Journal of the Mechanics and Physics of Solids, 2016, 91, 240-264.	2.3	9
30	Multiscale modelling of skeletal muscle tissue by incorporating microstructural effects. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 75-76.	0.2	3
31	Macroscopic constitutive relations for elastomers reinforced with short aligned fibers: Instabilities and post-bifurcation response. Journal of the Mechanics and Physics of Solids, 2016, 97, 37-67.	2.3	19
32	Stationary variational estimates for the effective response and field fluctuations in nonlinear composites. Journal of the Mechanics and Physics of Solids, 2016, 96, 660-682.	2.3	36
33	Towards effective mechanical properties of skeletal muscle tissue via homogenisation. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 83-84.	0.2	3
34	The rheology of non-dilute dispersions of highly deformable viscoelastic particles in Newtonian fluids. Journal of Fluid Mechanics, 2015, 763, 386-432.	1.4	20
35	Fully optimized second-order variational estimates for the macroscopic response and field statistics in viscoplastic crystalline composites. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150665.	1.0	17
36	The evolution of pore shape and orientation in plastically deforming metals: Implications for macroscopic response and shear localization. Mechanics of Materials, 2015, 90, 47-68.	1.7	20

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37	Electromechanical instabilities in fiber-constrained, dielectric-elastomer composites subjected to all-around dead-loading. Mathematics and Mechanics of Solids, 2015, 20, 729-759.	1.5	16
38	On the macroscopic response, microstructure evolution, and macroscopic stability of short-fiber-reinforced elastomers at finite strains: II – Representative examples. Philosophical Magazine, 2014, 94, 1068-1094.	0.7	7
39	Magnetoactive elastomers with periodic and random microstructures. International Journal of Solids and Structures, 2014, 51, 3012-3024.	1.3	60
40	On the macroscopic response, microstructure evolution, and macroscopic stability of short-fibre-reinforced elastomers at finite strains: I – Analytical results. Philosophical Magazine, 2014, 94, 1031-1067.	0.7	9
41	Anisotropic finite-strain models for porous viscoplastic materials with microstructure evolution. International Journal of Solids and Structures, 2014, 51, 981-1002.	1.3	21
42	Fiber-constrained, dielectric-elastomer composites: Finite-strain response and stability analysis. Journal of the Mechanics and Physics of Solids, 2014, 68, 211-238.	2.3	50
43	Tangent Second-Order Estimates for the Large-Strain, Macroscopic Response of Particle-Reinforced Elastomers. Journal of Elasticity, 2013, 112, 139-183.	0.9	22
44	Iterated linear comparison bounds for viscoplastic porous materials with "ellipsoidal― microstructures. Journal of the Mechanics and Physics of Solids, 2013, 61, 701-725.	2.3	35
45	Giant field-induced strains in magnetoactive elastomer composites. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130385.	1.0	44
46	A finite-strain constitutive model for magnetorheological elastomers: Magnetic torques and fiber rotations. Journal of the Mechanics and Physics of Solids, 2013, 61, 1065-1090.	2.3	94
47	Dynamics and rheology of elastic particles in an extensional flow. Journal of Fluid Mechanics, 2013, 715, 573-596.	1.4	13
48	Dielectric elastomer composites: small-deformation theory and applications. Philosophical Magazine, 2013, 93, 2769-2801.	0.7	15
49	Estimates for two-phase nonlinear conductors via iterated homogenization. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20120626.	1.0	8
50	Shape Dynamics and Rheology of Soft Elastic Particles in a Shear Flow. Physical Review Letters, 2012, 108, 058302.	2.9	44
51	Effects of internal pore pressure on closed-cell elastomeric foams. International Journal of Solids and Structures, 2012, 49, 2793-2798.	1.3	18
52	Response to the comments by Hucthinson and Tvergaard. International Journal of Solids and Structures, 2012, 49, 3486.	1.3	0
53	Multi-scale homogenization-based modeling of semi-crystalline polymers. Philosophical Magazine, 2012, 92, 925-958.	0.7	9
54	Bounds for nonlinear composites via iterated homogenization. Journal of the Mechanics and Physics of Solids, 2012, 60, 1583-1604.	2.3	28

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55	A magnetically anisotropic, ellipsoidal inclusion subjected to a non-aligned magnetic field in an elastic medium. Comptes Rendus - Mecanique, 2012, 340, 205-218.	2.1	15
56	A finite-strain constitutive theory for electro-active polymer composites via homogenization. International Journal of Non-Linear Mechanics, 2012, 47, 293-306.	1.4	73
57	The effect of particle shape and distribution on the macroscopic behavior of magnetoelastic composites. International Journal of Solids and Structures, 2012, 49, 1-17.	1.3	72
58	Influence of the Lode parameter and the stress triaxiality on the failure of elasto-plastic porous materials. International Journal of Solids and Structures, 2012, 49, 1325-1342.	1.3	165
59	Modeling microstructural effects in dilatational plasticity of polycrystalline materials. Procedia IUTAM, 2012, 3, 314-330.	1.2	5
60	Homogenization estimates for multi-scale nonlinear composites. European Journal of Mechanics, A/Solids, 2011, 30, 828-843.	2.1	26
61	Homogenization-based constitutive models for magnetorheological elastomers at finite strain. Journal of the Mechanics and Physics of Solids, 2011, 59, 194-215.	2.3	157
62	Dilatational viscoplasticity of polycrystalline solids with intergranular cavities. Philosophical Magazine, 2011, 91, 3038-3067.	0.7	65
63	Variational estimates for the effective response and field statistics in thermoelastic composites with intra-phase property fluctuations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 2224-2246.	1.0	17
64	Rheology of a suspension of elastic particles in a viscous shear flow. Journal of Fluid Mechanics, 2011, 687, 209-237.	1.4	46
65	Macroscopic response and stability in lamellar nanostructured elastomers with "oriented―and "unoriented―polydomain microstructures. Mechanics of Materials, 2010, 42, 451-468.	1.7	15
66	Microscopic and macroscopic instabilities in finitely strained fiber-reinforced elastomers. Journal of the Mechanics and Physics of Solids, 2010, 58, 1776-1803.	2.3	70
67	Microstructure evolution in hyperelastic laminates and implications for overall behavior and macroscopic stability. Mechanics of Materials, 2009, 41, 364-374.	1.7	26
68	A general hyperelastic model for incompressible fiber-reinforced elastomers. Journal of the Mechanics and Physics of Solids, 2009, 57, 268-286.	2.3	65
69	Onset of macroscopic instabilities in fiber-reinforced elastomers at finite strain. Journal of the Mechanics and Physics of Solids, 2009, 57, 1828-1850.	2.3	36
70	A finite-strain model for anisotropic viscoplastic porous media: I – Theory. European Journal of Mechanics, A/Solids, 2009, 28, 387-401.	2.1	106
71	A finite-strain model for anisotropic viscoplastic porous media: II – Applications. European Journal of Mechanics, A/Solids, 2009, 28, 402-416.	2.1	56
72	Infinite-contrast periodic composites with strongly nonlinear behavior: Effective-medium theory versus full-field simulations. International Journal of Solids and Structures, 2009, 46, 3365-3382.	1.3	38

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73	Localization of elastic deformation in strongly anisotropic, porous, linear materials with periodic microstructures: Exact solutions and dilute expansions. Journal of the Mechanics and Physics of Solids, 2008, 56, 1245-1268.	2.3	15
74	Multiscale modeling of oriented thermoplastic elastomers with lamellar morphology. Journal of the Mechanics and Physics of Solids, 2008, 56, 3206-3223.	2.3	11
75	A homogenization-based constitutive model for two-dimensional viscoplastic porous media. Comptes Rendus - Mecanique, 2008, 336, 79-90.	2.1	20
76	A homogenization-based constitutive model for isotropic viscoplastic porous media. International Journal of Solids and Structures, 2008, 45, 3392-3409.	1.3	59
77	Micromechanical modeling of the viscoplastic behavior of olivine. Journal of Geophysical Research, 2008, 113, .	3.3	55
78	Linear comparison estimates for the effective resistivity of three-dimensional nonlinear polycrystals. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 2391-2410.	1.0	0
79	Effective-medium theory for infinite-contrast two-dimensionally periodic linear composites with strongly anisotropic matrix behavior: Dilute limit and crossover behavior. Physical Review B, 2008, 78, .	1.1	16
80	Self-consistent modelling of the mechanical behaviour of viscoplastic polycrystals incorporating intragranular field fluctuations. Philosophical Magazine, 2007, 87, 4287-4322.	0.7	280
81	Field statistics in nonlinear composites. I. Theory. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2007, 463, 183-202.	1.0	54
82	Field statistics in nonlinear composites. II. Applications. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2007, 463, 203-222.	1.0	13
83	Variational linear comparison bounds for nonlinear composites with anisotropic phases. I. General results. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2007, 463, 907-924.	1.0	27
84	Variational linear comparison bounds for nonlinear composites with anisotropic phases. II. Crystalline materials. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2007, 463, 925-943.	1.0	19
85	Homogenization estimates for fiber-reinforced elastomers with periodic microstructures. International Journal of Solids and Structures, 2007, 44, 5953-5979.	1.3	43
86	Microscopic and macroscopic instabilities in finitely strained porous elastomers. Journal of the Mechanics and Physics of Solids, 2007, 55, 900-938.	2.3	111
87	Homogenization-based constitutive models for porous elastomers and implications for macroscopic instabilities: l—Analysis. Journal of the Mechanics and Physics of Solids, 2007, 55, 1677-1701.	2.3	48
88	Homogenization-based constitutive models for porous elastomers and implications for macroscopic instabilities: Il—Results. Journal of the Mechanics and Physics of Solids, 2007, 55, 1702-1728.	2.3	37
89	Second-order theory for nonlinear composites and application to isotropic constituents. Comptes Rendus - Mecanique, 2006, 334, 575-581.	2.1	20
90	On the overall behavior, microstructure evolution, and macroscopic stability in reinforced rubbers at large deformations: I—Theory. Journal of the Mechanics and Physics of Solids, 2006, 54, 807-830.	2.3	89

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91	On the overall behavior, microstructure evolution, and macroscopic stability in reinforced rubbers at large deformations: II—Application to cylindrical fibers. Journal of the Mechanics and Physics of Solids, 2006, 54, 831-863.	2.3	67
92	Macroscopic behavior and field fluctuations in viscoplastic composites: Second-order estimates versus full-field simulations. Journal of the Mechanics and Physics of Solids, 2006, 54, 1029-1063.	2.3	98
93	Void growth in power-law creeping solids: Effect of surface diffusion and surface energy. International Journal of Solids and Structures, 2005, 42, 6202-6225.	1.3	5
94	Second-order estimates for nonlinear isotropic composites with spherical pores and rigid particles. Comptes Rendus - Mecanique, 2005, 333, 147-154.	2.1	21
95	Improving the Self-Consistent Predictions of Texture Development of Polycrystals Incorporating Intragranular Field Fluctuations. Materials Science Forum, 2005, 495-497, 955-964.	0.3	6
96	Homogenization estimates for texture evolution in halite. Tectonophysics, 2005, 406, 179-195.	0.9	19
97	Second-Order Homogenization Estimates Incorporating Field Fluctuations in Finite Elasticity. Mathematics and Mechanics of Solids, 2004, 9, 243-270.	1.5	29
98	Second-Order Estimates for the Macroscopic Response and Loss of Ellipticity in Porous Rubbers at Large Deformations. Journal of Elasticity, 2004, 76, 247-287.	0.9	51
99	Second-order theory for the effective behavior and field fluctuations in viscoplastic polycrystals. Journal of the Mechanics and Physics of Solids, 2004, 52, 467-495.	2.3	71
100	Homogenization estimates for the average behavior and field fluctuations in cubic and hexagonal viscoplastic polycrystals. Journal of the Mechanics and Physics of Solids, 2004, 52, 1175-1211.	2.3	29
101	Numerical methods for porous metals with deformation-induced anisotropy. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 3767-3805.	3.4	72
102	On the accuracy of the self-consistent approximation for polycrystals: comparison with full-field numerical simulations. Acta Materialia, 2004, 52, 5347-5361.	3.8	140
103	Field fluctuations and macroscopic properties for nonlinear composites. International Journal of Solids and Structures, 2003, 40, 7015-7033.	1.3	12
104	Second-order estimates for the large-deformation response of particle-reinforced rubbers. Comptes Rendus - Mecanique, 2003, 331, 1-8.	2.1	13
105	Variational self-consistent estimates for texture evolution in viscoplastic polycrystals. Acta Materialia, 2003, 51, 5425-5437.	3.8	26
106	Yield criteria for porous media in plane strain: second-order estimates versus numerical results. Comptes Rendus - Mecanique, 2002, 330, 741-747.	2.1	27
107	Second-order homogenization estimates for nonlinear composites incorporating field fluctuations: Il—applications. Journal of the Mechanics and Physics of Solids, 2002, 50, 759-782.	2.3	87
108	Second-order homogenization estimates for nonlinear composites incorporating field fluctuations: I—theory. Journal of the Mechanics and Physics of Solids, 2002, 50, 737-757.	2.3	317

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109	Variational self-consistent estimates for cubic viscoplastic polycrystals: the effects of grain anisotropy and shape. Journal of the Mechanics and Physics of Solids, 2001, 49, 313-340.	2.3	48
110	Second-order estimates for the effective behaviour of viscoplastic polycrystalline materials. Journal of the Mechanics and Physics of Solids, 2001, 49, 2737-2764.	2.3	33
111	Accurate estimates for the creep behavior of hexagonal polycrystals. Acta Materialia, 2001, 49, 329-337.	3.8	21
112	Bounds on the self-consistent approximation for nonlinear media and implications for the second-order method. Comptes Rendus Mecanique, 2001, 329, 571-577.	0.2	5
113	A second-order homogenization method in finite elasticity and applications to black-filled elastomers. Journal of the Mechanics and Physics of Solids, 2000, 48, 1389-1411.	2.3	90
114	Variational self-consistent estimates for viscoplastic polycrystals with highly anisotropic grains. Comptes Rendus De L'Academie De Sciences - Serie IIb: Mecanique, Physique, Chimie, Astronomie, 2000, 328, 11-17.	0.1	4
115	Estimations homogénéisées pour les composites hyperélastiques et applications aux élastomères renforcés. Comptes Rendus De L'Academie De Sciences - Serie IIb: Mecanique, Physique, Chimie, Astronomie, 1999, 327, 1297-1304.	0.1	0
116	The second-order procedure: exact vs approximate results for isotropic, two-phase composites. Journal of the Mechanics and Physics of Solids, 1999, 47, 2171-2185.	2.3	6
117	Stable crack growth along a brittleductile interface—II. Small scale yielding solutions and interfacial toughness predictions. International Journal of Solids and Structures, 1999, 36, 1-34.	1.3	14
118	A general constitutive theory for linear and nonlinear particulate media with microstructure evolution. Journal of the Mechanics and Physics of Solids, 1998, 46, 427-465.	2.3	106
119	Exact second-order estimates of the self-consistent type for nonlinear composite materials. Mechanics of Materials, 1998, 28, 9-22.	1.7	4
120	Three-point bounds and other estimates for strongly nonlinear composites. Physical Review B, 1998, 57, 12077-12083.	1.1	14
121	Nonlinear Composites. Advances in Applied Mechanics, 1997, , 171-302.	1.4	471
122	Strongly nonlinear composites: A second-order theory for estimating transport properties. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 224, 163-168.	0.9	5
123	The finite deformation of nonlinear composite materials—II. Evolution of the microstructure. International Journal of Solids and Structures, 1996, 33, 1287-1303.	1.3	26
124	Exact second-order estimates for the effective mechanical properties of nonlinear composite materials. Journal of the Mechanics and Physics of Solids, 1996, 44, 827-862.	2.3	295
125	Steady-state creep of fiber-reinforced composites: constitutive equations and computational issues. International Journal of Solids and Structures, 1995, 32, 2219-2244.	1.3	30
126	The effect of spatial distribution on the effective behavior of composite materials and cracked media. Journal of the Mechanics and Physics of Solids, 1995, 43, 1919-1951.	2.3	637

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127	Constitutive models for porous materials with evolving microstructure. Journal of the Mechanics and Physics of Solids, 1994, 42, 1459-1497.	2.3	165
128	Constitutive models for ductile solids reinforced by rigid spheroidal inclusions. Mechanics of Materials, 1993, 15, 279-300.	1.7	21
129	Elastoplastic constitutive relations for fiber-reinforced solids. International Journal of Solids and Structures, 1993, 30, 1865-1890.	1.3	43
130	The Effective Behavior of Nonlinear Composites: A Comparison between Two Methods. Materials Science Forum, 1993, 123-125, 351-360.	0.3	5
131	Effective properties of nonlinear inhomogeneous dielectrics. Physical Review B, 1992, 46, 4387-4394.	1.1	56
132	A New Variational Principle and Its Application to Nonlinear Heterogeneous Systems. SIAM Journal on Applied Mathematics, 1992, 52, 1321-1341.	0.8	45
133	New variational principles in plasticity and their application to composite materials. Journal of the Mechanics and Physics of Solids, 1992, 40, 1757-1788.	2.3	212
134	Stable crack growth under mixed-mode conditions. Journal of the Mechanics and Physics of Solids, 1992, 40, 1053-1103.	2.3	32
135	On the ductility of laminated materials. International Journal of Solids and Structures, 1992, 29, 2329-2353.	1.3	31
136	Stable crack growth along a brittle/ductile interface—I. Near-tip fields. International Journal of Solids and Structures, 1991, 27, 105-133.	1.3	28
137	The effective mechanical properties of nonlinear isotropic composites. Journal of the Mechanics and Physics of Solids, 1991, 39, 45-71.	2.3	804
138	Asymptotic fields in steady crack growth with linear strain-hardening. Journal of the Mechanics and Physics of Solids, 1987, 35, 227-268.	2.3	72