Xiaoxu Huang

List of Publications by Year in descending order

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203	13,585	36303	22166
papers	citations	51 h-index	113 g-index

205	205	205	6591
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Revealing the Maximum Strength in Nanotwinned Copper. Science, 2009, 323, 607-610.	12.6	1,688
2	Heterogeneous lamella structure unites ultrafine-grain strength with coarse-grain ductility. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14501-14505.	7.1	1,202
3	The morphology and crystallography of lath martensite in alloy steels. Acta Materialia, 2006, 54, 5323-5331.	7.9	660
4	Hardening by Annealing and Softening by Deformation in Nanostructured Metals. Science, 2006, 312, 249-251.	12.6	632
5	Strong crystal size effect on deformation twinning. Nature, 2010, 463, 335-338.	27.8	553
6	Strengthening mechanisms in nanostructured high-purity aluminium deformed to high strain and annealed. Acta Materialia, 2009, 57, 4198-4208.	7.9	523
7	Effect of block size on the strength of lath martensite in low carbon steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 438-440, 237-240.	5.6	514
8	Microstructure and flow stress of polycrystals and single crystals. Acta Materialia, 1998, 46, 1827-1836.	7.9	286
9	Microstructure and strength of commercial purity aluminium (AA 1200) cold-rolled to large strains. Acta Materialia, 2002, 50, 3789-3802.	7.9	286
10	Microstructure and strengthening mechanisms in cold-drawn pearlitic steel wire. Acta Materialia, 2011, 59, 3422-3430.	7.9	275
11	Microstructural evolution during accumulative roll-bonding of commercial purity aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 340, 265-271.	5.6	257
12	The mechanism for the high dependence of the Hall-Petch slope for twinning/slip on texture in Mg alloys. Acta Materialia, 2017, 128, 313-326.	7.9	247
13	Watching the Growth of Bulk Grains During Recrystallization of Deformed Metals. Science, 2004, 305, 229-232.	12.6	234
14	Dislocation structures. Part I. Grain orientation dependence. Philosophical Magazine, 2007, 87, 5189-5214.	1.6	193
15	Microstructural evolution and hardening parameters. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 317, 3-11.	5.6	175
16	Nucleation and thickening of shear bands in nano-scale twin/matrix lamellae of a Cuâ€“Al alloy processed by dynamic plastic deformation. Acta Materialia, 2010, 58, 3103-3116.	7.9	172
17	Grain orientation dependence of microstructure in aluminium deformed in tension. Scripta Materialia, 1997, 37, 1-7.	5.2	146
18	Hallâ€“Petch and dislocation strengthening in graded nanostructured steel. Acta Materialia, 2012, 60, 5933-5943.	7.9	145

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19	Quantification of annealed microstructures in ARB processed aluminum. Acta Materialia, 2006, 54, 3055-3066.	7.9	140
20	Transitions in mechanical behavior and in deformation mechanisms enhance the strength and ductility of Mg-3Gd. Acta Materialia, 2020, 183, 398-407.	7.9	136
21	Quantitative prediction of texture effect on Hallâ€“Petch slope for magnesium alloys. Acta Materialia, 2019, 173, 142-152.	7.9	126
22	Evading strength-corrosion tradeoff in Mg alloys via dense ultrafine twins. Nature Communications, 2021, 12, 4616.	12.8	126
23	Grain Orientation Effect on Microstructure in Tensile Strained Copper. Scripta Materialia, 1998, 38, 1697-1703.	5.2	120
24	Strengthening mechanisms and Hall-Petch stress of ultrafine grained Al-0.3%Cu. Acta Materialia, 2018, 156, 369-378.	7.9	118
25	Evolution of microstructural parameters and flow stresses toward limits in nickel deformed to ultra-high strains. Acta Materialia, 2008, 56, 5451-5465.	7.9	117
26	Thermal behavior of Ni (99.967% and 99.5% purity) deformed to an ultra-high strain by high pressure torsion. Acta Materialia, 2010, 58, 1698-1707.	7.9	116
27	Dislocation structures. Part II. Slip system dependence. Philosophical Magazine, 2007, 87, 5215-5235.	1.6	115
28	Tracking the sliding of grain boundaries at the atomic scale. Science, 2022, 375, 1261-1265.	12.6	115
29	Three-Dimensional Orientation Mapping in the Transmission Electron Microscope. Science, 2011, 332, 833-834.	12.6	114
30	Dislocation-based plasticity and strengthening mechanisms in sub-20Ânm lamellar structures in pearlitic steel wire. Acta Materialia, 2016, 114, 176-183.	7.9	112
31	Characteristics of long {10-12} twin bands in sheet rolling of a magnesium alloy. Scripta Materialia, 2014, 74, 96-99.	5.2	102
32	Hierarchical structures in cold-drawn pearlitic steel wire. Acta Materialia, 2013, 61, 4898-4909.	7.9	99
33	High-pressure strengthening in ultrafine-grained metals. Nature, 2020, 579, 67-72.	27.8	96
34	Crystallographic and macroscopic orientation of planar dislocation boundariesâ€”correlation with grain orientation. Acta Materialia, 2000, 48, 2187-2198.	7.9	95
35	Effect of hardness of martensite and ferrite on void formation in dual phase steel. Materials Science and Technology, 2012, 28, 1092-1100.	1.6	94
36	Structure and strength after large strain deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 387-389, 191-194.	5.6	92

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37	Laminated Ti-Al composites: Processing, structure and strength. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 673, 572-580.	5.6	92
38	Mechanism of dynamic continuous recrystallization during superplastic deformation in a microduplex stainless steel. Acta Materialia, 1996, 44, 4491-4499.	7.9	87
39	Evolution of cementite morphology in pearlitic steel wire during wet wire drawing. Materials Characterization, 2010, 61, 65-72.	4.4	80
40	Dependence of dislocation structure on orientation and slip systems in highly oriented nanotwinned Cu. Acta Materialia, 2017, 127, 85-97.	7.9	79
41	Critical comparison of dislocation boundary alignment studied by TEM and EBSD: technical issues and theoretical consequences. Acta Materialia, 2004, 52, 4437-4446.	7.9	77
42	The effect of cooling rate on the microstructures formed during solidification of ferritic steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 3155-3166.	2.2	76
43	Strengthening mechanisms in nanostructured aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 483-484, 102-104.	5.6	76
44	Enhancement of an additive-manufactured austenitic stainless steel by post-manufacture heat-treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 65-69.	5.6	75
45	Recovery by triple junction motion in aluminium deformed to ultrahigh strains. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 3039-3065.	2.1	72
46	Superplasticity in a SiCw-6061Al composite. Journal of Materials Science Letters, 1991, 10, 964-966.	0.5	67
47	Grain orientation, deformation microstructure and flow stress. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 494, 61-67.	5.6	64
48	Enhanced strength in pure Ti via design of alternating coarse- and fine-grain layers. Acta Materialia, 2021, 206, 116627.	7.9	62
49	Twin stability in highly nanotwinned Cu under compression, torsion and tension. Scripta Materialia, 2012, 66, 872-877.	5.2	61
50	Grain orientation dependence of deformation twinning in pure Cu subjected to dynamic plastic deformation. Scripta Materialia, 2009, 61, 289-292.	5.2	56
51	Observations of orientation dependence of surface morphology in tungsten implanted by low energy and high flux D plasma. Journal of Nuclear Materials, 2013, 443, 452-457.	2.7	55
52	Interaction between nano-voids and migrating grain boundary by molecular dynamics simulation. Acta Materialia, 2019, 173, 206-224.	7.9	52
53	Polycrystal deformation and single crystal deformation: dislocation structure and flow stress in copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 319-321, 237-241.	5.6	50
54	Grain orientation and dislocation patterns. Philosophical Magazine, 2006, 86, 3981-3994.	1.6	50

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55	Recovery of heavily cold-rolled aluminum: Effect of local texture. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 1311-1322.	2.2	50
56	Linking recovery and recrystallization through triple junction motion in aluminum cold rolled to a large strain. Acta Materialia, 2013, 61, 6577-6586.	7.9	50
57	Tailoring dislocation structures and mechanical properties of nanostructured metals produced by plastic deformation. Scripta Materialia, 2009, 60, 1078-1082.	5.2	48
58	Influence of grain size in the near-micrometre regime on the deformation microstructure in aluminium. Acta Materialia, 2013, 61, 7072-7086.	7.9	48
59	Dislocation content of geometrically necessary boundaries aligned with slip planes in rolled aluminium. Philosophical Magazine, 2013, 93, 3118-3141.	1.6	47
60	In situ observation of triple junction motion during recovery of heavily deformed aluminum. Acta Materialia, 2015, 86, 269-278.	7.9	43
61	Hall-Petch strengthening in Fe-34.5Mn-0.04C steel cold-rolled, partially recrystallized and fully recrystallized. Scripta Materialia, 2018, 155, 41-45.	5.2	43
62	Ultrafine Structure and High Strength in Cold-Rolled Martensite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3517-3531.	2.2	42
63	Grain boundary induced deformation mechanisms in nanocrystalline Al by molecular dynamics simulation: From interatomic potential perspective. Computational Materials Science, 2019, 156, 421-433.	3.0	42
64	Revealing deformation microstructures. Materials Today, 2007, 10, 24-32.	14.2	41
65	Enhancement of strength and stability of nanostructured Ni by small amounts of solutes. Scripta Materialia, 2011, 65, 481-484.	5.2	41
66	Effect of Grain Boundaries and Grain Orientation on Structure and Properties. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 613-625.	2.2	41
67	Observation and Schmid factor analysis of multiple twins in a warm-rolled Mgâ€“3Alâ€“1Zn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 596, 41-44.	5.6	41
68	Through-Thickness Characterization of Microstructure and Texture in High Purity Aluminum Processed to High Strain by Accumulative Roll-Bonding. Materials Transactions, 2007, 48, 1978-1985.	1.2	38
69	Dislocations, boundaries and slip systems in cube grains of rolled aluminium. Scripta Materialia, 2011, 65, 355-358.	5.2	38
70	Deformation bands in a [110] aluminium single crystal strained in tension. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2003, 459, 85-108.	2.1	36
71	The different effects of twin boundary and grain boundary on reducing tension-compression yield asymmetry of Mg alloys. Scientific Reports, 2016, 6, 29283.	3.3	36
72	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:mrow><mml:mo stretchy="true">{</mml:mo><mml:mrow><mml:mn>10</mml:mn><mml:mrow><mml:mover accent="true"><mml:mn>1</mml:mn><mml:mo>Â¯</mml:mo></mml:mover></mml:mrow><mml:mn>2</mml:mn></mml:mrow><mml:mo stretchy="true">}</mml:mo></mml:mrow></mml:mrow></mml:math> twinning behavior under biaxial tension of Mgâ€“3Alâ€“1Zn plate. International Journal of Plasticity, 2020, 132, 102754.	8.8	36

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73	Deformation microstructures. Scripta Metallurgica Et Materialia, 1992, 27, 1447-1452.	1.0	35
74	A quantitative study on mechanical behavior of Mg alloys with bimodal texture components. Acta Materialia, 2021, 214, 117013.	7.9	35
75	Observation of a New Mechanism Balancing Hardening and Softening in Metals. Materials Research Letters, 2014, 2, 160-165.	8.7	34
76	Rapid hardening induced by electric pulse annealing in nanostructured pure aluminum. Scripta Materialia, 2012, 66, 147-150.	5.2	33
77	Orientation dependence of the deformation microstructure in compressed aluminum. Scripta Materialia, 2012, 66, 359-362.	5.2	33
78	Grain orientation dependence of microstructures in a warm rolled IF steel. Acta Materialia, 2004, 52, 5405-5418.	7.9	31
79	Determination of crystallographic and macroscopic orientation of planar structures in TEM. Ultramicroscopy, 1998, 74, 123-130.	1.9	30
80	Crystal orientations before and after annealing in an Al single crystal strained in tension. Acta Materialia, 2003, 51, 1827-1839.	7.9	30
81	Flow stress and microstructures of fine grained copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 387-389, 186-190.	5.6	29
82	Strengthening mechanisms in selective laser melted 316L stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 832, 142434.	5.6	29
83	Nucleation of recrystallization observed in situ in the bulk of a deformed metal. Scripta Materialia, 2005, 53, 553-557.	5.2	28
84	Cryogenic toughness in a low-cost austenitic steel. Communications Materials, 2021, 2, .	6.9	28
85	The mechanism for an orientation dependence of grain boundary strengthening in pure titanium. International Journal of Plasticity, 2022, 153, 103276.	8.8	28
86	In-situ synchrotron X-ray micro-diffraction investigation of ultra-low-strain deformation microstructure in laminated Ti-Al composites. Acta Materialia, 2021, 202, 149-158.	7.9	27
87	Increasing the ductility of nanostructured Al and Fe by deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 493, 184-189.	5.6	26
88	Plastic deformation of submicron-sized crystals studied by in-situ Kikuchi diffraction and dislocation imaging. Materials Characterization, 2012, 70, 21-27.	4.4	24
89	Structure and strength of sub-100â€‰nm lamellar structures in cold-drawn pearlitic steel wire. Materials Science and Technology, 2018, 34, 794-808.	1.6	24
90	Development of Goss texture in Alâ€“0.3%Cu annealed after heavy rolling. Journal of Alloys and Compounds, 2018, 749, 399-405.	5.5	24

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91	Extended planar boundary inclinations in fcc single crystals and polycrystals subjected to plane strain deformation. Philosophical Magazine, 2003, 83, 969-983.	1.6	22
92	Recovery mechanisms in nanostructured aluminium. Philosophical Magazine, 2012, 92, 4056-4074.	1.6	22
93	Surface Ripples of Polymeric Nanofibers under Tension: The Crucial Role of Poissonâ€™s Ratio. Macromolecules, 2014, 47, 6503-6514.	4.8	22
94	Laminated Fe-34.5â€Mn-0.04C composite with high strength and ductility. Journal of Materials Science and Technology, 2018, 34, 1939-1943.	10.7	22
95	Unprecedented strength in pure iron via high-pressure induced nanotwinned martensite. Materials Research Letters, 2019, 7, 354-360.	8.7	22
96	Strengthening mechanisms and optimization of structure and properties in a nanostructured IF steel. Journal of Materials Science, 2010, 45, 4761-4769.	3.7	21
97	In-situ investigation of the evolution of annealing twins in high purity aluminium. Scripta Materialia, 2018, 153, 68-72.	5.2	21
98	Quantitative Analysis of Structure-Strength Relation of Commercial Purity Aluminium Deformed by Accumulative Roll Bonding and Annealed at Low Temperature. Materials Science Forum, 2003, 426-432, 405-410.	0.3	20
99	Thermal stability of aluminum cold rolled to large strain. Journal of Materials Science, 2008, 43, 6254-6259.	3.7	20
100	TEM-based dislocation tomography: Challenges and opportunities. Current Opinion in Solid State and Materials Science, 2020, 24, 100833.	11.5	20
101	2D and 3D orientation mapping in nanostructured metals: A review. Nano Materials Science, 2020, 2, 50-57.	8.8	20
102	Crystallography and morpholgy of cementite precipitates formed during rapid solidification of a ferritic stainless steel. Acta Materialia, 2000, 48, 4073-4082.	7.9	19
103	Electron Backscatter Diffraction Analysis of Recrystallized Grains Formed in Deformation Band in Aluminum Single Crystal. Materials Transactions, 2001, 42, 1938-1944.	1.2	19
104	Microstructures of Nickel Deformed by High Pressure Torsion to High Strains. Materials Science Forum, 2003, 426-432, 2819-2824.	0.3	19
105	Investigation of the deformation structure in an aluminium magnesium alloy by high angular resolution three-dimensional X-ray diffraction. Scripta Materialia, 2007, 56, 769-772.	5.2	18
106	Nanostructured Aluminum and IF Steel Produced by Rollingâ€”a Comparative Study. ISIJ International, 2008, 48, 1080-1087.	1.4	17
107	Uniaxial stress-driven grain boundary migration in Hexagonal Close-packed (HCP) metals: Theory and MD simulations. International Journal of Plasticity, 2017, 95, 82-104.	8.8	16
108	Managing both strength and ductility in duplex stainless steel with heterogeneous lamella structure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 738, 190-193.	5.6	16

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109	Characterization of nanostructured metals produced by plastic deformation. Journal of Materials Science, 2007, 42, 1577-1583.	3.7	15
110	Heterogeneous microstructure and enhanced mechanical properties in annealed multilayered IF steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 262-271.	5.6	15
111	Dislocation structure and dynamics govern pop-in modes of nanoindentation on single-crystal metals. Philosophical Magazine, 2020, 100, 1585-1606.	1.6	15
112	Property optimization of nanostructured ARB-processed Al by post-process deformation. Journal of Materials Science, 2008, 43, 7397-7402.	3.7	14
113	Cold rolled nanostructured super-pure Al (99.9996Â%) containing 1Â% Si particles: structure and strength. Journal of Materials Science, 2012, 47, 7914-7920.	3.7	14
114	Stringâ€Ofâ€Pearls Locking Plate and Cerclage Wire Stabilization of Periprosthetic Femoral Fractures after Total Hip Replacement in Six Dogs. Veterinary Surgery, 2012, 41, 180-188.	1.0	14
115	Low-Energy Dislocation Structure (LEDS) character of dislocation boundaries aligned with slip planes in rolled aluminium. Philosophical Magazine, 2015, 95, 1471-1489.	1.6	14
116	In situ TEM investigation on void coalescence in metallic materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 260-268.	5.6	14
117	The synergy of boundary engineering and segregation strategy towards high strength and ductility Mg-3Gd alloy. Journal of Alloys and Compounds, 2020, 819, 153051.	5.5	14
118	A semi-numerical algorithm for instability of compressible multilayered structures. Computational Mechanics, 2015, 56, 63-75.	4.0	13
119	Superior high temperature creep resistance of a cast Alâ€“Mgâ€“Ca-Sc alloy with multi-scale hierarchical microstructures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 850, 143533.	5.6	13
120	Segregation and precipitation stabilizing an ultrafine lamellar-structured Al-0.3%Cu alloy. Acta Materialia, 2021, 206, 116595.	7.9	12
121	Single-crystal two-dimensional material epitaxy on tailored non-single-crystal substrates. Nature Communications, 2022, 13, 1773.	12.8	12
122	Dislocation structures and flow stress. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 234-236, 602-605.	5.6	11
123	TEM Study of Twin Segments in Annealed Copper. Materials Science Forum, 1999, 294-296, 401-404.	0.3	11
124	Effects of interface roughness on the annealing behaviour of laminated Ti-Al composite deformed by hot rolling. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012021.	0.6	11
125	Tailoring structures through two-step annealing process in nanostructured aluminum produced by accumulative roll-bonding. Journal of Materials Science, 2008, 43, 7313-7319.	3.7	10
126	Effects of precipitates versus solute atoms on the deformation-induced grain refinement in an Alâ€“Cuâ€“Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138486.	5.6	10

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127	Microtexture of Lamellar Structures in Al Heavily Deformed by Accumulative Roll-Bonding (ARB). Materials Science Forum, 2002, 408-412, 715-720.	0.3	9
128	EBSD and TEM Characterization of Ultrafine Grained High Purity Aluminum Produced by Accumulative Roll-Bonding. Materials Science Forum, 2006, 512, 91-96.	0.3	9
129	Deformation Induced Martensitic Transformation and Its Initial Microstructure Dependence in a High Alloyed Duplex Stainless Steel. Steel Research International, 2017, 88, 1700169.	1.8	9
130	Large Strain Deformation and Annealing of Aluminium. Materials Science Forum, 2006, 519-521, 79-84.	0.3	8
131	Non-spherical voids and lattice reorientation patterning in a shock-loaded Al single crystal. Acta Materialia, 2017, 134, 16-30.	7.9	8
132	Grain Size Effect on the Mechanical Behavior of Metastable Fe-23Cr-8.5Ni Alloy. Metals, 2019, 9, 734.	2.3	8
133	twin nucleation at prismatic/basal boundary in hexagonal close-packed metals. Philosophical Magazine, 2019, 99, 2584-2603.	1.6	8
134	Termination of local strain concentration led to better tensile ductility in multilayered 2N/4N Al sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 782, 139240.	5.6	8
135	Superplastic deformation in a coarse-grained Fe3Al based alloy. Scripta Materialia, 2001, 44, 501-505.	5.2	7
136	Structural Change during Cold Rolling of Electrodeposited Copper. Materials Science Forum, 2007, 539-543, 5013-5018.	0.3	7
137	Chapter 18 THz Investigations of Condensed Phase Biomolecular Systems. Methods in Cell Biology, 2008, 90, 417-434.	1.1	7
138	Dislocation-Source Hardening in Nanostructured Steel Produced by Severe Plastic Deformation. Materials Science Forum, 0, 638-642, 1959-1964.	0.3	7
139	Pt-20Rh dispersion strengthened by ZrO2 - Microstructure and strength. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 765, 138305.	5.6	7
140	Microstructure, texture and mechanical properties of sandwiched ARB6/2/6 2N Al fabricated by accumulative roll bonding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 817, 141356.	5.6	7
141	Unprecedented age-hardening and its structural requirement in a severely deformed Al-Cu-Mg alloy. Scripta Materialia, 2022, 206, 114240.	5.2	7
142	Strain distribution during tensile deformation of nanostructured aluminum samples. Journal of Materials Science, 2012, 47, 7901-7907.	3.7	6
143	Development of a strong Goss texture during annealing of a heavily rolled Alâ€”0.3% Cu alloy. IOP Conference Series: Materials Science and Engineering, 2015, 82, 012050.	0.6	6
144	Five-parameter grain boundary character distribution of gold nanoparticles based on three dimensional orientation mapping in the TEM. Scripta Materialia, 2022, 214, 114677.	5.2	6

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145	Planar colony of needle precipitates formed during solidification of a ferritic stainless steel. Scripta Materialia, 1997, 36, 1219-1226.	5.2	5
146	Extended dislocation boundaries in metals subjected to plane strain deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 409, 52-58.	5.6	5
147	Precise determination of extended dislocation boundary plane in transmission electron microscopy. Materials Science and Technology, 2005, 21, 1379-1382.	1.6	5
148	Quantitative TEM analysis of Al/Cu multilayer systems prepared by pulsed laser deposition. Applied Physics A: Materials Science and Processing, 2010, 101, 677-680.	2.3	5
149	Stored Energy and Annealing Behavior of Heavily Deformed Aluminium. Materials Science Forum, 0, 715-716, 367-372.	0.3	5
150	Triple Junction Motion â€“ A New Recovery Mechanism in Metals Deformed to Large Strains. Materials Science Forum, 0, 753, 485-488.	0.3	5
151	Particle stabilization of plastic flow in nanostructured Al-1Â%Si Alloy. Journal of Materials Science, 2014, 49, 6667-6673.	3.7	5
152	Effect of shot peening on the residual stress and mechanical behaviour of low-temperature and high-temperature annealed martensitic gear steel 18CrNiMo7-6. IOP Conference Series: Materials Science and Engineering, 2017, 219, 012046.	0.6	5
153	Development of micro-Laue technique at Shanghai Synchrotron Radiation Facility for materials sciences. Science China Materials, 2021, 64, 2348-2358.	6.3	5
154	Boundary characteristics in Heavily Deformed Metals. Advanced Engineering Materials, 2003, 5, 317-322.	3.5	4
155	Length scale effect on the deformation microstructures of grown-in twins in copper. Philosophical Magazine, 2014, 94, 2262-2280.	1.6	4
156	Recrystallization textures and microstructures of Al-0.3%Cu alloy after deformation to high strains. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012032.	0.6	4
157	Electron tomography of dislocations in an Al-Cu-Mg alloy. IOP Conference Series: Materials Science and Engineering, 2017, 219, 012018.	0.6	4
158	Observation of simultaneous increase in strength and ductility by grain refinement in a Fe-34.5Mn-0.04C steel. IOP Conference Series: Materials Science and Engineering, 2017, 219, 012043.	0.6	4
159	Microstructural changes during superplastic deformation of an Al-Li-Cu-Mg-Zr alloy. Journal of Materials Science Letters, 1991, 10, 779-782.	0.5	3
160	In-Situ Measurements of Growth of Nuclei within the Bulk of Deformed Aluminium Single Crystals. Materials Science Forum, 2004, 467-470, 189-192.	0.3	3
161	Effect of grain orientation on microstructures of aluminium in warm tension. Materials Science and Technology, 2005, 21, 1471-1475.	1.6	3
162	Nanostructured Aluminium - Recovery and Recrystallization. Materials Science Forum, 2007, 558-559, 201-206.	0.3	3

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163	Gradient nanostructured surface of a Cu plate processed by incremental frictional sliding. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012026.	0.6	3
164	Recovery by triple junction motion in heavily deformed metals. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012014.	0.6	3
165	EBSD characterization of deformed lath martensite in IF steel. IOP Conference Series: Materials Science and Engineering, 2017, 219, 012033.	0.6	3
166	Atomistic Simulation of the Interaction Between Point Defects and Twin Boundary. Physica Status Solidi (B): Basic Research, 2018, 255, 1800228.	1.5	3
167	Gradient Microstructure in a Gear Steel Produced by Pressurized Gas Nitriding. Materials, 2019, 12, 3797.	2.9	3
168	Mechanical twinning during superplastic deformation of an Al-Li-Cu-Mg-Zr alloy. Journal of Materials Science Letters, 1991, 10, 932-934.	0.5	2
169	TEM method for rapid and precise evaluation of continuous recrystallization. Materials Characterization, 1992, 29, 271-276.	4.4	2
170	Microstructural Coarsening during Annealing of Cold Rolled Aluminum. Materials Science Forum, 2004, 467-470, 209-216.	0.3	2
171	Enhanced ductility in coarse grained Fe3Al alloys. Intermetallics, 2004, 12, 1019-1023.	3.9	2
172	Structural Refinement of Interstitial Free (IF) Steel by Deformation and Phase Transformation. Materials Science Forum, 2005, 475-479, 37-42.	0.3	2
173	Preface to the Viewpoint Set: Nanostructured metals â€“ Advances in processing, characterization and application. Scripta Materialia, 2009, 60, 1031-1032.	5.2	2
174	Preface to the special issue on ultrafine-grained materials. Journal of Materials Science, 2012, 47, 7717-7718.	3.7	2
175	Formation of a Random Recrystallization Texture in Heavily Cold Rolled and Annealed Al-1%Si Alloy. Materials Science Forum, 2013, 753, 243-246.	0.3	2
176	Microstructural and hardness gradients in Cu processed by high pressure surface rolling. IOP Conference Series: Materials Science and Engineering, 2017, 219, 012025.	0.6	2
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