

Xiaoxu Huang

List of Publications by Year in descending order

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203
papers

13,585
citations

36271

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205
all docs

205
docs citations

205
times ranked

6591
citing authors

#	ARTICLE	IF	CITATIONS
1	Revealing the Maximum Strength in Nanotwinned Copper. <i>Science</i> , 2009, 323, 607-610.	6.0	1,688
2	Heterogeneous lamella structure unites ultrafine-grain strength with coarse-grain ductility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14501-14505.	3.3	1,202
3	The morphology and crystallography of lath martensite in alloy steels. <i>Acta Materialia</i> , 2006, 54, 5323-5331.	3.8	660
4	Hardening by Annealing and Softening by Deformation in Nanostructured Metals. <i>Science</i> , 2006, 312, 249-251.	6.0	632
5	Strong crystal size effect on deformation twinning. <i>Nature</i> , 2010, 463, 335-338.	13.7	553
6	Strengthening mechanisms in nanostructured high-purity aluminium deformed to high strain and annealed. <i>Acta Materialia</i> , 2009, 57, 4198-4208.	3.8	523
7	Effect of block size on the strength of lath martensite in low carbon steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 438-440, 237-240.	2.6	514
8	Microstructure and flow stress of polycrystals and single crystals. <i>Acta Materialia</i> , 1998, 46, 1827-1836.	3.8	286
9	Microstructure and strength of commercial purity aluminium (AA 1200) cold-rolled to large strains. <i>Acta Materialia</i> , 2002, 50, 3789-3802.	3.8	286
10	Microstructure and strengthening mechanisms in cold-drawn pearlitic steel wire. <i>Acta Materialia</i> , 2011, 59, 3422-3430.	3.8	275
11	Microstructural evolution during accumulative roll-bonding of commercial purity aluminum. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 340, 265-271.	2.6	257
12	The mechanism for the high dependence of the Hall-Petch slope for twinning/slip on texture in Mg alloys. <i>Acta Materialia</i> , 2017, 128, 313-326.	3.8	247
13	Watching the Growth of Bulk Grains During Recrystallization of Deformed Metals. <i>Science</i> , 2004, 305, 229-232.	6.0	234
14	Dislocation structures. Part I. Grain orientation dependence. <i>Philosophical Magazine</i> , 2007, 87, 5189-5214.	0.7	193
15	Microstructural evolution and hardening parameters. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 317, 3-11.	2.6	175
16	Nucleation and thickening of shear bands in nano-scale twin/matrix lamellae of a Cu-Al alloy processed by dynamic plastic deformation. <i>Acta Materialia</i> , 2010, 58, 3103-3116.	3.8	172
17	Grain orientation dependence of microstructure in aluminium deformed in tension. <i>Scripta Materialia</i> , 1997, 37, 1-7.	2.6	146
18	Hall-Petch and dislocation strengthening in graded nanostructured steel. <i>Acta Materialia</i> , 2012, 60, 5933-5943.	3.8	145

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19	Quantification of annealed microstructures in ARB processed aluminum. <i>Acta Materialia</i> , 2006, 54, 3055-3066.	3.8	140
20	Transitions in mechanical behavior and in deformation mechanisms enhance the strength and ductility of Mg-3Gd. <i>Acta Materialia</i> , 2020, 183, 398-407.	3.8	136
21	Quantitative prediction of texture effect on Hall-Petch slope for magnesium alloys. <i>Acta Materialia</i> , 2019, 173, 142-152.	3.8	126
22	Evading strength-corrosion tradeoff in Mg alloys via dense ultrafine twins. <i>Nature Communications</i> , 2021, 12, 4616.	5.8	126
23	Grain Orientation Effect on Microstructure in Tensile Strained Copper. <i>Scripta Materialia</i> , 1998, 38, 1697-1703.	2.6	120
24	Strengthening mechanisms and Hall-Petch stress of ultrafine grained Al-0.3%Cu. <i>Acta Materialia</i> , 2018, 156, 369-378.	3.8	118
25	Evolution of microstructural parameters and flow stresses toward limits in nickel deformed to ultra-high strains. <i>Acta Materialia</i> , 2008, 56, 5451-5465.	3.8	117
26	Thermal behavior of Ni (99.967% and 99.5% purity) deformed to an ultra-high strain by high pressure torsion. <i>Acta Materialia</i> , 2010, 58, 1698-1707.	3.8	116
27	Dislocation structures. Part II. Slip system dependence. <i>Philosophical Magazine</i> , 2007, 87, 5215-5235.	0.7	115
28	Tracking the sliding of grain boundaries at the atomic scale. <i>Science</i> , 2022, 375, 1261-1265.	6.0	115
29	Three-Dimensional Orientation Mapping in the Transmission Electron Microscope. <i>Science</i> , 2011, 332, 833-834.	6.0	114
30	Dislocation-based plasticity and strengthening mechanisms in sub-20nm lamellar structures in pearlitic steel wire. <i>Acta Materialia</i> , 2016, 114, 176-183.	3.8	112
31	Characteristics of long {10-12} twin bands in sheet rolling of a magnesium alloy. <i>Scripta Materialia</i> , 2014, 74, 96-99.	2.6	102
32	Hierarchical structures in cold-drawn pearlitic steel wire. <i>Acta Materialia</i> , 2013, 61, 4898-4909.	3.8	99
33	High-pressure strengthening in ultrafine-grained metals. <i>Nature</i> , 2020, 579, 67-72.	13.7	96
34	Crystallographic and macroscopic orientation of planar dislocation boundaries correlation with grain orientation. <i>Acta Materialia</i> , 2000, 48, 2187-2198.	3.8	95
35	Effect of hardness of martensite and ferrite on void formation in dual phase steel. <i>Materials Science and Technology</i> , 2012, 28, 1092-1100.	0.8	94
36	Structure and strength after large strain deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 387-389, 191-194.	2.6	92

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37	Laminated Ti-Al composites: Processing, structure and strength. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 673, 572-580.	2.6	92
38	Mechanism of dynamic continuous recrystallization during superplastic deformation in a microduplex stainless steel. <i>Acta Materialia</i> , 1996, 44, 4491-4499.	3.8	87
39	Evolution of cementite morphology in pearlitic steel wire during wet wire drawing. <i>Materials Characterization</i> , 2010, 61, 65-72.	1.9	80
40	Dependence of dislocation structure on orientation and slip systems in highly oriented nanotwinned Cu. <i>Acta Materialia</i> , 2017, 127, 85-97.	3.8	79
41	Critical comparison of dislocation boundary alignment studied by TEM and EBSD: technical issues and theoretical consequences. <i>Acta Materialia</i> , 2004, 52, 4437-4446.	3.8	77
42	The effect of cooling rate on the microstructures formed during solidification of ferritic steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000, 31, 3155-3166.	1.1	76
43	Strengthening mechanisms in nanostructured aluminum. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 483-484, 102-104.	2.6	76
44	Enhancement of an additive-manufactured austenitic stainless steel by post-manufacture heat-treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 759, 65-69.	2.6	75
45	Recovery by triple junction motion in aluminium deformed to ultrahigh strains. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2011, 467, 3039-3065.	1.0	72
46	Superplasticity in a SiCw-6061Al composite. <i>Journal of Materials Science Letters</i> , 1991, 10, 964-966.	0.5	67
47	Grain orientation, deformation microstructure and flow stress. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 494, 61-67.	2.6	64
48	Enhanced strength in pure Ti via design of alternating coarse- and fine-grain layers. <i>Acta Materialia</i> , 2021, 206, 116627.	3.8	62
49	Twin stability in highly nanotwinned Cu under compression, torsion and tension. <i>Scripta Materialia</i> , 2012, 66, 872-877.	2.6	61
50	Grain orientation dependence of deformation twinning in pure Cu subjected to dynamic plastic deformation. <i>Scripta Materialia</i> , 2009, 61, 289-292.	2.6	56
51	Observations of orientation dependence of surface morphology in tungsten implanted by low energy and high flux D plasma. <i>Journal of Nuclear Materials</i> , 2013, 443, 452-457.	1.3	55
52	Interaction between nano-voids and migrating grain boundary by molecular dynamics simulation. <i>Acta Materialia</i> , 2019, 173, 206-224.	3.8	52
53	Polycrystal deformation and single crystal deformation: dislocation structure and flow stress in copper. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 319-321, 237-241.	2.6	50
54	Grain orientation and dislocation patterns. <i>Philosophical Magazine</i> , 2006, 86, 3981-3994.	0.7	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.	1.1	50
56	Linking recovery and recrystallization through triple junction motion in aluminum cold rolled to a large strain. Acta Materialia, 2013, 61, 6577-6586.	3.8	50
57	Tailoring dislocation structures and mechanical properties of nanostructured metals produced by plastic deformation. Scripta Materialia, 2009, 60, 1078-1082.	2.6	48
58	Influence of grain size in the near-micrometre regime on the deformation microstructure in aluminium. Acta Materialia, 2013, 61, 7072-7086.	3.8	48
59	Dislocation content of geometrically necessary boundaries aligned with slip planes in rolled aluminium. Philosophical Magazine, 2013, 93, 3118-3141.	0.7	47
60	In situ observation of triple junction motion during recovery of heavily deformed aluminum. Acta Materialia, 2015, 86, 269-278.	3.8	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.	2.6	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.	1.1	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.	1.4	42
64	Revealing deformation microstructures. Materials Today, 2007, 10, 24-32.	8.3	41
65	Enhancement of strength and stability of nanostructured Ni by small amounts of solutes. Scripta Materialia, 2011, 65, 481-484.	2.6	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.	1.1	41
67	Observation and Schmid factor analysis of multiple twins in a warm-rolled Mg ₃ Al ₁ Zn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 596, 41-44.	2.6	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.	0.4	38
69	Dislocations, boundaries and slip systems in cube grains of rolled aluminium. Scripta Materialia, 2011, 65, 355-358.	2.6	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.	1.0	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.	1.6	36
72	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo stretchy="true"} \rangle \{ \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 10 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mover accent="true"} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \hat{\sim} \langle \text{mml:mo} \rangle \langle \text{mml:mover} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo stretchy="true"} \rangle \} \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ twinning behavior under biaxial tension of Mg ₃ Al ₁ Zn plate. International Journal of Plasticity, 2020, 132, 102754.	4.1	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.	3.8	35
75	Observation of a New Mechanism Balancing Hardening and Softening in Metals. Materials Research Letters, 2014, 2, 160-165.	4.1	34
76	Rapid hardening induced by electric pulse annealing in nanostructured pure aluminum. Scripta Materialia, 2012, 66, 147-150.	2.6	33
77	Orientation dependence of the deformation microstructure in compressed aluminum. Scripta Materialia, 2012, 66, 359-362.	2.6	33
78	Grain orientation dependence of microstructures in a warm rolled IF steel. Acta Materialia, 2004, 52, 5405-5418.	3.8	31
79	Determination of crystallographic and macroscopic orientation of planar structures in TEM. Ultramicroscopy, 1998, 74, 123-130.	0.8	30
80	Crystal orientations before and after annealing in an Al single crystal strained in tension. Acta Materialia, 2003, 51, 1827-1839.	3.8	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.	2.6	29
82	Strengthening mechanisms in selective laser melted 316L stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 832, 142434.	2.6	29
83	Nucleation of recrystallization observed in situ in the bulk of a deformed metal. Scripta Materialia, 2005, 53, 553-557.	2.6	28
84	Cryogenic toughness in a low-cost austenitic steel. Communications Materials, 2021, 2, .	2.9	28
85	The mechanism for an orientation dependence of grain boundary strengthening in pure titanium. International Journal of Plasticity, 2022, 153, 103276.	4.1	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.	3.8	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.	2.6	26
88	Plastic deformation of submicron-sized crystals studied by in-situ Kikuchi diffraction and dislocation imaging. Materials Characterization, 2012, 70, 21-27.	1.9	24
89	Structure and strength of sub-100nm lamellar structures in cold-drawn pearlitic steel wire. Materials Science and Technology, 2018, 34, 794-808.	0.8	24
90	Development of Goss texture in Al-0.3%Cu annealed after heavy rolling. Journal of Alloys and Compounds, 2018, 749, 399-405.	2.8	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.	0.7	22
92	Recovery mechanisms in nanostructured aluminium. Philosophical Magazine, 2012, 92, 4056-4074.	0.7	22
93	Surface Ripples of Polymeric Nanofibers under Tension: The Crucial Role of Poisson's Ratio. Macromolecules, 2014, 47, 6503-6514.	2.2	22
94	Laminated Fe-34.5%Mn-0.04C composite with high strength and ductility. Journal of Materials Science and Technology, 2018, 34, 1939-1943.	5.6	22
95	Unprecedented strength in pure iron via high-pressure induced nanotwinned martensite. Materials Research Letters, 2019, 7, 354-360.	4.1	22
96	Strengthening mechanisms and optimization of structure and properties in a nanostructured IF steel. Journal of Materials Science, 2010, 45, 4761-4769.	1.7	21
97	In-situ investigation of the evolution of annealing twins in high purity aluminium. Scripta Materialia, 2018, 153, 68-72.	2.6	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.	1.7	20
100	TEM-based dislocation tomography: Challenges and opportunities. Current Opinion in Solid State and Materials Science, 2020, 24, 100833.	5.6	20
101	2D and 3D orientation mapping in nanostructured metals: A review. Nano Materials Science, 2020, 2, 50-57.	3.9	20
102	Crystallography and morphology of cementite precipitates formed during rapid solidification of a ferritic stainless steel. Acta Materialia, 2000, 48, 4073-4082.	3.8	19
103	Electron Backscatter Diffraction Analysis of Recrystallized Grains Formed in Deformation Band in Aluminum Single Crystal. Materials Transactions, 2001, 42, 1938-1944.	0.4	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.	2.6	18
106	Nanostructured Aluminum and IF Steel Produced by Rolling—a Comparative Study. ISIJ International, 2008, 48, 1080-1087.	0.6	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.	4.1	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.	2.6	16

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109	Characterization of nanostructured metals produced by plastic deformation. <i>Journal of Materials Science</i> , 2007, 42, 1577-1583.	1.7	15
110	Heterogeneous microstructure and enhanced mechanical properties in annealed multilayered IF steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 759, 262-271.	2.6	15
111	Dislocation structure and dynamics govern pop-in modes of nanoindentation on single-crystal metals. <i>Philosophical Magazine</i> , 2020, 100, 1585-1606.	0.7	15
112	Property optimization of nanostructured ARB-processed Al by post-process deformation. <i>Journal of Materials Science</i> , 2008, 43, 7397-7402.	1.7	14
113	Cold rolled nanostructured super-pure Al (99.9996%) containing 1% Si particles: structure and strength. <i>Journal of Materials Science</i> , 2012, 47, 7914-7920.	1.7	14
114	String-of-Pearls Locking Plate and Cerclage Wire Stabilization of Periprosthetic Femoral Fractures after Total Hip Replacement in Six Dogs. <i>Veterinary Surgery</i> , 2012, 41, 180-188.	0.5	14
115	Low-Energy Dislocation Structure (LEDS) character of dislocation boundaries aligned with slip planes in rolled aluminium. <i>Philosophical Magazine</i> , 2015, 95, 1471-1489.	0.7	14
116	In situ TEM investigation on void coalescence in metallic materials. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 734, 260-268.	2.6	14
117	The synergy of boundary engineering and segregation strategy towards high strength and ductility Mg-3Gd alloy. <i>Journal of Alloys and Compounds</i> , 2020, 819, 153051.	2.8	14
118	A semi-numerical algorithm for instability of compressible multilayered structures. <i>Computational Mechanics</i> , 2015, 56, 63-75.	2.2	13
119	Superior high temperature creep resistance of a cast Al-Mg-Ca-Sc alloy with multi-scale hierarchical microstructures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 850, 143533.	2.6	13
120	Segregation and precipitation stabilizing an ultrafine lamellar-structured Al-0.3%Cu alloy. <i>Acta Materialia</i> , 2021, 206, 116595.	3.8	12
121	Single-crystal two-dimensional material epitaxy on tailored non-single-crystal substrates. <i>Nature Communications</i> , 2022, 13, 1773.	5.8	12
122	Dislocation structures and flow stress. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1997, 234-236, 602-605.	2.6	11
123	TEM Study of Twin Segments in Annealed Copper. <i>Materials Science Forum</i> , 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. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015, 89, 012021.	0.3	11
125	Tailoring structures through two-step annealing process in nanostructured aluminum produced by accumulative roll-bonding. <i>Journal of Materials Science</i> , 2008, 43, 7313-7319.	1.7	10
126	Effects of precipitates versus solute atoms on the deformation-induced grain refinement in an Al-Cu-Mg alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 771, 138486.	2.6	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.	1.0	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.	3.8	8
132	Grain Size Effect on the Mechanical Behavior of Metastable Fe-23Cr-8.5Ni Alloy. Metals, 2019, 9, 734.	1.0	8
133	twin nucleation at prismatic/basal boundary in hexagonal close-packed metals. Philosophical Magazine, 2019, 99, 2584-2603.	0.7	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.	2.6	8
135	Superplastic deformation in a coarse-grained Fe ₃ Al based alloy. Scripta Materialia, 2001, 44, 501-505.	2.6	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.	0.5	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 ZrO ₂ - Microstructure and strength. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 765, 138305.	2.6	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.	2.6	7
141	Unprecedented age-hardening and its structural requirement in a severely deformed Al-Cu-Mg alloy. Scripta Materialia, 2022, 206, 114240.	2.6	7
142	Strain distribution during tensile deformation of nanostructured aluminum samples. Journal of Materials Science, 2012, 47, 7901-7907.	1.7	6
143	Development of a strong Goss texture during annealing of a heavily rolled Al-0.3% Cu alloy. IOP Conference Series: Materials Science and Engineering, 2015, 82, 012050.	0.3	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.	2.6	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.	2.6	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.	2.6	5
147	Precise determination of extended dislocation boundary plane in transmission electron microscopy. Materials Science and Technology, 2005, 21, 1379-1382.	0.8	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.	1.1	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 – 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-1%Si Alloy. Journal of Materials Science, 2014, 49, 6667-6673.	1.7	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.	0.3	5
153	Development of micro-Laue technique at Shanghai Synchrotron Radiation Facility for materials sciences. Science China Materials, 2021, 64, 2348-2358.	3.5	5
154	Boundary characteristics in Heavily Deformed Metals. Advanced Engineering Materials, 2003, 5, 317-322.	1.6	4
155	Length scale effect on the deformation microstructures of grown-in twins in copper. Philosophical Magazine, 2014, 94, 2262-2280.	0.7	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.	0.3	4
157	Electron tomography of dislocations in an Al-Cu-Mg alloy. IOP Conference Series: Materials Science and Engineering, 2017, 219, 012018.	0.3	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.	0.3	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.	0.8	3
162	Nanostructured Aluminium - Recovery and Recrystallization. Materials Science Forum, 2007, 558-559, 201-206.	0.3	3

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