

Strength and tension/compression asymmetry in nanos metals

Acta Materialia

51, 4505-4518

DOI: [10.1016/s1359-6454\(03\)00286-6](https://doi.org/10.1016/s1359-6454(03)00286-6)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Mechanical Behavior of Bulk Nanocrystalline and Ultrafine-grain Metals. , 2003, , 529-550.		14
2	Plasticity in Nanocrystalline and Amorphous Metals: Similarities at the Atomic Scale. Materials Research Society Symposia Proceedings, 2003, 806, 309.	0.1	2
3	Modeling of Deformation in Nanocrystalline Copper Using An Atomistic-Based Continuum Approach. Materials Research Society Symposia Proceedings, 2003, 791, 1.	0.1	0
4	Development of High-Strength, Aluminum-Alloy Nanocomposite Material for Advanced Aerospace Fastener Technology. , 2004, , .		0
5	Tension/compression strength asymmetry in a simulated nanocrystalline metal. Physical Review B, 2004, 69, .	3.2	73
6	Deformation-mechanism map for nanocrystalline metals by molecular-dynamics simulation. Nature Materials, 2004, 3, 43-47.	27.5	740
7	Mapping plasticity. Nature Materials, 2004, 3, 11-12.	27.5	67
8	Atomic-scale modeling of plastic deformation of nanocrystalline copper. Scripta Materialia, 2004, 51, 837-841.	5.2	142
9	Microstructure characterization and creep deformation of an Al-10 Wt Pct Ti-2 Wt Pct Cu nanocomposite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 3855-3861.	2.2	21
10	Grain-boundary sliding and separation in polycrystalline metals: application to nanocrystalline fcc metals. Journal of the Mechanics and Physics of Solids, 2004, 52, 2587-2616.	4.8	261
11	Transformations of grain boundaries in deformed nanocrystalline materials. Acta Materialia, 2004, 52, 3793-3805.	7.9	65
12	Deformation and activation volumes of cryomilled ultrafine-grained aluminum. Acta Materialia, 2004, 52, 4259-4271.	7.9	167
13	MATERIALS SCIENCE: Watching the Nanograins Roll. Science, 2004, 305, 623-624.	12.6	105
14	On the origin of ultrahigh cryogenic strength of nanocrystalline metals. Applied Physics Letters, 2004, 85, 2750-2752.	3.3	136
15	ROLE OF MECHANICAL TWINNING IN TENSILE COMPRESSIVE YIELD ASYMMETRY OF DIE CAST MG ALLOYS. Canadian Metallurgical Quarterly, 2005, 44, 155-166.	1.2	28
16	On tension/compression asymmetry of an extruded nanocrystalline Al-Fe-Cr-Ti alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 409, 249-256.	5.6	29
17	The influence of boundary structure on the mechanical properties of ultrafine grained AA1050. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 265-268.	5.6	15
18	Deformation of nanocrystalline materials by molecular-dynamics simulation: relationship to experiments?. Acta Materialia, 2005, 53, 1-40.	7.9	635

#	ARTICLE	IF	CITATIONS
19	Tensile properties of in situ consolidated nanocrystalline Cu. <i>Acta Materialia</i> , 2005, 53, 1521-1533.	7.9	445
20	Strength asymmetry in nanocrystalline metals under multiaxial loading. <i>Acta Materialia</i> , 2005, 53, 3193-3205.	7.9	124
21	Transition of tensile deformation behaviors in ultrafine-grained aluminum. <i>Acta Materialia</i> , 2005, 53, 4019-4028.	7.9	407
22	Mechanical Behavior of Ultrafine-Grained Cryomilled Al 5083 at Elevated Temperature. <i>Journal of Materials Engineering and Performance</i> , 2005, 14, 519-527.	2.5	29
23	Influence of boundary characters on the tensile behavior of sub-micron-grained aluminum. <i>Scripta Materialia</i> , 2005, 52, 265-269.	5.2	71
24	Mechanical properties of submicron-grained aluminum. <i>Scripta Materialia</i> , 2005, 52, 359-363.	5.2	115
25	Inhomogeneous tensile deformation in ultrafine-grained aluminum. <i>Scripta Materialia</i> , 2005, 53, 647-652.	5.2	63
26	Influence of grain size on deformation mechanisms: An extension to nanocrystalline materials. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 409, 234-242.	5.6	106
27	The creep and fracture in nanostructured metals and alloys. <i>Jom</i> , 2005, 57, 63-70.	1.9	11
28	An interpretation of size-scale plasticity in geometrically confined systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 16933-16938.	7.1	66
29	Ultra-high Strength in Nanocrystalline Materials Under Shock Loading. <i>Science</i> , 2005, 309, 1838-1841.	12.6	292
30	Impact of Bond Order Loss on Surface and Nanosolid Mechanics. <i>Journal of Physical Chemistry B</i> , 2005, 109, 415-423.	2.6	45
31	Plasticity of Copper with Small Grain Size. <i>Materials Science Forum</i> , 2005, 482, 71-76.	0.3	8
33	Size Effects on Deformation and Fracture of Nanostructured Metals. <i>Nanostructure Science and Technology</i> , 2006, , 27-77.	0.1	1
34	Determining the activation energy and volume for the onset of plasticity during nanoindentation. <i>Physical Review B</i> , 2006, 73, .	3.2	228
35	Development of Metal-Matrix Nano-Composite Materials for Advanced Aerospace Fastener Technology. , 2006, , .		0
36	Deformation in nanocrystalline metals. <i>Materials Today</i> , 2006, 9, 24-31.	14.2	338
37	Deformation twinning in polycrystalline copper at room temperature and low strain rate. <i>Acta Materialia</i> , 2006, 54, 655-665.	7.9	241

#	ARTICLE	IF	CITATIONS
38	Plastic deformation and fracture of ultrafine-grained Al–Mg alloys with a bimodal grain size distribution. <i>Acta Materialia</i> , 2006, 54, 1759-1766.	7.9	216
39	Nucleation and propagation of dislocations in nanocrystalline fcc metals. <i>Acta Materialia</i> , 2006, 54, 1975-1983.	7.9	345
40	Temperature-dependent strain rate sensitivity and activation volume of nanocrystalline Ni. <i>Acta Materialia</i> , 2006, 54, 2715-2726.	7.9	405
41	Flow stress anisotropy and Bauschinger effect in ultrafine grained copper. <i>Acta Materialia</i> , 2006, 54, 5477-5488.	7.9	77
42	Discrete dislocation dynamics simulations to interpret plasticity size and surface effects in freestanding FCC thin films. <i>International Journal of Plasticity</i> , 2006, 22, 2091-2117.	8.8	107
43	Synthesis and mechanical behavior of nanostructured materials via cryomilling. <i>Progress in Materials Science</i> , 2006, 51, 1-60.	32.8	516
44	Diminishing of work hardening in electroformed polycrystalline copper with nano-sized and uf-sized twins. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 441, 282-290.	5.6	86
45	Room-temperature mechanical behavior of cryomilled al alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2006, 37, 185-194.	2.2	27
46	Eight routes to improve the tensile ductility of bulk nanostructured metals and alloys. <i>Jom</i> , 2006, 58, 49-53.	1.9	375
47	On the behavior of microstructures with multiple length scales. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2006, 37, 2265-2273.	2.2	16
49	Generation of dislocation loops in deformed nanocrystalline materials. <i>Philosophical Magazine</i> , 2006, 86, 1483-1511.	1.6	16
50	Influence of Shock Prestraining and Grain Size on the Dynamic-Tensile-Extrusion Response of Copper: Experiments and Simulation. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	29
51	Strength asymmetry of ductile dendrites reinforced Zr- and Ti-based composites. <i>Journal of Materials Research</i> , 2006, 21, 2331-2336.	2.6	39
52	Orientation-dependent grain growth in a bulk nanocrystalline alloy during the uniaxial compressive deformation. <i>Applied Physics Letters</i> , 2006, 88, 171914.	3.3	67
53	Strain rate sensitivity of face-centered-cubic nanocrystalline materials based on dislocation deformation. <i>Journal of Applied Physics</i> , 2006, 99, 076103.	2.5	61
54	Microcompression of nanocrystalline nickel. <i>Applied Physics Letters</i> , 2006, 88, 103112.	3.3	50
55	Experimental and modelling investigations on strain rate sensitivity of an electrodeposited 20-nm grain sized Ni. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 7440-7446.	2.8	110
56	Tension-compression asymmetry in homogeneous dislocation nucleation in single crystal copper. <i>Applied Physics Letters</i> , 2007, 90, 121916.	3.3	64

#	ARTICLE	IF	CITATIONS
57	Tensionâ€™compression asymmetry and size effects in nanocrystalline Ni nanowires. Philosophical Magazine, 2007, 87, 2233-2244.	1.6	27
58	Effect of annealing on the mechanical properties and fracture mechanisms of aZr56.2Ti13.8Nb5.0Cu6.9Ni5.6Be12.5bulk-metallic-glass composite. Physical Review B, 2007, 75, .	3.2	65
59	Size dependence of nanostructures: Impact of bond order deficiency. Progress in Solid State Chemistry, 2007, 35, 1-159.	7.2	774
60	Thermo-mechanical behaviour of nanostructured copper. Journal of Alloys and Compounds, 2007, 434-435, 279-282.	5.5	7
61	Mechanical properties of bulk metallic glasses and composites. Journal of Materials Research, 2007, 22, 285-301.	2.6	386
62	Mechanical properties of structural nanocrystalline materials â€™ experimental observations. , 0, , 134-203.		2
63	Mechanical properties of structural nanocrystalline materials â€™ theory and simulations. , 2007, , 204-316.		0
64	Nanocrystallized Al92Sm8 Amorphous Alloy Investigated by High-Resolution Microscopy and 3D Atom-Probe Analysis. Advanced Engineering Materials, 2007, 9, 151-155.	3.5	3
65	The Physical Nature of Materials Strengths. Advanced Engineering Materials, 2007, 9, 143-146.	3.5	9
66	Processing Routes, Microstructure and Mechanical Properties of Metallic Glasses and their Composites. Advanced Engineering Materials, 2007, 9, 443-453.	3.5	44
67	Tailoring and patterning the grain size of nanocrystalline alloys. Acta Materialia, 2007, 55, 371-379.	7.9	289
68	Toward a quantitative understanding of mechanical behavior of nanocrystalline metals. Acta Materialia, 2007, 55, 4041-4065.	7.9	973
69	The Hallâ€™Petch breakdown in nanocrystalline metals: A crossover to glass-like deformation. Acta Materialia, 2007, 55, 5948-5958.	7.9	240
70	A comment on the role of Frankâ€™Read sources in plasticity of nanomaterials. Acta Materialia, 2007, 55, 6401-6407.	7.9	46
71	Relationship between hardness and grain size in electrodeposited copper films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 457, 120-126.	5.6	94
72	Enhanced tensile ductility through boundary structure engineering in ultrafine-grained aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 464, 343-350.	5.6	33
73	Grain boundary sliding in nanomaterials at elevated temperatures. Journal of Materials Science, 2007, 42, 1433-1438.	3.7	36
74	The effect of annealing on deformation and fracture of a nanocrystalline fcc metal. Journal of Materials Science, 2007, 42, 1444-1454.	3.7	31

#	ARTICLE	IF	CITATIONS
75	Nanoparticle consolidation using equal channel angular extrusion at room temperature. <i>Journal of Materials Science</i> , 2007, 42, 1561-1576.	3.7	42
76	Experimental Techniques for the Mechanical Characterization of One-Dimensional Nanostructures. <i>Experimental Mechanics</i> , 2007, 47, 7-24.	2.0	69
77	Controllable bimodal structures in hypo-eutectoid Cu-Al alloy for both high strength and tensile ductility. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 490, 471-476.	5.6	31
78	Microstructural features of failure surfaces and low-temperature mechanical properties of Ti-6Al-4V ELI ultra-fine grained alloy. <i>Strength of Materials</i> , 2008, 40, 71-74.	0.5	2
79	The Optimal Grain Sized Nanocrystalline Ni with High Strength and Good Ductility Fabricated by a Direct Current Electrodeposition. <i>Advanced Engineering Materials</i> , 2008, 10, 539-546.	3.5	31
80	Compressive and tensile deformation behavior of consolidated Fe. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 493, 226-231.	5.6	12
81	Severe plastic deformation introduced by rotation shear. <i>Journal of Materials Processing Technology</i> , 2008, 202, 549-552.	6.3	6
82	Homogeneous nucleation of dislocation loops in nanocrystalline metals and ceramics. <i>Acta Materialia</i> , 2008, 56, 1642-1649.	7.9	36
83	Predicting the Hall-Petch effect in fcc metals using non-local crystal plasticity. <i>International Journal of Plasticity</i> , 2008, 24, 1243-1263.	8.8	53
84	Footprints of plastic deformation in nanocrystalline metals. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 483-484, 33-39.	5.6	48
85	Tensile and compressive properties of AISI 304L stainless steel subjected to equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 475, 207-216.	5.6	104
86	Effect of temperature and strain rate on tensile behavior of ultrafine-grained aluminum alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 494, 247-252.	5.6	12
87	Fracture toughness of bulk metallic glass welds made using nanostructured reactive multilayer foils. <i>Scripta Materialia</i> , 2008, 58, 315-318.	5.2	22
88	Grain boundary dislocation sources in nanocrystalline copper. <i>Scripta Materialia</i> , 2008, 58, 299-302.	5.2	89
89	Mechanical properties of a nanocrystalline Co-Cu alloy with a high-density fine nanoscale lamellar structure. <i>Scripta Materialia</i> , 2008, 58, 731-734.	5.2	31
90	Effect of strain rate on the tensile behavior of ultra-fine grained pure aluminum. <i>Journal of Alloys and Compounds</i> , 2008, 455, L10-L14.	5.5	34
91	Influence of Grain Boundary Structure on Dislocation Nucleation in FCC Metals. <i>Dislocations in Solids</i> , 2008, 14, 43-139.	1.6	57
92	FACTORS CONTROLLING THE STRONGEST SIZES IN THE INVERSE HALL-PETCH RELATIONSHIP. <i>Nano</i> , 2008, 03, 175-185.	1.0	2

#	ARTICLE	IF	CITATIONS
93	Influence of defects on mechanical properties of bicrystal copper grain boundary interfaces. Journal Physics D: Applied Physics, 2008, 41, 135304.	2.8	8
94	A comparison of microtensile and microcompression methods for studying plastic properties of nanocrystalline electrodeposited nickel at different length scales. Journal of Materials Research, 2008, 23, 1383-1388.	2.6	9
95	Inverse Grain-Size Effect on Twinning in Nanocrystalline Ni. Physical Review Letters, 2008, 101, 025503.	7.8	190
96	Probing thickness-dependent dislocation storage in freestanding Cu films using residual electrical resistivity. Applied Physics Letters, 2008, 93, .	3.3	13
97	Limits of hardness at the nanoscale: Molecular dynamics simulations. Physical Review B, 2008, 78, .	3.2	49
98	Dislocation Bow-Out Model for Yield Stress of Ultra-Fine Grained Materials. Materials Transactions, 2008, 49, 1278-1283.	1.2	54
99	Deformation Crossover: From Nano- to Mesoscale. Physical Review Letters, 2009, 103, 035502.	7.8	51
100	The Effect of Grain Size and Strain Rate on the Tensile Ductility of Bulk Nanostructured Metals and Alloys. Materials Science Forum, 2009, 633-634, 393-410.	0.3	0
101	High-Rate Plastic Deformation of Nanocrystalline Tantalum to Large Strains: Molecular Dynamics Simulation. Materials Science Forum, 0, 633-634, 3-19.	0.3	19
102	Anisotropic tensile ductility of cold-rolled and annealed aluminum alloy sheet and the beneficial effect of post-anneal rolling. Scripta Materialia, 2009, 60, 340-343.	5.2	24
103	Sliding wear-induced microstructure evolution of nanocrystalline and coarse-grained AZ91D Mg alloy. Wear, 2009, 266, 666-670.	3.1	38
104	Mechanical characteristics, failure regularities, and dimple structures on failure surfaces of Ti-6Al-4V ultrafine-grained alloy at temperatures from 300 to 4.2K. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 503, 106-109.	5.6	10
105	Effect of stacking fault energy on strength and ductility of nanostructured alloys: An evaluation with minimum solution hardening. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 525, 83-86.	5.6	75
106	Thermally activated dislocation depinning at a grain boundary in nanocrystalline and ultrafine-grained materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 516, 276-282.	5.6	55
107	Thermo-mechanical behavior of low-dimensional systems: The local bond average approach. Progress in Materials Science, 2009, 54, 179-307.	32.8	252
108	Cyclic deformation of nanocrystalline and ultrafine-grained nickel. Acta Materialia, 2009, 57, 1272-1280.	7.9	27
109	Overview of the Grain Size Effects on the Mechanical and Deformation Behaviour of Electrodeposited Nanocrystalline Nickel ~ From Nanoindentation to High Pressure Torsion. Materials Science Forum, 0, 633-634, 85-98.	0.3	3
110	Modeling Nanomaterials. , 2009, , 261-298.		0

#	ARTICLE	IF	CITATIONS
111	Nanomaterials. , 2009, , .		42
112	Chapter 90 Mechanical Properties of Nanograined Metallic Polycrystals. Dislocations in Solids, 2009, 15, 199-248.	1.6	13
113	Nanostructured Materials: An Overview. , 0, , 1-20.		6
114	Temperature and Strain Rate Dependence of Flow Stress in Severely Deformed Copper by Accumulative Roll Bonding. Materials Transactions, 2009, 50, 64-69.	1.2	38
115	Can we use kinetic analysis for investigation of deformation processes in nanocrystalline materials?. Journal of Physics: Conference Series, 2010, 240, 012138.	0.4	2
116	The influence of cooling rate on the microstructures and mechanical properties in ultrafine-grained aluminum processed by hot rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5287-5294.	5.6	8
117	Distribution of dislocation source length and the size dependent yield strength in freestanding thin films. Journal of the Mechanics and Physics of Solids, 2010, 58, 678-695.	4.8	49
118	A perspective on trends in multiscale plasticity. International Journal of Plasticity, 2010, 26, 1280-1309.	8.8	240
119	Sliding wear of nanocrystalline Ni-W: Structural evolution and the apparent breakdown of Archard scaling. Acta Materialia, 2010, 58, 4137-4148.	7.9	282
120	Superplastic deformation mechanism of an ultrafine-grained aluminum alloy produced by friction stir processing. Acta Materialia, 2010, 58, 4693-4704.	7.9	135
121	Asymmetric ability of grain boundaries to generate dislocations under tensile or compressive loadings. Physical Review B, 2010, 82, .	3.2	42
122	Deformation behavior of bulk nanocrystalline Fe ₈₈ Si ₁₂ alloy. Journal of Alloys and Compounds, 2010, 505, 456-458.	5.5	0
123	Deformation twinning mechanism and its effects on the mechanical behaviors of ultrafine grained and nanocrystalline copper. Computational Materials Science, 2010, 49, 226-235.	3.0	24
124	On tension-compression asymmetry in ultrafine-grained and nanocrystalline metals. Computational Materials Science, 2010, 50, 639-644.	3.0	13
125	Effect of Stacking Fault Energy on the Mechanical Properties of Cold-Rolling Cu and Cu-Al-Zn Alloys. Advanced Materials Research, 2011, 399-401, 708-712.	0.3	0
126	Rolling deformation induced reduction of rate sensitivity and enhancement of hardness in nanocrystalline NiFe alloys. Journal Physics D: Applied Physics, 2011, 44, 295403.	2.8	11
127	Damage-Tolerant, Hard Nanocomposite Coatings Enabled by a Hierarchical Structure. Journal of Physical Chemistry C, 2011, 115, 18977-18982.	3.1	14
128	Inverse Hall-Petch Effect of Hardness in Nanocrystalline Ta Films. Advanced Materials Research, 2011, 378-379, 575-579.	0.3	3

#	ARTICLE	IF	CITATIONS
129	Annealing behaviour and mechanical properties of severely deformed interstitial free steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 530, 492-503.	5.6	43
130	A constitutive model of nanocrystalline metals based on competing grain boundary and grain interior deformation mechanisms. <i>Materials Letters</i> , 2011, 65, 3391-3395.	2.6	11
131	Effect of stacking fault energy on mechanical behavior of bulk nanocrystalline Cu and Cu alloys. <i>Acta Materialia</i> , 2011, 59, 5758-5764.	7.9	121
132	Work hardening behavior of ultrafine-grained Mn transformation-induced plasticity steel. <i>Acta Materialia</i> , 2011, 59, 7546-7553.	7.9	82
133	Effects of Si addition on mechanical properties of copper severely deformed by accumulative roll-bonding. <i>Journal of Materials Science</i> , 2011, 46, 4290-4295.	3.7	15
134	Inverse temperature dependence of activation volume in ultrafine-grained copper processed by accumulative roll-bonding. <i>Journal of Materials Science</i> , 2011, 46, 4302-4307.	3.7	24
135	Enhanced solid solution effects on the strength of nanocrystalline alloys. <i>Acta Materialia</i> , 2011, 59, 1619-1631.	7.9	200
136	Effect of Annealing on Thermal Stability, Precipitate Evolution, and Mechanical Properties of Cryorolled Al 7075 Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011, 42, 3208-3217.	2.2	42
137	The rate sensitivity and plastic deformation of nanocrystalline tantalum films at nanoscale. <i>Nanoscale Research Letters</i> , 2011, 6, 186.	5.7	42
138	Microstructure and mechanical properties after annealing of equal-channel angular pressed interstitial-free steel. <i>Acta Materialia</i> , 2011, 59, 4015-4029.	7.9	71
139	The enhancement of warm-temperature mechanical properties of ultrafine-grained aluminum by carbon nanotubes. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 6134-6139.	5.6	6
140	Anisotropic tensile properties of recovery annealed aluminum alloy sheet. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 1979-1986.	5.6	6
141	Mechanism for <i>In Situ</i> Iron Nanoparticles Formed during Copper Alloy Solidification. <i>Advanced Materials Research</i> , 0, 189-193, 2441-2447.	0.3	0
142	A Model for the Effects of Strain Rate and Temperature on the Deformation Behavior of Ultrafine-Grained Metals. <i>Advanced Materials Research</i> , 0, 291-294, 1173-1177.	0.3	0
143	Strengthening mechanisms in nanocrystalline metals. , 2011, , 299-328.		16
144	The mechanical properties of multi-scale metallic materials. , 2011, , 375-429.		8
145	Modelling the elastic–plastic transition of polycrystalline metals with a distribution of grain sizes. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2012, 20, 015015.	2.0	10
146	Mechanical properties of titanium processed by hydrostatic extrusion. <i>Archives of Metallurgy and Materials</i> , 2012, 57, 863-867.	0.6	8

#	ARTICLE	IF	CITATIONS
147	Grain Boundary Structure Dependence of Extrinsic Grain Boundary Dislocation Emission Phenomena: A Molecular Dynamics Study. <i>Materials Transactions</i> , 2012, 53, 147-155.	1.2	13
148	Thermally Activated Process during Dislocation Motion in Ultrafine-Grained Copper. <i>Materia Japan</i> , 2012, 51, 102-107.	0.1	0
149	Grain boundary relaxation strengthening of nanocrystalline Ni-W alloys. <i>Journal of Materials Research</i> , 2012, 27, 1285-1294.	2.6	146
150	Strain Energy During Mechanical Milling: Part I. Mathematical Modeling. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 4247-4257.	2.2	12
151	Property evolution on annealing deformed 304 austenitic stainless steel. <i>Journal of Materials Science</i> , 2012, 47, 8128-8133.	3.7	11
152	Nanoindentation analysis for local properties of ultrafine grained copper processed by high pressure torsion. <i>Journal of Materials Science</i> , 2012, 47, 7828-7834.	3.7	14
153	Wallner lines in a nanocrystalline Ni-23% Fe alloy. <i>Scripta Materialia</i> , 2012, 67, 907-910.	5.2	1
154	Mesoscopic superelasticity, superplasticity, and superrigidity. <i>Science China: Physics, Mechanics and Astronomy</i> , 2012, 55, 963-979.	5.1	11
155	High strength-ductility of thin nanocrystalline palladium films with nanoscale twins: On-chip testing and grain aggregate model. <i>Acta Materialia</i> , 2012, 60, 1795-1806.	7.9	52
156	Simultaneously improving the strength and ductility of coarse-grained Hadfield steel with increasing strain rate. <i>Scripta Materialia</i> , 2012, 66, 431-434.	5.2	44
157	Effect of manganese addition on the tensile properties of cold-rolled and recovery-annealed aluminum alloy sheets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 535, 297-305.	5.6	10
158	Transition of deformation behavior in an ultrafine grained magnesium alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 549, 123-127.	5.6	25
159	Microstructure and mechanical properties of spot friction stir welded ultrafine grained 1050 Al and conventional grained 6061-T6 Al alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 585, 17-24.	5.6	21
160	The Formation of Twins in Al-10Zn-3Mg-1.8Cu Alloy by Cryomilling. <i>Jom</i> , 2013, 65, 967-972.	1.9	0
161	Strain rate effects on the mechanical response in multi- and single-crystalline Cu micropillars: Grain boundary effects. <i>International Journal of Plasticity</i> , 2013, 50, 1-17.	8.8	78
162	Precipitation phenomena in an ultrafine-grained Al alloy. <i>Acta Materialia</i> , 2013, 61, 2163-2178.	7.9	201
163	Twinning in cryomilled nanocrystalline Mg powder. <i>Philosophical Magazine Letters</i> , 2013, 93, 457-464.	1.2	5
164	Effects of annealing treatments on microstructure and mechanical properties of the Zr ₃₄ Ti ₃₅ Al ₃₃ V alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 582, 374-378.	5.6	28

#	ARTICLE	IF	CITATIONS
165	Tensile behavior of Al _{1-x} Mo crystalline and amorphous thin films. <i>Acta Materialia</i> , 2013, 61, 1432-1443.	7.9	24
166	Nanoquasicrystalline Al-Fe-Cr-Nb alloys produced by powder metallurgy. <i>Journal of Alloys and Compounds</i> , 2013, 577, 650-657.	5.5	24
167	Nanostructure and surface effects on yield in Cu nanowires. <i>Acta Materialia</i> , 2013, 61, 1831-1842.	7.9	68
168	Fabrication techniques for multiscale 3D-MEMS with vertical metal micro- and nanowire integration. <i>Journal of Micromechanics and Microengineering</i> , 2013, 23, 025018.	2.6	13
169	Unprecedented grain size effect on stacking fault width. <i>APL Materials</i> , 2013, 1, .	5.1	20
170	Strain localization in a nanocrystalline metal: Atomic mechanisms and the effect of testing conditions. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	72
171	A universal fracture criterion for high-strength materials. <i>Scientific Reports</i> , 2013, 3, .	3.3	83
172	Stability of Fatigued Dislocation Wall Structure in Coarse-Grained and Ultrafine-Grained Aluminum against Monotonic Tensile Deformation. <i>Materials Transactions</i> , 2013, 54, 43-49.	1.2	1
173	Mechanical Properties of Nanostructured Metals. , 2014, , 495-553.		6
174	Microstructure and melting behavior of tin nanoparticles embedded in alumina matrix processed by ball milling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 600, 59-66.	5.6	9
176	Crystal orientation effect on dislocation nucleation and multiplication in FCC single crystal under uniaxial loading. <i>International Journal of Plasticity</i> , 2014, 52, 133-146.	8.8	74
177	Tension behavior of Ti-6.6Al-3.3Mo-1.8Zr-0.29Si alloy over a wide range of strain rates. <i>Materials Letters</i> , 2014, 124, 113-116.	2.6	16
178	Predeformation and Subsequent Annealing—A Way for Controlling Morphology of Carbides in Large Dimensional Bulk Nanocrystalline Fe-Al-Cr Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 522-528.	2.2	2
179	Crystal plasticity modeling and simulation considering the behavior of the dislocation source of ultrafine-grained metal. <i>International Journal of Plasticity</i> , 2014, 55, 43-57.	8.8	49
180	Effect of strain rate on tensile properties of electric brush-plated nanocrystalline copper. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 618, 621-628.	5.6	22
181	Deformation of as-fabricated and helium implanted 100nm-diameter iron nano-pillars. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 612, 316-325.	5.6	36
182	Microstructure-hardness-fretting wear resistance correlation in ultrafine grained Cu-Ti ₂ -Pb composites. <i>Wear</i> , 2014, 319, 160-171.	3.1	14
183	Understanding the mechanical behavior of nanocrystalline Al ₂ O ₃ thin films with complex microstructures. <i>Acta Materialia</i> , 2014, 77, 269-283.	7.9	11

#	ARTICLE	IF	CITATIONS
184	Stacking fault emission from grain boundaries: Material dependencies and grain size effects. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 600, 200-210.	5.6	37
185	Nano crystalline high energy milled 5083 Al powder deposited using cold spray. <i>Applied Surface Science</i> , 2014, 305, 797-804.	6.1	33
186	Characterization of bulk bimodal polycrystalline nickel deformed by direct impact loadings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 601, 48-57.	5.6	19
187	Structure and mechanical properties of the annealed TZAV-30 alloy. <i>Materials & Design</i> , 2014, 58, 368-373.	5.1	23
188	Mechanical properties and deformation kinetics of bulk Cu-Al-Zn alloy subjected to rolling and annealing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 609, 217-221.	5.6	8
189	Micrometric grained Al synthesized via quasi-hydrostatic ultra-high pressure consolidation of micrometric Al powders. <i>Materials Letters</i> , 2014, 130, 299-302.	2.6	9
190	Hall–Petch Relationship and Dislocation Model for Deformation of Ultrafine-Grained and Nanocrystalline Metals. <i>Materials Transactions</i> , 2014, 55, 19-24.	1.2	77
191	The Influence of Annealing on Characteristics of Copper in TSV. <i>ECS Journal of Solid State Science and Technology</i> , 2015, 4, P451-P455.	1.8	4
192	Evaluations of Mechanical Properties of Electrodeposited Nickel Film by Using Micro-Testing Method. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2015, 80, 7-12.	0.4	0
193	Recycling of AZ40 Magnesium Alloy Scraps by Hydriding-Dehydriding and Subsequent Consolidation Processing. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 3666-3672.	2.5	1
194	Hybrid nanostructured aluminum alloy with super-high strength. <i>NPG Asia Materials</i> , 2015, 7, e229-e229.	7.9	82
195	Simultaneously increasing strength and ductility of the Al-Cu alloys inoculated by Zr-based metallic glass. <i>Materials Characterization</i> , 2015, 100, 36-40.	4.4	12
196	Atomic-scale intergranular crack-tip plasticity in tilt grain boundaries acting as an effective dislocation source. <i>Acta Materialia</i> , 2015, 87, 233-247.	7.9	35
197	A Highly Reliable Copper Nanowire/Nanoparticle Ink Pattern with High Conductivity on Flexible Substrate Prepared via a Flash Light-Sintering Technique. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 5674-5684.	8.0	128
198	Age Hardening and Mechanical Properties of Cast Al ₇₅ Cu Alloy Modified by La and Pr. <i>Advanced Engineering Materials</i> , 2015, 17, 143-147.	3.5	10
199	Suppression of twinning and phase transformation in an ultrafine grained 2 GPa strong metastable austenitic steel: Experiment and simulation. <i>Acta Materialia</i> , 2015, 97, 305-315.	7.9	79
200	A multi-scale Al-Mg alloy containing ultra-fine lamellar structure. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 636, 207-215.	5.6	7
201	In situ Testing of Mechanical Properties of Materials11Figures 1–3 and Table 1, plus similarities in this Chapter are reproduced with permission of <i>MRS Journal of Materials Research</i> ., 2015, , 715-732.		1

#	ARTICLE	IF	CITATIONS
202	Representation of a microstructure with bimodal grain size distribution through crystal plasticity and cohesive interface modeling. <i>Mechanics of Materials</i> , 2015, 82, 1-12.	3.2	37
203	Microstructure evolution and mechanical properties of Al-Cu alloys inoculated by FeBSi metallic glass. <i>Materials & Design</i> , 2015, 67, 130-135.	5.1	12
204	Correlating the Layer Properties of Ni-alumina Composite Coatings and the Mechanism of Codeposition. <i>International Journal of Chemistry</i> , 2016, 8, 110.	0.3	1
205	Evaluations of Mechanical Properties of Electrodeposited Nickel Film by Using Micro-Testing Method. <i>Materials Transactions</i> , 2016, 57, 1979-1984.	1.2	7
206	Generalized energy failure criterion. <i>Scientific Reports</i> , 2016, 6, 23359.	3.3	34
207	Tension-compression asymmetry and twin boundaries spacings effects in polycrystalline Ni nanowires. <i>Journal of Applied Physics</i> , 2016, 120, 044303.	2.5	12
208	Mechanical properties and strain hardening behavior of phase reversion-induced nano/ultrafine Fe-17Cr-6Ni austenitic structure steel. <i>Journal of Alloys and Compounds</i> , 2016, 689, 718-725.	5.5	31
209	A deformation mechanism based crystal plasticity model of ultrafine-grained/nanocrystalline FCC polycrystals. <i>International Journal of Plasticity</i> , 2016, 86, 56-69.	8.8	104
210	Effect of annealing on microstructure and tensile property of a novel ZrB alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 674, 1-8.	5.6	6
211	Plastic deformation mechanisms of ultrafine-grained copper in the temperature range of 4.2-300 K. <i>Low Temperature Physics</i> , 2016, 42, 825-835.	0.6	12
212	Intrinsic Strength Asymmetry Between Tension and Compression of Perfect Face-Centered-Cubic Crystals. <i>Acta Metallurgica Sinica (English Letters)</i> , 2016, 29, 755-762.	2.9	1
213	A novel Zr-based alloy microstructure with high strength and excellent ductility. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 651, 370-375.	5.6	12
214	Experimental study on solid solution strengthening in nanocrystalline alloys using multilayered films. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 653, 8-12.	5.6	1
215	Sample size and orientation effects of single crystal aluminum. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 662, 296-302.	5.6	27
216	Deformation behavior of multilayered NiFe with bimodal grain size distribution at room and elevated temperature. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 656, 174-183.	5.6	10
217	Microstructures and mechanical properties of the ultrafine-grained Mg-Al-Zn alloys fabricated by powder metallurgy. <i>Advanced Powder Technology</i> , 2016, 27, 550-556.	4.1	24
218	High strength and high ductility behavior of 6061-T6 alloy after laser shock processing. <i>Optics and Lasers in Engineering</i> , 2016, 77, 183-190.	3.8	28
219	The effect of bending loading conditions on the reliability of inkjet printed and evaporated silver metallization on polymer substrates. <i>Microelectronics Reliability</i> , 2016, 56, 109-113.	1.7	24

#	ARTICLE	IF	CITATIONS
220	Stability, phase separation and oxidation of a supersaturated nanocrystalline Cu-33 at.% Cr thin film alloy. <i>Thin Solid Films</i> , 2017, 623, 48-58.	1.8	4
221	Molecular dynamics simulations of tension/compression asymmetry in nanocrystalline copper. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2017, 381, 1163-1168.	2.1	39
222	Anisotropic and asymmetrical yielding and its evolution in plastic deformation: Titanium tubular materials. <i>International Journal of Plasticity</i> , 2017, 90, 177-211.	8.8	67
223	Pertinence of the Grain Size on the Mechanical Strength of Polycrystalline Metals. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2017, 139, .	1.4	3
224	Atomistic simulation of the tension/compression response of textured nanocrystalline HCP Zr. <i>Computational Materials Science</i> , 2017, 130, 172-182.	3.0	11
225	On the influence of junction structures on the mechanical and thermal properties of carbon honeycombs. <i>Carbon</i> , 2017, 119, 278-286.	10.3	56
226	Disruption of oxide films during spark plasma sintering of micrometric-sized Al powders and its effect on microstructure and tensile properties of the consolidated Al. <i>Journal of Alloys and Compounds</i> , 2017, 712, 822-832.	5.5	5
227	Relaxation mechanisms in a gold thin film on a compliant substrate as revealed by X-ray diffraction. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	10
228	Dynamic flow stress of fine grain material processed using equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 698, 256-267.	5.6	8
229	Mapping the strain-rate and grain-size dependence of deformation behaviors in nanocrystalline face-centered-cubic Ni and Ni-based alloys. <i>Journal of Alloys and Compounds</i> , 2017, 709, 566-574.	5.5	25
230	The influence of defect structures on the mechanical properties of Ti-6Al-4V alloys deformed by high-pressure torsion at ambient temperature. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 684, 1-13.	5.6	38
231	A thermally activated dislocation-based constitutive flow model of nanostructured FCC metals involving microstructural evolution. <i>Philosophical Magazine</i> , 2017, 97, 613-637.	1.6	3
232	Grain Size Effect on Mechanical Behavior of Nanocrystalline Alloy Films. <i>Journal of Nano Research</i> , 2017, 48, 204-210.	0.8	0
233	Engineering Applications. <i>Experimental Methods in the Physical Sciences</i> , 2017, , 683-737.	0.1	3
234	Effect of strain-path change on the anisotropic mechanical properties of a commercially pure aluminum. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 219, 012040.	0.6	1
235	Multiscale Crystal Plasticity Modeling Considering Nucleation of Dislocations Based on Thermal Activation Process on Ultrafine-grained Aluminum. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 194, 012048.	0.6	0
236	Mechanical behavior of nanostructured and ultra-fine grained Al containing nanoscale oxide particles processed via spark plasma sintering of nano-sized Al powders. <i>Journal of Alloys and Compounds</i> , 2018, 745, 677-687.	5.5	3
237	On the characteristics of Portevin/Le Chatelier bands in cold-rolled 7Mn steel showing transformation-induced plasticity. <i>International Journal of Plasticity</i> , 2018, 103, 188-202.	8.8	88

#	ARTICLE	IF	CITATIONS
238	Analytical and numerical approaches to modelling severe plastic deformation. <i>Progress in Materials Science</i> , 2018, 95, 172-242.	32.8	126
239	Fine equiaxed dendritic structure of a medium carbon steel cast using pulsed magneto-oscillation melt treatment. <i>Advances in Manufacturing</i> , 2018, 6, 189-194.	6.1	7
240	Failure surfaces of high-strength materials predicted by a universal failure criterion. <i>International Journal of Fracture</i> , 2018, 211, 237-252.	2.2	5
241	Strain rate effects on tensile deformation behaviors of Ti-10V-2Fe-3Al alloy undergoing stress-induced martensitic transformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 710, 1-9.	5.6	60
242	Thermo-mechanical processing, microstructure and mechanical properties of TiZrB alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 712, 350-357.	5.6	7
243	Refinement and Coarsening of Grains Caused by Tensile-Shear Tests in Ultra-Fine Grained Cu Processed by Severe Plastic Deformation. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2018, 82, 442-448.	0.4	1
244	Effect of Sintering Temperature on Fatigue Crack Propagation Rate of Sintered Ag Nanoparticles. <i>Materials Transactions</i> , 2018, 59, 612-619.	1.2	17
245	Heterogeneity of grain refinement and texture formation during pulsed electric current sintering of conductive powder: A case study in copper powder. <i>Advanced Powder Technology</i> , 2018, 29, 3385-3393.	4.1	6
246	Optimal Design of High-Strength Ti-Al-V-Zr Alloys through a Combinatorial Approach. <i>Materials</i> , 2018, 11, 1603.	2.9	4
247	Tension-compression asymmetry in plasticity of nanotwinned 3C-SiC nanocrystals. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	9
248	Modeling the mechanical behavior of heterogeneous ultrafine grained polycrystalline and nanocrystalline FCC metals. <i>Mechanics of Materials</i> , 2018, 126, 1-12.	3.2	10
249	Annealing Effect on Dislocation Emission from Non-equilibrium Grain Boundaries. <i>Zairyo/Journal of the Society of Materials Science, Japan</i> , 2018, 67, 256-262.	0.2	0
250	Evolution of grain refinement mechanism in Cu-4wt.%Ti alloy during surface mechanical attrition treatment. <i>Journal of Alloys and Compounds</i> , 2018, 763, 835-843.	5.5	17
251	Evaluating the material strength from fracture angle under uniaxial loading. <i>Frontiers of Structural and Civil Engineering</i> , 2019, 13, 288-293.	2.9	1
252	Ex-situ EBSD analysis of yield asymmetry, texture and twinning development in Mg-5Li-3Al-2Zn alloy during tensile and compressive deformation. <i>Journal of Alloys and Compounds</i> , 2019, 805, 947-956.	5.5	45
253	Low-Temperature feature of grain-boundary hardening of nanocrystalline titanium. <i>Low Temperature Physics</i> , 2019, 45, 811-819.	0.6	4
254	NOP Receptor Agonist Ro 64-6198 Decreases Escalation of Cocaine Self-Administration in Rats Genetically Selected for Alcohol Preference. <i>Frontiers in Psychiatry</i> , 2019, 10, 176.	2.6	6
255	Deformation characteristics of nanocrystalline TWIP steel under uniaxial tension and compression. <i>Mechanics of Materials</i> , 2019, 138, 103147.	3.2	11

#	ARTICLE	IF	CITATIONS
256	Effects of TiN nanoparticles on hot deformation behavior of ultra-fine grained Al ₂₀₂₄ -TiN nanocomposites prepared by spark plasma sintering. <i>Mechanics of Materials</i> , 2019, 138, 103152.	3.2	7
257	Lomer-Cottrell locks with multiple stair-rod dislocations in a nanostructured Al alloy processed by severe plastic deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 747, 177-184.	5.6	45
258	Design of a new Al-Cu alloy manipulated by in-situ nanocrystals with superior high temperature tensile properties and its constitutive equation. <i>Materials and Design</i> , 2019, 181, 107945.	7.0	25
259	A Review on High-Strength Titanium Alloys: Microstructure, Strengthening, and Properties. <i>Advanced Engineering Materials</i> , 2019, 21, 1801359.	3.5	144
260	Dynamic Tensile Behavior and Constitutive Modeling of TC21 Titanium Alloy. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2019, 34, 707-716.	1.0	7
261	Deformation Inhomogeneity. , 2019, , 29-83.		0
262	Faulted dipoles in a nanostructured 7075 Al alloy produced via high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 754, 232-237.	5.6	3
263	Carbon-Dislocation Interaction-Induced Abnormal Strain-Rate Sensitivity in Twinning-Induced Plasticity Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 2570-2575.	2.2	7
264	Refinement and Coarsening of Grains Caused by Tensile-Shear Tests in Ultra-Fine Grained Cu Processed by Severe Plastic Deformation. <i>Materials Transactions</i> , 2019, 60, 751-757.	1.2	2
265	Stress-assisted grain-rotation-induced dislocation emission from grain boundaries in nanocrystalline face-centered-cubic metals. <i>Philosophical Magazine Letters</i> , 2019, 99, 466-478.	1.2	6
266	Strengthening Mechanisms in Ultrafine-Grained and Sub-grained High-Purity Aluminum. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 234-248.	2.2	29
267	On the widths of stacking faults formed by dissociation of different types of full dislocations in a nanostructured Al alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 770, 138532.	5.6	9
268	Temperature and strain-rate dependence of flow stress of nanocrystalline nickel fabricated by electrolytic deposition. <i>Philosophical Magazine Letters</i> , 2020, 100, 571-580.	1.2	1
269	Mechanical Properties of Ultrafine-Grained Aluminum in the Temperature Range 4.2â€“300 K. <i>Physics of the Solid State</i> , 2020, 62, 1048-1055.	0.6	2
270	Interfacial characteristics and mechanical asymmetry in Al ₂₀₂₄ matrix composites containing Fe-based metallic glass particles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 793, 139971.	5.6	6
271	Self-energy, line tension and bow-out of grain boundary dislocation sources. <i>International Journal of Plasticity</i> , 2020, 133, 102802.	8.8	8
272	Bulk nanostructured AlCoCrFeMnNi chemically complex alloy synthesized by laser-powder bed fusion. <i>Additive Manufacturing</i> , 2020, 35, 101337.	3.0	3
273	Plastic anisotropy and tension-compression asymmetry in nanotwinned Al-Fe alloys: An in-situ micromechanical investigation. <i>International Journal of Plasticity</i> , 2020, 132, 102760.	8.8	21

#	ARTICLE	IF	CITATIONS
274	Different Evolutions of the Microstructure, Texture, and Mechanical Performance During Tension and Compression of 316L Stainless Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 3447-3460.	2.2	18
275	Continuous and discontinuous yielding behaviors in ferrite-cementite steels. <i>Acta Materialia</i> , 2020, 196, 565-575.	7.9	35
276	Effect of rolling with different amounts of deformation on microstructure and mechanical properties of the Mg-1Al-4Y alloy. <i>Materials Characterization</i> , 2020, 161, 110149.	4.4	12
277	Hydrolysis acceleration in an Al-Ga-Gr particle material utilizing ultrasound irradiation. <i>Ultrasonics Sonochemistry</i> , 2020, 65, 105064.	8.2	4
278	On the mechanical properties of atomic and 3D printed zeolite-templated carbon nanotube networks. <i>Additive Manufacturing</i> , 2021, 37, 101628.	3.0	14
280	High-strength and tunable plasticity in sputtered Al-Cr alloys with multistage phase transformations. <i>International Journal of Plasticity</i> , 2021, 137, 102915.	8.8	9
281	Fatigue and Fracture of Nanostructured Materials. , 2021, , .		5
282	Effect of samarium on the high temperature tensile properties and fracture behaviors of Al-Zn-Mg-Cu-Zr alloy. <i>Materials Research Express</i> , 2021, 8, 016521.	1.6	5
283	Enhancing mechanical properties of consolidated nanocrystalline copper powder by means of equal channel angular pressing method. <i>Journal of Strain Analysis for Engineering Design</i> , 2021, 56, 531-538.	1.8	1
285	Compressive Testing. , 2021, , 107-122.		0
286	Strength, plasticity, thermal stability and strain rate sensitivity of nanograined nickel with amorphous ceramic grain boundaries. <i>Acta Materialia</i> , 2021, 212, 116918.	7.9	27
287	Novel Al based nanoquasicrystalline alloys. <i>Progress in Materials Science</i> , 2022, 123, 100831.	32.8	10
288	SEM/EBSD Analysis of Grain Refinement and Coarsening of Ultra-Fine-Grained Al during Simple Shear Deformation. <i>Materials Transactions</i> , 2021, 62, 921-928.	1.2	2
289	Grain Refinement Mechanisms in Gradient Nanostructured AZ31B Mg Alloy Prepared via Rotary Swaging. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 4053-4065.	2.2	18
290	Friction of Metals: A Review of Microstructural Evolution and Nanoscale Phenomena in Shearing Contacts. <i>Tribology Letters</i> , 2021, 69, 1.	2.6	11
293	Nanograins: II. Plasticity and Yield Stress. <i>Springer Series in Chemical Physics</i> , 2014, , 571-601.	0.2	3
294	In-situ Testing of Mechanical Properties of Materials. , 2010, , 331-343.		1
295	Origin of tension-compression asymmetry in ultrafine-grained fcc metals. <i>Physical Review Materials</i> , 2017, 1, .	2.4	6

#	ARTICLE	IF	CITATIONS
296	Structural Aspects of Wear Resistance of Coatings Deposited by Physical Vapor Deposition. Physical Mesomechanics, 2020, 23, 570-583.	1.9	22
297	Grain Boundaries in Nanomaterials. , 2006, , .		7
298	Experimental Study on the Thickness-Dependent Hardness of SiO ₂ Thin Films Using Nanoindentation. Coatings, 2021, 11, 23.	2.6	12
299	Effect of Coil Configuration Design on Al Solidified Structure Refinement. Metals, 2020, 10, 153.	2.3	5
300	Exploring the Strain Hardening Mechanisms of Ultrafine Grained Nickel Processed by Spark Plasma Sintering. Metals, 2021, 11, 65.	2.3	4
301	Achieving strong and stable nanocrystalline Al alloys through compositional design. Journal of Materials Research, 2022, 37, 183-207.	2.6	5
302	Influence of lamellar and equiaxed microstructural morphologies on yielding behaviour of a medium Mn steel. Materialia, 2021, 20, 101252.	2.7	8
303	Defects and Deformation Mechanisms in Nanostructured Coatings. Nanostructure Science and Technology, 2006, , 78-108.	0.1	1
305	Stress Relaxation Study of Ultrafine-Grained AA 6061 Alloy Processed Through Combined Constrained Groove Pressing and Cold Rolling. Lecture Notes in Mechanical Engineering, 2021, , 111-121.	0.4	0
306	EÅž KANALLI AÅ±ISAL PRESLEME (EKAP) UYGULANAN GEMÄ° Ä°NÄžA Ä±ELÄ°ÄžÄ°NÄ°N Ä°Ä±YAPI VE MEKANÄ°K Ä±ZELLÄ°KLERÄ°NÄ°N Ä°NCELENMESÄ°. MÄ¼hendislik Bilimleri Ve TasarÄ±m Dergisi, 2020, 8, 240-251.	0.3	1
307	ROLE OF MECHANICAL TWINNING IN TENSILE COMPRESSIVE YIELD ASYMMETRY OF DIE CAST MG ALLOYS. Canadian Metallurgical Quarterly, 2005, 44, 155-166.	1.2	0
308	Crack Initiation and Growth in Metal Alloys and Composites. , 2021, , 105-154.		1
309	The influence of extrusion temperature on the structures and mechanical properties of MgÄ±AlÄ±4Y alloys. Materials Research Express, 2020, 7, 096505.	1.6	1
310	Macroscopic analysis of time dependent plasticity in Ti alloys. Journal of Materials Science and Technology, 2022, , .	10.7	0
311	Design of a in-situ crystallization inoculant of AlÄ±Cu alloys by addition of lanthanum. Journal of Materials Research and Technology, 2022, 18, 852-858.	5.8	1
312	Peculiarities of Strengthening of AlÄ±CuÄ±Zr Alloy Structured by Severe Plastic Deformation. Physics of the Solid State, 2021, 63, 1744-1756.	0.6	4
313	Size Effects on Deformation and Fracture of Nanostructured Metals. , 0, , 27-77.		0
314	Defects and Deformation Mechanisms in Nanostructured Coatings. , 0, , 78-108.		0

#	ARTICLE	IF	CITATIONS
315	Application of copper as a pulse shaper in SHPB tests on brittle materials- experimental study, constitutive parameters identification, and numerical simulations. <i>Mechanics of Materials</i> , 2022, 171, 104336.	3.2	12
316	Numerical research on springback law of tension-compression yield asymmetry sheet in multi-point forming. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 0, , 095440542211017.	2.4	1
317	Different response mechanisms of yield strength and ultimate tensile strength in pure copper considering size effect. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 849, 143443.	5.6	5
318	Tension-compression asymmetry of grain-boundary sliding: A molecular dynamics study. <i>Materials Letters</i> , 2022, 325, 132822.	2.6	5
319	Unravelling the Size-Dependent Mechanical Properties of Nanocrystalline Face-Centered Cubic Metals: From the Dislocation Point of View. <i>Advanced Engineering Materials</i> , 2022, 24, .	3.5	2
320	Plastic flow behaviors of high-strength dual-phase Ni-SiOC nanocomposites. <i>International Journal of Plasticity</i> , 2022, 158, 103431.	8.8	3
321	Advances in the Processing of High-Entropy Alloys by Mechanical Alloying. <i>Advances in Material Research and Technology</i> , 2022, , 531-559.	0.6	0
322	Tension-compression asymmetry of quadruple CuCoNiBe alloys processed by high-temperature multi-pass equal channel angular pressing (ECAP). <i>Materialpruefung/Materials Testing</i> , 2022, 64, 1263-1269.	2.2	1
323	Effect of Interface Orientation and Loading Direction on the Mechanical Response of Cu-Nb Multilayered Nanocomposites. <i>Journal of Materials Engineering and Performance</i> , 0, , .	2.5	2
324	Linear complexions directly modify dislocation motion in face-centered cubic alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2023, 870, 144875.	5.6	2
325	A machine learning enabled ultra-fine grain design strategy of Mg-Mn-based alloys. <i>Journal of Materials Research and Technology</i> , 2023, 23, 4576-4590.	5.8	6
326	Deformation and fatigue behaviour of additively manufactured Scalmalloy® with bimodal microstructure. <i>International Journal of Fatigue</i> , 2023, 172, 107592.	5.7	4
327	Tension-Compression Flow Asymmetry as a Function of Alloy Composition in the Al-Si System. <i>Journal of Materials Engineering and Performance</i> , 2024, 33, 3148-3166.	2.5	0
328	Effects of grain size, texture and grain growth capacity gradients on the deformation mechanisms and mechanical properties of gradient nanostructured nickel. <i>Acta Mechanica</i> , 2023, 234, 4147-4181.	2.1	2
329	Elastic-Dissipative Properties of Heavy-Loaded Modified Friction Pairs. <i>Journal of Friction and Wear</i> , 2023, 44, 34-41.	0.5	1
330	Plasticity dependence on amorphous continuity in Fe-SiOC dual-phase nanocomposites. <i>Journal of Materials Science and Technology</i> , 2024, 173, 80-85.	10.7	1
331	In situ neutron diffraction revealing the achievement of excellent combination of strength and ductility in metastable austenitic steel by grain refinement. <i>Journal of Materials Science and Technology</i> , 2024, 176, 69-82.	10.7	0
332	Plastic Behavior of Metals and Their Sensitivity to Grain Size: Comparison between Two Multiscale Approaches. <i>Crystals</i> , 2023, 13, 1463.	2.2	0

#	ARTICLE	IF	CITATIONS
333	High Temperature Tensile and Compressive Behaviors of Nanostructured Polycrystalline AlCoCrFeNi High Entropy Alloy: A Molecular Dynamics Study. Journal of Engineering Materials and Technology, Transactions of the ASME, 0, , 1-35.	1.4	0
334	Effects of Pre-Stretching on the Mechanical Behavior of Cold-Rolled 5%Mn Medium Manganese Steel. Materials, 2023, 16, 6926.	2.9	0
335	Creation of a heterogeneous grain structure is a condition for increasing the low-temperature ductility of nanocrystalline hcp metals. Low Temperature Physics, 2023, 49, 1250-1256.	0.6	0
337	Effect of $\hat{\epsilon}^3$ -Ti Martensitic Phase Formation on Plasticity in Ti $\hat{\epsilon}$ Fe $\hat{\epsilon}$ Sn Ultrafine Eutectic Composites. Micromachines, 2024, 15, 148.	2.9	0
338	Ultrafine-grained Mg alloy: Preparation, properties, design strategy. Journal of Materials Research and Technology, 2024, 29, 4480-4504.	5.8	0
339	Cooperative effect of grain size and cryogenic temperature on deformation behavior and mechanism of commercial pure Al sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2024, 899, 146411.	5.6	0