

Xiaoxu Huang

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

202
papers

10,299
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46
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99
g-index

205
ext. papers

11,950
ext. citations

5.5
avg, IF

6.41
L-index

#	Paper	IF	Citations
202	Revealing the maximum strength in nanotwinned copper. <i>Science</i> , 2009 , 323, 607-10	33.3	1393
201	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, 14501-5	11.5	708
200	Hardening by annealing and softening by deformation in nanostructured metals. <i>Science</i> , 2006 , 312, 249-51	33.3	528
199	The morphology and crystallography of lath martensite in alloy steels. <i>Acta Materialia</i> , 2006 , 54, 5323-5334	8.4	516
198	Strong crystal size effect on deformation twinning. <i>Nature</i> , 2010 , 463, 335-8	50.4	460
197	Strengthening mechanisms in nanostructured high-purity aluminium deformed to high strain and annealed. <i>Acta Materialia</i> , 2009 , 57, 4198-4208	8.4	409
196	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	5.3	380
195	Microstructure and strength of commercial purity aluminium (AA 1200) cold-rolled to large strains. <i>Acta Materialia</i> , 2002 , 50, 3789-3802	8.4	260
194	Microstructure and flow stress of polycrystals and single crystals. <i>Acta Materialia</i> , 1998 , 46, 1827-1836	8.4	234
193	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	5.3	227
192	Microstructure and strengthening mechanisms in cold-drawn pearlitic steel wire. <i>Acta Materialia</i> , 2011 , 59, 3422-3430	8.4	215
191	Watching the growth of bulk grains during recrystallization of deformed metals. <i>Science</i> , 2004 , 305, 229-323	33.3	211
190	Dislocation structures. Part I. Grain orientation dependence. <i>Philosophical Magazine</i> , 2007 , 87, 5189-5214	14.6	163
189	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	8.4	160
188	Microstructural evolution and hardening parameters. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 317, 3-11	5.3	155
187	Nucleation and thickening of shear bands in nano-scale twin/matrix lamellae of a CuAl alloy processed by dynamic plastic deformation. <i>Acta Materialia</i> , 2010 , 58, 3103-3116	8.4	136
186	Grain orientation dependence of microstructure in aluminium deformed in tension. <i>Scripta Materialia</i> , 1997 , 37, 1-7	5.6	131

185	Quantification of annealed microstructures in ARB processed aluminum. <i>Acta Materialia</i> , 2006 , 54, 3055-3066	8.4	127
184	Grain Orientation Effect on Microstructure in Tensile Strained Copper. <i>Scripta Materialia</i> , 1998 , 38, 1697-1703	5.1	110
183	Hall-Petch and dislocation strengthening in graded nanostructured steel. <i>Acta Materialia</i> , 2012 , 60, 5933-5943	5.2	108
182	Three-dimensional orientation mapping in the transmission electron microscope. <i>Science</i> , 2011 , 332, 833-4	33.3	103
181	Evolution of microstructural parameters and flow stresses toward limits in nickel deformed to ultra-high strains. <i>Acta Materialia</i> , 2008 , 56, 5451-5465	8.4	100
180	Dislocation structures. Part II. Slip system dependence. <i>Philosophical Magazine</i> , 2007 , 87, 5215-5235	1.6	97
179	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	8.4	96
178	Characteristics of long {10-12} twin bands in sheet rolling of a magnesium alloy. <i>Scripta Materialia</i> , 2014 , 74, 96-99	5.6	89
177	Crystallographic and macroscopic orientation of planar dislocation boundaries—correlation with grain orientation. <i>Acta Materialia</i> , 2000 , 48, 2187-2198	8.4	88
176	Structure and strength after large strain deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 387-389, 191-194	5.3	86
175	Hierarchical structures in cold-drawn pearlitic steel wire. <i>Acta Materialia</i> , 2013 , 61, 4898-4909	8.4	78
174	Effect of hardness of martensite and ferrite on void formation in dual phase steel. <i>Materials Science and Technology</i> , 2012 , 28, 1092-1100	1.5	77
173	Dislocation-based plasticity and strengthening mechanisms in sub-20 nm lamellar structures in pearlitic steel wire. <i>Acta Materialia</i> , 2016 , 114, 176-183	8.4	75
172	Critical comparison of dislocation boundary alignment studied by TEM and EBSD: technical issues and theoretical consequences. <i>Acta Materialia</i> , 2004 , 52, 4437-4446	8.4	75
171	Mechanism of dynamic continuous recrystallization during superplastic deformation in a microduplex stainless steel. <i>Acta Materialia</i> , 1996 , 44, 4491-4499	8.4	75
170	Evolution of cementite morphology in pearlitic steel wire during wet wire drawing. <i>Materials Characterization</i> , 2010 , 61, 65-72	3.9	68
169	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	2.4	67
168	Strengthening mechanisms in nanostructured aluminum. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 483-484, 102-104	5.3	67

167	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 ^{2,3}	2.3	63
166	Strengthening mechanisms and Hall-Petch stress of ultrafine grained Al-0.3%Cu. <i>Acta Materialia</i> , 2018 , 156, 369-378	8.4	62
165	Superplasticity in a SiCw-6061Al composite. <i>Journal of Materials Science Letters</i> , 1991 , 10, 964-966		61
164	Laminated Ti-Al composites: Processing, structure and strength. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 673, 572-580	5.3	60
163	Quantitative prediction of texture effect on Hall-Petch slope for magnesium alloys. <i>Acta Materialia</i> , 2019 , 173, 142-152	8.4	57
162	Twin stability in highly nanotwinned Cu under compression, torsion and tension. <i>Scripta Materialia</i> , 2012 , 66, 872-877	5.6	57
161	Dependence of dislocation structure on orientation and slip systems in highly oriented nanotwinned Cu. <i>Acta Materialia</i> , 2017 , 127, 85-97	8.4	56
160	Grain orientation, deformation microstructure and flow stress. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 494, 61-67	5.3	55
159	High-pressure strengthening in ultrafine-grained metals. <i>Nature</i> , 2020 , 579, 67-72	50.4	52
158	Recovery of heavily cold-rolled aluminum: Effect of local texture. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2006 , 37, 1311-1322	2.3	48
157	Transitions in mechanical behavior and in deformation mechanisms enhance the strength and ductility of Mg-3Gd. <i>Acta Materialia</i> , 2020 , 183, 398-407	8.4	47
156	Linking recovery and recrystallization through triple junction motion in aluminum cold rolled to a large strain. <i>Acta Materialia</i> , 2013 , 61, 6577-6586	8.4	46
155	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	3.3	46
154	Grain orientation dependence of deformation twinning in pure Cu subjected to dynamic plastic deformation. <i>Scripta Materialia</i> , 2009 , 61, 289-292	5.6	45
153	Grain orientation and dislocation patterns. <i>Philosophical Magazine</i> , 2006 , 86, 3981-3994	1.6	43
152	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	5.3	43
151	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	5.3	42
150	Influence of grain size in the near-micrometre regime on the deformation microstructure in aluminium. <i>Acta Materialia</i> , 2013 , 61, 7072-7086	8.4	42

149	Dislocation content of geometrically necessary boundaries aligned with slip planes in rolled aluminium. <i>Philosophical Magazine</i> , 2013 , 93, 3118-3141	1.6	42
148	Tailoring dislocation structures and mechanical properties of nanostructured metals produced by plastic deformation. <i>Scripta Materialia</i> , 2009 , 60, 1078-1082	5.6	41
147	Through-Thickness Characterization of Microstructure and Texture in High Purity Aluminum Processed to High Strain by Accumulative Roll-Bonding. <i>Materials Transactions</i> , 2007 , 48, 1978-1985	1.3	38
146	Revealing deformation microstructures. <i>Materials Today</i> , 2007 , 10, 24-32	21.8	35
145	Enhancement of strength and stability of nanostructured Ni by small amounts of solutes. <i>Scripta Materialia</i> , 2011 , 65, 481-484	5.6	34
144	Deformation microstructures. <i>Scripta Metallurgica Et Materialia</i> , 1992 , 27, 1447-1452		34
143	Observation and Schmid factor analysis of multiple twins in a warm-rolled Mg ₃ Al ₂ Zn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 596, 41-44	5.3	33
142	In situ observation of triple junction motion during recovery of heavily deformed aluminum. <i>Acta Materialia</i> , 2015 , 86, 269-278	8.4	32
141	Ultrafine Structure and High Strength in Cold-Rolled Martensite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 3517-3531	2.3	32
140	Effect of Grain Boundaries and Grain Orientation on Structure and Properties. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 613-625	2.3	32
139	Deformation bands in a [110] aluminium single crystal strained in tension. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2003 , 459, 85-108	2.4	32
138	Orientation dependence of the deformation microstructure in compressed aluminum. <i>Scripta Materialia</i> , 2012 , 66, 359-362	5.6	30
137	Grain orientation dependence of microstructures in a warm rolled IF steel. <i>Acta Materialia</i> , 2004 , 52, 5405-5418	8.4	29
136	Observation of a New Mechanism Balancing Hardening and Softening in Metals. <i>Materials Research Letters</i> , 2014 , 2, 160-165	7.4	28
135	Flow stress and microstructures of fine grained copper. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 387-389, 186-190	5.3	27
134	Crystal orientations before and after annealing in an Al single crystal strained in tension. <i>Acta Materialia</i> , 2003 , 51, 1827-1839	8.4	27
133	Nucleation of recrystallization observed in situ in the bulk of a deformed metal. <i>Scripta Materialia</i> , 2005 , 53, 553-557	5.6	27
132	The different effects of twin boundary and grain boundary on reducing tension-compression yield asymmetry of Mg alloys. <i>Scientific Reports</i> , 2016 , 6, 29283	4.9	27

131	Dislocations, boundaries and slip systems in cube grains of rolled aluminium. <i>Scripta Materialia</i> , 2011 , 65, 355-358	5.6	26
130	Determination of crystallographic and macroscopic orientation of planar structures in TEM. <i>Ultramicroscopy</i> , 1998 , 74, 123-130	3.1	26
129	Grain boundary induced deformation mechanisms in nanocrystalline Al by molecular dynamics simulation: From interatomic potential perspective. <i>Computational Materials Science</i> , 2019 , 156, 421-433 ^{3.2}	3.2	25
128	Interaction between nano-voids and migrating grain boundary by molecular dynamics simulation. <i>Acta Materialia</i> , 2019 , 173, 206-224	8.4	24
127	Hall-Petch strengthening in Fe-34.5Mn-0.04C steel cold-rolled, partially recrystallized and fully recrystallized. <i>Scripta Materialia</i> , 2018 , 155, 41-45	5.6	24
126	Increasing the ductility of nanostructured Al and Fe by deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 493, 184-189	5.3	23
125	Extended planar boundary inclinations in fcc single crystals and polycrystals subjected to plane strain deformation. <i>Philosophical Magazine</i> , 2003 , 83, 969-983	1.6	22
124	Rapid hardening induced by electric pulse annealing in nanostructured pure aluminum. <i>Scripta Materialia</i> , 2012 , 66, 147-150	5.6	21
123	Recovery mechanisms in nanostructured aluminium. <i>Philosophical Magazine</i> , 2012 , 92, 4056-4074	1.6	21
122	Surface Ripples of Polymeric Nanofibers under Tension: The Crucial Role of Poisson's Ratio. <i>Macromolecules</i> , 2014 , 47, 6503-6514	5.5	20
121	Strengthening mechanisms and optimization of structure and properties in a nanostructured IF steel. <i>Journal of Materials Science</i> , 2010 , 45, 4761-4769	4.3	20
120	Structure and strength of sub-100 nm lamellar structures in cold-drawn pearlitic steel wire. <i>Materials Science and Technology</i> , 2018 , 34, 794-808	1.5	19
119	Quantitative Analysis of Structure-Strength Relation of Commercial Purity Aluminium Deformed by Accumulative Roll Bonding and Annealed at Low Temperature. <i>Materials Science Forum</i> , 2003 , 426-432, 405-410	0.4	19
118	Electron Backscatter Diffraction Analysis of Recrystallized Grains Formed in Deformation Band in Aluminum Single Crystal. <i>Materials Transactions</i> , 2001 , 42, 1938-1944	1.3	19
117	Enhanced strength in pure Ti via design of alternating coarse- and fine-grain layers. <i>Acta Materialia</i> , 2021 , 206, 116627	8.4	19
116	Thermal stability of aluminum cold rolled to large strain. <i>Journal of Materials Science</i> , 2008 , 43, 6254-6259 ³	3	18
115	Crystallography and morphology of cementite precipitates formed during rapid solidification of a ferritic stainless steel. <i>Acta Materialia</i> , 2000 , 48, 4073-4082	8.4	18
114	In-situ investigation of the evolution of annealing twins in high purity aluminium. <i>Scripta Materialia</i> , 2018 , 153, 68-72	5.6	18

113	Plastic deformation of submicron-sized crystals studied by in-situ Kikuchi diffraction and dislocation imaging. <i>Materials Characterization</i> , 2012 , 70, 21-27	3.9	17
112	Nanostructured Aluminum and IF Steel Produced by Rolling Comparative Study. <i>ISIJ International</i> , 2008 , 48, 1080-1087	1.7	17
111	Microstructures of Nickel Deformed by High Pressure Torsion to High Strains. <i>Materials Science Forum</i> , 2003 , 426-432, 2819-2824	0.4	16
110	Development of Goss texture in Al0.3%Cu annealed after heavy rolling. <i>Journal of Alloys and Compounds</i> , 2018 , 749, 399-405	5.7	15
109	Investigation of the deformation structure in an aluminium magnesium alloy by high angular resolution three-dimensional X-ray diffraction. <i>Scripta Materialia</i> , 2007 , 56, 769-772	5.6	15
108	Characterization of nanostructured metals produced by plastic deformation. <i>Journal of Materials Science</i> , 2007 , 42, 1577-1583	4.3	14
107	Property optimization of nanostructured ARB-processed Al by post-process deformation. <i>Journal of Materials Science</i> , 2008 , 43, 7397-7402	4.3	14
106	{1010} twinning behavior under biaxial tension of MgAlZn plate. <i>International Journal of Plasticity</i> , 2020 , 132, 102754	7.6	13
105	A semi-numerical algorithm for instability of compressible multilayered structures. <i>Computational Mechanics</i> , 2015 , 56, 63-75	4	13
104	Unprecedented strength in pure iron via high-pressure induced nanotwinned martensite. <i>Materials Research Letters</i> , 2019 , 7, 354-360	7.4	12
103	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	4.3	12
102	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, 180-8	1.7	12
101	Evading strength-corrosion tradeoff in Mg alloys via dense ultrafine twins. <i>Nature Communications</i> , 2021 , 12, 4616	17.4	12
100	Tracking the sliding of grain boundaries at the atomic scale.. <i>Science</i> , 2022 , 375, 1261-1265	33.3	12
99	Low-Energy Dislocation Structure (LEDS) character of dislocation boundaries aligned with slip planes in rolled aluminium. <i>Philosophical Magazine</i> , 2015 , 95, 1471-1489	1.6	11
98	Dislocation structures and flow stress. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1997 , 234-236, 602-605	5.3	11
97	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	0.4	10
96	Laminated Fe-34.5 Mn-0.04C composite with high strength and ductility. <i>Journal of Materials Science and Technology</i> , 2018 , 34, 1939-1943	9.1	10

95	Dislocation structure and dynamics govern pop-in modes of nanoindentation on single-crystal metals. <i>Philosophical Magazine</i> , 2020 , 100, 1585-1606	1.6	9
94	2D and 3D orientation mapping in nanostructured metals: A review. <i>Nano Materials Science</i> , 2020 , 2, 50-57.2	5.2	9
93	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	4.3	9
92	TEM Study of Twin Segments in Annealed Copper. <i>Materials Science Forum</i> , 1998 , 294-296, 401-404	0.4	9
91	In-situ synchrotron X-ray micro-diffraction investigation of ultra-low-strain deformation microstructure in laminated Ti-Al composites. <i>Acta Materialia</i> , 2021 , 202, 149-158	8.4	9
90	Uniaxial stress-driven grain boundary migration in Hexagonal Close-packed (HCP) metals: Theory and MD simulations. <i>International Journal of Plasticity</i> , 2017 , 95, 82-104	7.6	8
89	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	5.3	8
88	Large Strain Deformation and Annealing of Aluminium. <i>Materials Science Forum</i> , 2006 , 519-521, 79-84	0.4	8
87	EBSD and TEM Characterization of Ultrafine Grained High Purity Aluminum Produced by Accumulative Roll-Bonding. <i>Materials Science Forum</i> , 2006 , 512, 91-96	0.4	8
86	Managing both strength and ductility in duplex stainless steel with heterogeneous lamella structure. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 738, 190-193	5.3	8
85	TEM-based dislocation tomography: Challenges and opportunities. <i>Current Opinion in Solid State and Materials Science</i> , 2020 , 24, 100833	12	7
84	Deformation Induced Martensitic Transformation and Its Initial Microstructure Dependence in a High Alloyed Duplex Stainless Steel. <i>Steel Research International</i> , 2017 , 88, 1700169	1.6	7
83	Dislocation-Source Hardening in Nanostructured Steel Produced by Severe Plastic Deformation. <i>Materials Science Forum</i> , 2010 , 638-642, 1959-1964	0.4	7
82	Superplastic deformation in a coarse-grained Fe ₃ Al based alloy. <i>Scripta Materialia</i> , 2001 , 44, 501-505	5.6	7
81	Microtexture of Lamellar Structures in Al Heavily Deformed by Accumulative Roll-Bonding (ARB). <i>Materials Science Forum</i> , 2002 , 408-412, 715-720	0.4	7
80	Cryogenic toughness in a low-cost austenitic steel. <i>Communications Materials</i> , 2021 , 2,	6	7
79	Non-spherical voids and lattice reorientation patterning in a shock-loaded Al single crystal. <i>Acta Materialia</i> , 2017 , 134, 16-30	8.4	6
78	Termination of local strain concentration led to better tensile ductility in multilayered 2N/4N Al sheet. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 782, 139240	5.3	6

77	Grain Size Effect on the Mechanical Behavior of Metastable Fe-23Cr-8.5Ni Alloy. <i>Metals</i> , 2019 , 9, 734	2.3	6
76	twin nucleation at prismatic/basal boundary in hexagonal close-packed metals. <i>Philosophical Magazine</i> , 2019 , 99, 2584-2603	1.6	6
75	Strain distribution during tensile deformation of nanostructured aluminum samples. <i>Journal of Materials Science</i> , 2012 , 47, 7901-7907	4.3	6
74	THz investigations of condensed phase biomolecular systems. <i>Methods in Cell Biology</i> , 2008 , 90, 417-34	1.8	6
73	Structural Change during Cold Rolling of Electrodeposited Copper. <i>Materials Science Forum</i> , 2007 , 539-543, 5013-5018	0.4	6
72	Effects of precipitates versus solute atoms on the deformation-induced grain refinement in an AlCuMg alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 771, 138486	5.3	6
71	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	5.3	5
70	Development of a strong Goss texture during annealing of a heavily rolled Al0.3% Cu alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015 , 82, 012050	0.4	5
69	Pt-20Rh dispersion strengthened by ZrO ₂ - Microstructure and strength. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 765, 138305	5.3	5
68	Stored Energy and Annealing Behavior of Heavily Deformed Aluminium. <i>Materials Science Forum</i> , 2012 , 715-716, 367-372	0.4	5
67	Quantitative TEM analysis of Al/Cu multilayer systems prepared by pulsed laser deposition. <i>Applied Physics A: Materials Science and Processing</i> , 2010 , 101, 677-680	2.6	5
66	Planar colony of needle precipitates formed during solidification of a ferritic stainless steel. <i>Scripta Materialia</i> , 1997 , 36, 1219-1226	5.6	5
65	Extended dislocation boundaries in metals subjected to plane strain deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 409, 52-58	5.3	5
64	Precise determination of extended dislocation boundary plane in transmission electron microscopy. <i>Materials Science and Technology</i> , 2005 , 21, 1379-1382	1.5	5
63	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	5.7	5
62	A quantitative study on mechanical behavior of Mg alloys with bimodal texture components. <i>Acta Materialia</i> , 2021 , 214, 117013	8.4	5
61	Recrystallization textures and microstructures of Al-0.3%Cu alloy after deformation to high strains. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015 , 89, 012032	0.4	4
60	Particle stabilization of plastic flow in nanostructured Al-1 %Si Alloy. <i>Journal of Materials Science</i> , 2014 , 49, 6667-6673	4.3	4

59	Length scale effect on the deformation microstructures of grown-in twins in copper. <i>Philosophical Magazine</i> , 2014 , 94, 2262-2280	1.6	4
58	Effect of shot peening on the residual stress and mechanical behaviour of low-temperature and high-temperature annealed martensitic gear steel 18CrNiMo7-6. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017 , 219, 012046	0.4	4
57	Triple Junction Motion [A New Recovery Mechanism in Metals Deformed to Large Strains. <i>Materials Science Forum</i> , 2013 , 753, 485-488	0.4	4
56	Boundary characteristics in Heavily Deformed Metals. <i>Advanced Engineering Materials</i> , 2003 , 5, 317-322	3.5	4
55	EBSD characterization of deformed lath martensite in IF steel. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017 , 219, 012033	0.4	3
54	Electron tomography of dislocations in an Al-Cu-Mg alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017 , 219, 012018	0.4	3
53	In-Situ Measurements of Growth of Nuclei within the Bulk of Deformed Aluminium Single Crystals. <i>Materials Science Forum</i> , 2004 , 467-470, 189-192	0.4	3
52	Effect of grain orientation on microstructures of aluminium in warm tension. <i>Materials Science and Technology</i> , 2005 , 21, 1471-1475	1.5	3
51	Segregation and precipitation stabilizing an ultrafine lamellar-structured Al-0.3%Cu alloy. <i>Acta Materialia</i> , 2021 , 206, 116595	8.4	3
50	Observation of simultaneous increase in strength and ductility by grain refinement in a Fe-34.5Mn-0.04C steel. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017 , 219, 012043	0.4	2
49	Atomistic Simulation of the Interaction Between Point Defects and Twin Boundary. <i>Physica Status Solidi (B): Basic Research</i> , 2018 , 255, 1800228	1.3	2
48	Gradient nanostructured surface of a Cu plate processed by incremental frictional sliding. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015 , 89, 012026	0.4	2
47	Formation of a Random Recrystallization Texture in Heavily Cold Rolled and Annealed Al-1%Si Alloy. <i>Materials Science Forum</i> , 2013 , 753, 243-246	0.4	2
46	Preface to the Viewpoint Set: Nanostructured metals [Advances in processing, characterization and application. <i>Scripta Materialia</i> , 2009 , 60, 1031-1032	5.6	2
45	Nanostructured Aluminium - Recovery and Recrystallization. <i>Materials Science Forum</i> , 2007 , 558-559, 201-206	0.4	2
44	Microstructural Coarsening during Annealing of Cold Rolled Aluminum. <i>Materials Science Forum</i> , 2004 , 467-470, 209-216	0.4	2
43	Enhanced ductility in coarse grained Fe ₃ Al alloys. <i>Intermetallics</i> , 2004 , 12, 1019-1023	3.5	2
42	Structural Refinement of Interstitial Free (IF) Steel by Deformation and Phase Transformation. <i>Materials Science Forum</i> , 2005 , 475-479, 37-42	0.4	2

41	Mechanical twinning during superplastic deformation of an Al-Li-Cu-Mg-Zr alloy. <i>Journal of Materials Science Letters</i> , 1991 , 10, 932-934		2
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