

Michael Zaiser

List of Publications by Year in descending order

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165
papers

5,817
citations

76326

40
h-index

82547

72
g-index

165
all docs

165
docs citations

165
times ranked

3125
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermodynamic considerations on a class of dislocation-based constitutive models. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 159, 104735.	4.8	11
2	Size-dependent yield stress in ultrafine-grained polycrystals: A multiscale discrete dislocation dynamics study. <i>International Journal of Plasticity</i> , 2022, 149, 103183.	8.8	21
3	Pinning of dislocations in disordered alloys: effects of dislocation orientation. <i>Materials Theory</i> , 2022, 6, .	4.3	3
4	Effects of elasticity and dislocation core structure on the interaction of dislocations with embedded CNTs in aluminium: An atomistic simulation study. <i>Materialia</i> , 2022, 21, 101347.	2.7	7
5	Evading strength and ductility trade-off in an inverse nacre structured magnesium matrix nanocomposite. <i>Acta Materialia</i> , 2022, 228, 117730.	7.9	36
6	Statistical aspects of interface adhesion and detachment of hierarchically patterned structures. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2022, 2022, 023301.	2.3	3
7	Atomistic aspects of load transfer and fracture in CNT-reinforced aluminium. <i>Materialia</i> , 2022, 22, 101376.	2.7	3
8	Pinning of extended dislocations in atomically disordered crystals. <i>Acta Materialia</i> , 2022, 236, 118095.	7.9	13
9	Edge betweenness centrality as a failure predictor in network models of structurally disordered materials. <i>Scientific Reports</i> , 2022, 12, .	3.3	6
10	Digital strategies for structured and architected materials design. <i>APL Materials</i> , 2021, 9, .	5.1	15
11	Strain rate dependency of dislocation plasticity. <i>Nature Communications</i> , 2021, 12, 1845.	12.8	97
12	Cell structure formation in a two-dimensional density-based dislocation dynamics model. <i>Materials Theory</i> , 2021, 5, .	4.3	16
13	The tension-compression behavior of gradient structured materials: A deformation-mechanism-based strain gradient plasticity model. <i>Mechanics of Materials</i> , 2021, 159, 103912.	3.2	22
14	Size-dependent plasticity of hetero-structured laminates: A constitutive model considering deformation heterogeneities. <i>International Journal of Plasticity</i> , 2021, 145, 103063.	8.8	45
15	Beam network model for fracture of materials with hierarchical microstructure. <i>International Journal of Fracture</i> , 2021, 227, 243-257.	2.2	8
16	A Beam Network Model Approach to Strength Optimization of Disordered Fibrous Materials. <i>Advanced Engineering Materials</i> , 2020, 22, 1901013.	3.5	4
17	Stochastic Crystal Plasticity Models with Internal Variables: Application to Slip Channel Formation in Irradiated Metals. <i>Advanced Engineering Materials</i> , 2020, 22, 1901208.	3.5	8
18	Multilayer Structures of Graphene and Pt Nanoparticles: A Multiscale Computational Study. <i>Advanced Engineering Materials</i> , 2020, 22, 2000207.	3.5	4

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19	Prediction of creep failure time using machine learning. <i>Scientific Reports</i> , 2020, 10, 16910.	3.3	22
20	Snow Mechanics Near the Ductile-Brittle Transition: Compressive Stick-Slip and Snow Microquakes. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL085491.	4.0	10
21	Exaptation in Physics and Materials Science. <i>The Frontiers Collection</i> , 2020, , 35-45.	0.2	1
22	Cyclic-loading microstructure-property relations from a mesoscale perspective: An example of single crystal Nickel-based superalloys. <i>Journal of Alloys and Compounds</i> , 2019, 770, 964-971.	5.5	11
23	Graph theoretical approaches for the characterization of damage in hierarchical materials. <i>European Physical Journal B</i> , 2019, 92, 1.	1.5	4
24	Statistical dynamics of early creep stages in disordered materials. <i>European Physical Journal B</i> , 2019, 92, 1.	1.5	7
25	Effects of twin boundary orientation on plasticity of bicrystalline copper micropillars: A discrete dislocation dynamics simulation study. <i>Acta Materialia</i> , 2019, 176, 289-296.	7.9	45
26	Microplasticity and yielding in crystals with heterogeneous dislocation distribution. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2019, 27, 074003.	2.0	11
27	Avalanche dynamics in hierarchical fiber bundles. <i>Physical Review E</i> , 2019, 100, 022133.	2.1	6
28	Nickel coated carbon nanotubes in aluminum matrix composites: a multiscale simulation study. <i>European Physical Journal B</i> , 2019, 92, 1.	1.5	12
29	Network analysis predicts failure of materials and structures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 16666-16668.	7.1	9
30	Thin Film Encapsulation of Organic Solar Cells by Direct Deposition of Polysilazanes from Solution. <i>Advanced Energy Materials</i> , 2019, 9, 1900598.	19.5	52
31	Properties of dislocation lines in crystals with strong atomic-scale disorder. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 740-741, 285-294.	5.6	22
32	Grain boundary effect on nanoindentation: A multiscale discrete dislocation dynamics model. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 126, 117-135.	4.8	57
33	Size and disorder effects in elasticity of cellular structures: From discrete models to continuum representations. <i>International Journal of Solids and Structures</i> , 2018, 146, 97-116.	2.7	22
34	Determining Cosserat constants of 2D cellular solids from beam models. <i>Materials Theory</i> , 2018, 2, .	4.3	11
35	Avalanche precursors of failure in hierarchical fuse networks. <i>Scientific Reports</i> , 2018, 8, 12090.	3.3	18
36	Avalanche Behavior in Creep Failure of Disordered Materials. <i>Physical Review Letters</i> , 2018, 121, 125501.	7.8	21

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37	Annihilation and sources in continuum dislocation dynamics. <i>Materials Theory</i> , 2018, 2, .	4.3	24
38	Instability of dislocation fluxes in a single slip: Deterministic and stochastic models of dislocation patterning. <i>Physical Review B</i> , 2018, 98, .	3.2	28
39	Disorder is good for you: the influence of local disorder on strain localization and ductility of strain softening materials. <i>International Journal of Fracture</i> , 2017, 205, 139-150.	2.2	15
40	Role of weakest links and system-size scaling in multiscale modeling of stochastic plasticity. <i>Physical Review B</i> , 2017, 95, .	3.2	7
41	Universal features of amorphous plasticity. <i>Nature Communications</i> , 2017, 8, 15928.	12.8	59
42	Propagating compaction bands in confined compression of snow. <i>Nature Physics</i> , 2017, 13, 272-275.	16.7	44
43	A continuum approach to combined $\dot{\gamma}$ evolution and dislocation plasticity in Nickel-based superalloys. <i>International Journal of Plasticity</i> , 2017, 95, 142-162.	8.8	49
44	Continuum representation of systems of dislocation lines: A general method for deriving closed-form evolution equations. <i>Journal of the Mechanics and Physics of Solids</i> , 2016, 95, 575-601.	4.8	28
45	Dislocation patterning in a two-dimensional continuum theory of dislocations. <i>Physical Review B</i> , 2016, 93, .	3.2	47
46	Rupture of graphene sheets with randomly distributed defects. <i>AIMS Materials Science</i> , 2016, 3, 1340-1349.	1.4	13
47	Local density approximation for the energy functional of three-dimensional dislocation systems. <i>Physical Review B</i> , 2015, 92, .	3.2	46
48	Statistical analysis and stochastic dislocation-based modeling of microplasticity. <i>Journal of the Mechanical Behavior of Materials</i> , 2015, 24, 105-113.	1.8	11
49	Crack phantoms: localized damage correlations and failure in network models of disordered materials. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2015, 2015, P08029.	2.3	3
50	Stress and strain fluctuations in plastic deformation of crystals with disordered microstructure. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2015, 2015, P08009.	2.3	8
51	Pattern formation in a minimal model of continuum dislocation plasticity. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2015, 23, 065005.	2.0	40
52	Scaling properties of dislocation simulations in the similitude regime. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2014, 22, 065012.	2.0	53
53	Avalanches in 2D Dislocation Systems: Plastic Yielding Is Not Depinning. <i>Physical Review Letters</i> , 2014, 112, 235501.	7.8	111
54	Acceleration and localization of subcritical crack growth in a natural composite material. <i>Physical Review E</i> , 2014, 90, 052401.	2.1	47

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55	Comparison of closure approximations for continuous dislocation dynamics. Materials Research Society Symposia Proceedings, 2014, 1651, 1.	0.1	18
56	Internal length scale and grain boundary yield strength in gradient models of polycrystal plasticity: How do they relate to the dislocation microstructure?. Journal of Materials Research, 2014, 29, 2116-2128.	2.6	26
57	Plasticity of Crystals with Disordered Microstructure: Scale-dependent Fluctuations of Stress and Strain. Materials Research Society Symposia Proceedings, 2014, 1651, 1.	0.1	0
58	Mechanical properties and microstructure of single-wall carbon nanotube/elastomeric epoxy composites with block copolymers. Materials Letters, 2014, 125, 116-119.	2.6	24
59	Continuum dislocation dynamics: Towards a physical theory of crystal plasticity. Journal of the Mechanics and Physics of Solids, 2014, 63, 167-178.	4.8	141
60	Deformation patterns and surface morphology in a minimal model of amorphous plasticity. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P03014.	2.3	15
61	Higher Order Continuum Modelling for Predicting the Mechanical Behaviour of Solid Foams. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 315-316.	0.2	1
62	The energetics and interactions of random dislocation walls. Philosophical Magazine Letters, 2013, 93, 387-394.	1.2	14
63	Strain localization and strain propagation in collapsible solid foams. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 567, 38-45.	5.6	21
64	Statistical aspects of microplasticity: experiments, discrete dislocation simulations and stochastic continuum models. Journal of the Mechanical Behavior of Materials, 2013, 22, 89-100.	1.8	11
65	From systems of discrete dislocations to a continuous field description: stresses and averaging aspects. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 085006.	2.0	36
66	Emergent patterns of localized damage as a precursor to catastrophic failure in a random fuse network. Physical Review E, 2013, 87, 042811.	2.1	6
67	Damage growth in fibre bundle models with localized load sharing and environmentally-assisted ageing. Journal of Physics: Conference Series, 2013, 410, 012064.	0.4	3
68	Modeling microbending of thin films through discrete dislocation dynamics, continuum dislocation theory, and gradient plasticity. Journal of Materials Research, 2012, 27, 612-618.	2.6	4
69	Preface of the Symposium on Discrete and Continuum Modeling of Dislocation Systems. , 2011, , .		0
70	Modelling Thin Film Microbending: A Comparative Study of Three Different Approaches. , 2011, , .		0
71	Some Limitations of Dislocation Walls as Models for Plastic Boundary Layers. , 2011, , .		3
72	Size scaling of strength in thin film delamination. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P02024.	2.3	1

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73	Continuum modeling of dislocation plasticity: Theory, numerical implementation, and validation by discrete dislocation simulations. <i>Journal of Materials Research</i> , 2011, 26, 623-632.	2.6	85
74	Statistical heterogeneity of plastic deformation: An investigation based on surface profilometry. <i>Acta Materialia</i> , 2010, 58, 4859-4870.	7.9	13
75	Der Knall im Lawinenhang. Die Ursache von Schneebrettlawinen. <i>Physik in Unserer Zeit</i> , 2010, 41, 31-34.	0.0	2
76	Numerical implementation of a 3D continuum theory of dislocation dynamics and application to micro-bending. <i>Philosophical Magazine</i> , 2010, 90, 3697-3728.	1.6	56
77	Symposium on Modelling Complex Materials: Materials Behavior below the Scale of the Representative Volume Element. , 2009, , .		0
78	The role of density fluctuations in the relaxation of random dislocation systems. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P03036.	2.3	7
79	Roughening and pinning of interface cracks in shear delamination of thin films. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P11009.	2.3	6
80	Nucleation of interfacial shear cracks in thin films on disordered substrates. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P02047.	2.3	5
81	Interface-Dislocation Interaction on Sub-micron Scales. , 2009, , .		0
82	The Connection between Size Effects and Strain Bursts in Microscale Plasticity. , 2009, , .		0
83	Crack Nucleation in Thin Films on Disordered Substrates. , 2009, , .		0
84	Dislocation Transport and Line Length Increase in Averaged Descriptions of Dislocations. , 2009, , .		9
85	Continuum Dislocation Dynamics (CDD) Modeling of Thin Film Micro-Plasticity. , 2009, , .		0
86	Expansion of Quasi-Discrete Dislocation Loops in the Context of a 3D Continuum Theory of Curved Dislocations. , 2009, , .		3
87	Application of a 3D-Continuum Theory of Dislocations to a Problems of Constrained Plastic Flow: Microbending of a Thin Film. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1224, 1.	0.1	0
88	Depinning transition of a dislocation line in ferritic oxide strengthened steels. <i>Journal of Nuclear Materials</i> , 2009, 385, 284-287.	2.7	4
89	Discrete dislocation dynamics simulation and continuum modeling of plastic boundary layers in tricrystal micropillars. <i>IOP Conference Series: Materials Science and Engineering</i> , 2009, 3, 012025.	0.6	10
90	Failure initiation in snow stratifications containing weak layers: Nucleation of whumpfs and slab avalanches. <i>Cold Regions Science and Technology</i> , 2008, 52, 385-400.	3.5	24

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91	Strain bursts in plastically deforming molybdenum micro- and nanopillars. Philosophical Magazine, 2008, 88, 3861-3874.	1.6	128
92	Anticrack Nucleation as Triggering Mechanism for Snow Slab Avalanches. Science, 2008, 321, 240-243.	12.6	120
93	Dislocation depinning transition in a dispersion-strengthened steel. Physical Review B, 2008, 78, .	3.2	28
94	Size effect in the tensile fracture of single-walled carbon nanotubes with defects. Nanotechnology, 2007, 18, 155708.	2.6	25
95	Slip avalanches in crystal plasticity: scaling of the avalanche cut-off. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P04013-P04013.	2.3	46
96	Nucleation And Non-Linear Strain Localization During Cyclic Plastic Deformation. Journal of the Mechanical Behavior of Materials, 2007, 18, 69-79.	1.8	2
97	Fracture Toughness of Snow: The Influence of Layered Microstructure. Journal of the Mechanical Behavior of Materials, 2007, 18, 195-215.	1.8	2
98	Interplay of basal shear fracture and slab rupture in slab avalanche release. Cold Regions Science and Technology, 2007, 49, 26-38.	3.5	11
99	Modelling size effects using 3D density-based dislocation dynamics. Philosophical Magazine, 2007, 87, 1283-1306.	1.6	29
100	A three-dimensional continuum theory of dislocation systems: kinematics and mean-field formulation. Philosophical Magazine, 2007, 87, 1261-1282.	1.6	134
101	Density-based modelling of dislocations. Philosophical Magazine, 2007, 87, 1159-1160.	1.6	5
102	Dislocation Avalanches, Strain Bursts, and the Problem of Plastic Forming at the Micrometer Scale. Science, 2007, 318, 251-254.	12.6	506
103	Scale-free statistics of plasticity-induced surface steps on KCl single crystals. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, L04001-L04001.	2.3	11
104	Scale invariance in plastic flow of crystalline solids. Advances in Physics, 2006, 55, 185-245.	14.4	293
105	An analytical model for fracture nucleation in collapsible stratifications. Geophysical Research Letters, 2006, 33, .	4.0	17
106	Randomness and slip avalanches in gradient plasticity. International Journal of Plasticity, 2006, 22, 1432-1455.	8.8	73
107	Some steps towards a continuum representation of 3D dislocation systems. Scripta Materialia, 2006, 54, 717-721.	5.2	50
108	Statistical dynamics of dislocations in simple models of plastic deformation: Phase transitions and related phenomena. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 191-198.	5.6	10

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109	RAS as a remote sensor of plastic deformation in metals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 3997-4002.	0.8	5
110	Fluctuation phenomena in crystal plasticity—a continuum model. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2005, 2005, P08004-P08004.	2.3	76
111	Interactions between Polymers and Carbon Nanotubes: A Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2005, 109, 10009-10014.	2.6	333
112	Self-Affine Surface Morphology of Plastically Deformed Metals. <i>Physical Review Letters</i> , 2004, 93, 195507.	7.8	99
113	Growth of a Vortex Polycrystal in Type II Superconductors. <i>Physical Review Letters</i> , 2004, 92, 257004.	7.8	13
114	Depinning transition of dislocation assemblies: Pileups and low-angle grain boundaries. <i>Physical Review B</i> , 2004, 69, .	3.2	73
115	Dislocation Patterns in Crystalline Solids—Phenomenology and Modelling. , 2004, , 215-238.		11
116	Shear Bands and Damage Clusters in Slope Failure - A One-Dimensional Model. <i>Journal of the Mechanical Behavior of Materials</i> , 2004, 15, 185-202.	1.8	6
117	Carbon nanotube/epoxy resin composites using a block copolymer as a dispersing agent. <i>Physica Status Solidi A</i> , 2004, 201, R89-R91.	1.7	88
118	The effects of snow variability on slab avalanche release. <i>Cold Regions Science and Technology</i> , 2004, 40, 229-242.	3.5	31
119	Slab avalanche release viewed as interface fracture in a random medium. <i>Annals of Glaciology</i> , 2004, 38, 9-14.	1.4	8
120	Pinning and propagation of interface cracks in slope failure. , 2004, , 435-446.		0
121	Geometrically necessary dislocations and strain gradient plasticity—a dislocation dynamics point of view. <i>Scripta Materialia</i> , 2003, 48, 133-139.	5.2	49
122	Spatial correlations and higher-order gradient terms in a continuum description of dislocation dynamics. <i>Acta Materialia</i> , 2003, 51, 1271-1281.	7.9	345
123	Avalanches and Slip Patterning in Plastic Deformation. <i>Journal of the Mechanical Behavior of Materials</i> , 2003, 14, 255-270.	1.8	15
124	Statistical Dislocation Dynamics — Multiplication and Long Range Interactions. <i>Materials Research Society Symposia Proceedings</i> , 2003, 779, 571.	0.1	2
125	Dislocation motion in a random solid solution. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2002, 82, 2869-2883.	0.6	39
126	Chapter 56 Long-range internal stresses, dislocation patterning and work-hardening in crystal plasticity. <i>Dislocations in Solids</i> , 2002, 11, 1-100.	1.6	32

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127	Dislocation Jamming and Andrade Creep. <i>Physical Review Letters</i> , 2002, 89, 165501.	7.8	128
128	Mithradham RE centre: Environment and RE promotion in India. <i>Refocus</i> , 2002, 3, 26-29.	0.2	1
129	Statistical dynamics of dislocation systems: The influence of dislocation-dislocation correlations. <i>Physical Review B</i> , 2001, 64, .	3.2	130
130	Depinning of a dislocation: the influence of long-range interactions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 309-310, 348-351.	5.6	44
131	Statistical modelling of dislocation systems. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 309-310, 304-315.	5.6	54
132	Fractal Dislocation Patterning in Plastically Deformed NaCl Polycrystals. <i>Physica Status Solidi A</i> , 2001, 185, R4-R5.	1.7	10
133	Some exactly solvable models for the statistical evolution of internal variables during plastic deformation. <i>Probabilistic Engineering Mechanics</i> , 2000, 15, 131-138.	2.7	10
134	Irradiation-induced transformation of graphite to diamond: A quantitative study. <i>Physical Review B</i> , 2000, 62, 3058-3064.	3.2	59
135	Fractal analysis of deformation-induced dislocation patterns. <i>Acta Materialia</i> , 1999, 47, 2463-2476.	7.9	78
136	The flow stress of fractal dislocation arrangements. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 270, 299-307.	5.6	36
137	Dislocation dynamics and work hardening of fractal dislocation cell structures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 272, 443-454.	5.6	40
138	On the relations between strain and strain-rate softening phenomena in some metallic materials: a computational study. <i>Computational Materials Science</i> , 1999, 15, 35-49.	3.0	23
139	Misfit Dislocation Patterning in Thin Films. <i>Physica Status Solidi (B): Basic Research</i> , 1998, 209, 295-304.	1.5	12
140	A generalized composite approach to the flow stress and strain hardening of crystals containing heterogeneous dislocation distributions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998, 249, 145-151.	5.6	16
141	Stochastic and deterministic aspects of strain localization during cyclic plastic deformation. <i>Acta Materialia</i> , 1998, 46, 4143-4151.	7.9	22
142	Fractal Dislocation Patterning During Plastic Deformation. <i>Physical Review Letters</i> , 1998, 81, 2470-2473.	7.8	148
143	Radiation-Induced Transformation of Graphite to Diamond. <i>Physical Review Letters</i> , 1997, 79, 3680-3683.	7.8	131
144	The influence of strain-rate fluctuations on the stability of low-temperature plastic deformation. <i>Acta Materialia</i> , 1997, 45, 1695-1704.	7.9	6

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145	Statistical theory of slip channels in body-centered cubic metals. Applied Physics A: Materials Science and Processing, 1997, 64, 391-401.	2.3	3
146	From mesoscopic heterogeneity of slip to macroscopic fluctuations of stress and strain. Acta Materialia, 1997, 45, 1067-1075.	7.9	30
147	A unified description of strain-rate softening instabilities. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 238, 399-406.	5.6	27
148	Oscillatory Modes of Plastic Deformation: Theoretical Concepts. Physica Status Solidi (B): Basic Research, 1997, 199, 267-330.	1.5	133
149	Microstructural Slip Localization in Strain Softening Materials. Physica Status Solidi (B): Basic Research, 1997, 203, 29-42.	1.5	5
150	Random aspects of macroscopic plastic deformation. Philosophical Magazine Letters, 1996, 73, 369-376.	1.2	11
151	A theory of the formation of slip channels in cold-worked bcc metals. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1996, 74, 287-298.	0.6	5
152	Theory of diffusion-controlled defect aggregation under irradiation: A comparative study of three basic approaches. Radiation Effects and Defects in Solids, 1995, 136, 209-215.	1.2	4
153	Stability criteria for plastic deformation at low temperatures. Scripta Metallurgica Et Materialia, 1995, 32, 1261-1268.	1.0	7
154	Dislocation dynamics in cyclic plastic deformation. Applied Physics A: Materials Science and Processing, 1995, 60, 589-595.	2.3	0
155	Dislocation dynamics in cyclic plastic deformation. Applied Physics A: Materials Science and Processing, 1995, 60, 497-503.	2.3	1
156	Dislocation dynamics in cyclic plastic deformation II. Strain bursts. Applied Physics A: Materials Science and Processing, 1995, 60, 589-595.	2.3	0
157	A mesoscopic approach to radiation-induced defect aggregation in alkali halides stimulated by the elastic interaction of mobile Frenkel defects. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1994, 70, 313-327.	0.6	23
158	Theory of radiation-induced self-organization of defect structures. Applied Physics A: Solids and Surfaces, 1994, 58, 3-10.	1.4	4
159	Theory of radiation-induced self-organization of defect structures. Applied Physics A: Solids and Surfaces, 1994, 58, 11-19.	1.4	0
160	A model of the formation of strain bursts during cyclic deformation. Scripta Metallurgica Et Materialia, 1994, 31, 1587-1592.	1.0	4
161	A mesoscopic approach to point-defect clustering in solids during irradiation. Applied Physics A: Solids and Surfaces, 1993, 57, 117-121.	1.4	6
162	Spatio-temporal aspects of low-temperature thermomechanical instabilities: A model based on dislocation dynamics. Applied Physics A: Solids and Surfaces, 1993, 57, 143-151.	1.4	9

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163	Radiation-Induced Self-Organization of Defect Structures in Metals. Materials Science Forum, 1993, 123-125, 687-700.	0.3	2
164	Self-Organization of Defect Structures under Low-Temperature Irradiation-A Theory of Stacking-Fault-Tetrahedron Lattices. Solid State Phenomena, 1992, 23-24, 221-236.	0.3	10
165	The study of self-organization processes in crystals by high-voltage electron microscopy. Ultramicroscopy, 1991, 39, 342-354.	1.9	26