

# Xiaoxu Huang

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/4614848/xiaoxu-huang-publications-by-year.pdf>

**Version:** 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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  
citations

46  
h-index

99  
g-index

205  
ext. papers

11,950  
ext. citations

5.5  
avg, IF

6.41  
L-index

#	Paper	IF	Citations
202	Strengthening mechanisms in selective laser melted 316L stainless steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2022</b> , 832, 142434	5.3	1
201	Unprecedented age-hardening and its structural requirement in a severely deformed Al-Cu-Mg alloy. <i>Scripta Materialia</i> , <b>2022</b> , 206, 114240	5.6	1
200	Tracking the sliding of grain boundaries at the atomic scale.. <i>Science</i> , <b>2022</b> , 375, 1261-1265	33.3	12
199	Single-crystal two-dimensional material epitaxy on tailored non-single-crystal substrates.. <i>Nature Communications</i> , <b>2022</b> , 13, 1773	17.4	2
198	The mechanism for an orientation dependence of grain boundary strengthening in pure titanium. <i>International Journal of Plasticity</i> , <b>2022</b> , 153, 103276	7.6	1
197	Five-parameter grain boundary character distribution of gold nanoparticles based on three dimensional orientation mapping in the TEM. <i>Scripta Materialia</i> , <b>2022</b> , 214, 114677	5.6	0
196	Segregation and precipitation stabilizing an ultrafine lamellar-structured Al-0.3%Cu alloy. <i>Acta Materialia</i> , <b>2021</b> , 206, 116595	8.4	3
195	Enhanced strength in pure Ti via design of alternating coarse- and fine-grain layers. <i>Acta Materialia</i> , <b>2021</b> , 206, 116627	8.4	19
194	Cryogenic toughness in a low-cost austenitic steel. <i>Communications Materials</i> , <b>2021</b> , 2,	6	7
193	Development of micro-Laue technique at Shanghai Synchrotron Radiation Facility for materials sciences. <i>Science China Materials</i> , <b>2021</b> , 64, 2348-2358	7.1	0
192	Microstructure, texture and mechanical properties of sandwiched ARB6/2/6 2N Al fabricated by accumulative roll bonding. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 817, 141356	5.3	0
191	Evading strength-corrosion tradeoff in Mg alloys via dense ultrafine twins. <i>Nature Communications</i> , <b>2021</b> , 12, 4616	17.4	12
190	In-situ synchrotron X-ray micro-diffraction investigation of ultra-low-strain deformation microstructure in laminated Ti-Al composites. <i>Acta Materialia</i> , <b>2021</b> , 202, 149-158	8.4	9
189	A quantitative study on mechanical behavior of Mg alloys with bimodal texture components. <i>Acta Materialia</i> , <b>2021</b> , 214, 117013	8.4	5
188	{101 $\bar{2}$ } twinning behavior under biaxial tension of Mg $\beta$ Al $\bar{1}$ Zn plate. <i>International Journal of Plasticity</i> , <b>2020</b> , 132, 102754	7.6	13
187	TEM-based dislocation tomography: Challenges and opportunities. <i>Current Opinion in Solid State and Materials Science</i> , <b>2020</b> , 24, 100833	12	7
186	Dislocation structure and dynamics govern pop-in modes of nanoindentation on single-crystal metals. <i>Philosophical Magazine</i> , <b>2020</b> , 100, 1585-1606	1.6	9

185	2D and 3D orientation mapping in nanostructured metals: A review. <i>Nano Materials Science</i> , <b>2020</b> , 2, 50-57.2	5.2	9
184	High-pressure strengthening in ultrafine-grained metals. <i>Nature</i> , <b>2020</b> , 579, 67-72	50.4	52
183	Termination of local strain concentration led to better tensile ductility in multilayered 2N/4N Al sheet. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 782, 139240	5.3	6
182	The synergy of boundary engineering and segregation strategy towards high strength and ductility Mg-3Gd alloy. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 819, 153051	5.7	5
181	Transitions in mechanical behavior and in deformation mechanisms enhance the strength and ductility of Mg-3Gd. <i>Acta Materialia</i> , <b>2020</b> , 183, 398-407	8.4	47
180	Heterogeneity and Homogeneity in 2/4 N Multilayered Al Fabricated by Accumulative Roll Bonding and Annealing. <i>Journal of Materials Engineering and Performance</i> , <b>2020</b> , 29, 6147-6154	1.6	
179	Effects of precipitates versus solute atoms on the deformation-induced grain refinement in an AlCuMg alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 771, 138486	5.3	6
178	Unprecedented strength in pure iron via high-pressure induced nanotwinned martensite. <i>Materials Research Letters</i> , <b>2019</b> , 7, 354-360	7.4	12
177	Interaction between nano-voids and migrating grain boundary by molecular dynamics simulation. <i>Acta Materialia</i> , <b>2019</b> , 173, 206-224	8.4	24
176	Heterogeneous microstructure and enhanced mechanical properties in annealed multilayered IF steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 759, 262-271	5.3	5
175	Quantitative prediction of texture effect on Hall-Petch slope for magnesium alloys. <i>Acta Materialia</i> , <b>2019</b> , 173, 142-152	8.4	57
174	Enhancement of an additive-manufactured austenitic stainless steel by post-manufacture heat-treatment. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 759, 65-69	5.3	42
173	Grain Size Effect on the Mechanical Behavior of Metastable Fe-23Cr-8.5Ni Alloy. <i>Metals</i> , <b>2019</b> , 9, 734	2.3	6
172	twin nucleation at prismatic/basal boundary in hexagonal close-packed metals. <i>Philosophical Magazine</i> , <b>2019</b> , 99, 2584-2603	1.6	6
171	Pt-20Rh dispersion strengthened by ZrO <sub>2</sub> - Microstructure and strength. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 765, 138305	5.3	5
170	Microstructure and strength of weldment in Pt20Rh alloys dispersion-strengthened by ZrO <sub>2</sub> particles. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2019</b> , 580, 012035	0.4	
169	Gradient Microstructure in a Gear Steel Produced by Pressurized Gas Nitriding. <i>Materials</i> , <b>2019</b> , 12,	3.5	1
168	Grain boundary induced deformation mechanisms in nanocrystalline Al by molecular dynamics simulation: From interatomic potential perspective. <i>Computational Materials Science</i> , <b>2019</b> , 156, 421-433 <sup>3-2</sup>		25

167	Structure and strength of sub-100 nm lamellar structures in cold-drawn pearlitic steel wire. <i>Materials Science and Technology</i> , <b>2018</b> , 34, 794-808	1.5	19
166	Development of Goss texture in Al0.3%Cu annealed after heavy rolling. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 749, 399-405	5.7	15
165	Laminated Fe-34.5 Mn-0.04C composite with high strength and ductility. <i>Journal of Materials Science and Technology</i> , <b>2018</b> , 34, 1939-1943	9.1	10
164	Atomistic Simulation of the Interaction Between Point Defects and Twin Boundary. <i>Physica Status Solidi (B): Basic Research</i> , <b>2018</b> , 255, 1800228	1.3	2
163	In situ TEM investigation on void coalescence in metallic materials. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 734, 260-268	5.3	8
162	Hall-Petch strengthening in Fe-34.5Mn-0.04C steel cold-rolled, partially recrystallized and fully recrystallized. <i>Scripta Materialia</i> , <b>2018</b> , 155, 41-45	5.6	24
161	Atomistic Simulation of the Interaction Between Point Defects and Twin Boundary (Phys. Status Solidi B 9/2018). <i>Physica Status Solidi (B): Basic Research</i> , <b>2018</b> , 255, 1870133	1.3	
160	Managing both strength and ductility in duplex stainless steel with heterogeneous lamella structure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 738, 190-193	5.3	8
159	In-situ investigation of the evolution of annealing twins in high purity aluminium. <i>Scripta Materialia</i> , <b>2018</b> , 153, 68-72	5.6	18
158	Strengthening mechanisms and Hall-Petch stress of ultrafine grained Al-0.3%Cu. <i>Acta Materialia</i> , <b>2018</b> , 156, 369-378	8.4	62
157	Dependence of dislocation structure on orientation and slip systems in highly oriented nanotwinned Cu. <i>Acta Materialia</i> , <b>2017</b> , 127, 85-97	8.4	56
156	The mechanism for the high dependence of the Hall-Petch slope for twinning/slip on texture in Mg alloys. <i>Acta Materialia</i> , <b>2017</b> , 128, 313-326	8.4	160
155	Uniaxial stress-driven grain boundary migration in Hexagonal Close-packed (HCP) metals: Theory and MD simulations. <i>International Journal of Plasticity</i> , <b>2017</b> , 95, 82-104	7.6	8
154	Non-spherical voids and lattice reorientation patterning in a shock-loaded Al single crystal. <i>Acta Materialia</i> , <b>2017</b> , 134, 16-30	8.4	6
153	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> , <b>2017</b> , 219, 012043	0.4	2
152	Hydrogen-induced room-temperature plasticity in TC4 and TC21 alloys. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 219, 012049	0.4	
151	A gradient surface produced by combined electroplating and incremental frictional sliding. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 219, 012048	0.4	
150	EBSD characterization of deformed lath martensite in IF steel. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 219, 012033	0.4	3

149	Deformation Induced Martensitic Transformation and Its Initial Microstructure Dependence in a High Alloyed Duplex Stainless Steel. <i>Steel Research International</i> , <b>2017</b> , 88, 1700169	1.6	7
148	Microstructural and hardness gradients in Cu processed by high pressure surface rolling. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 219, 012025	0.4	1
147	Characterization of voids in shock-loaded Al single crystal by combining X-ray tomography and electron microscopy. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 219, 012027	0.4	
146	Characterization of Cu Distribution in an Al-0.3%Cu Alloy Cold Rolled to 98%. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 219, 012038	0.4	1
145	Electron tomography of dislocations in an Al-Cu-Mg alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 219, 012018	0.4	3
144	Structural refinement and property optimization in an Fe-23Cr-8.5Ni duplex stainless steel. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 219, 012045	0.4	
143	Orientation and length scale effects on dislocation structure in highly oriented nanotwinned Cu. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 219, 012032	0.4	
142	Gradient microstructure and microhardness in a nitrided 18CrNiMo7-6 gear steel. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 219, 012047	0.4	0
141	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> , <b>2017</b> , 219, 012046	0.4	4
140	Dislocation-based plasticity and strengthening mechanisms in sub-20 nm lamellar structures in pearlitic steel wire. <i>Acta Materialia</i> , <b>2016</b> , 114, 176-183	8.4	75
139	Influence of strain rate on the orientation dependence of microstructure in nickel single crystals. <i>Philosophical Magazine Letters</i> , <b>2016</b> , 96, 52-59	1	1
138	The different effects of twin boundary and grain boundary on reducing tension-compression yield asymmetry of Mg alloys. <i>Scientific Reports</i> , <b>2016</b> , 6, 29283	4.9	27
137	Laminated Ti-Al composites: Processing, structure and strength. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 673, 572-580	5.3	60
136	Low-Energy Dislocation Structure (LEDS) character of dislocation boundaries aligned with slip planes in rolled aluminium. <i>Philosophical Magazine</i> , <b>2015</b> , 95, 1471-1489	1.6	11
135	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> , <b>2015</b> , 82, 012050	0.4	5
134	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> , <b>2015</b> , 89, 012021	0.4	10
133	Recrystallization textures and microstructures of Al-0.3%Cu alloy after deformation to high strains. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 89, 012032	0.4	4
132	Recovery by triple junction motion in heavily deformed metals. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 89, 012014	0.4	1

131	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> , <b>2015</b> , 112, 14501-5	11.5	708
130	Characterization of Si particles and their effects on and recrystallization in a nanostructured cold rolled Al-1% Si alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 89, 012028	0.4	
129	Combined effect of rapid nitriding and plastic deformation on the surface strength, toughness and wear resistance of steel 38CrMoAlA. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 89, 012046	0.4	
128	Effects of thermomechanical processing on the recrystallization texture and grain size of Al-1%Si sputtering target material. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 82, 012065	0.4	
127	Microstructure and mechanical properties of ARB processed Mg-3% Gd alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 89, 012052	0.4	1
126	Gradient nanostructured surface of a Cu plate processed by incremental frictional sliding. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 89, 012026	0.4	2
125	A semi-numerical algorithm for instability of compressible multilayered structures. <i>Computational Mechanics</i> , <b>2015</b> , 56, 63-75	4	13
124	In situ observation of triple junction motion during recovery of heavily deformed aluminum. <i>Acta Materialia</i> , <b>2015</b> , 86, 269-278	8.4	32
123	Particle stabilization of plastic flow in nanostructured Al-1 %Si Alloy. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 6667-6673	4.3	4
122	Surface Ripples of Polymeric Nanofibers under Tension: The Crucial Role of Poisson's Ratio. <i>Macromolecules</i> , <b>2014</b> , 47, 6503-6514	5.5	20
121	Length scale effect on the deformation microstructures of grown-in twins in copper. <i>Philosophical Magazine</i> , <b>2014</b> , 94, 2262-2280	1.6	4
120	Characteristics of long {10-12} twin bands in sheet rolling of a magnesium alloy. <i>Scripta Materialia</i> , <b>2014</b> , 74, 96-99	5.6	89
119	Observation of a New Mechanism Balancing Hardening and Softening in Metals. <i>Materials Research Letters</i> , <b>2014</b> , 2, 160-165	7.4	28
118	Observation and Schmid factor analysis of multiple twins in a warm-rolled Mg <sub>92</sub> Al <sub>8</sub> Zn alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 596, 41-44	5.3	33
117	Linking recovery and recrystallization through triple junction motion in aluminum cold rolled to a large strain. <i>Acta Materialia</i> , <b>2013</b> , 61, 6577-6586	8.4	46
116	Observations of orientation dependence of surface morphology in tungsten implanted by low energy and high flux D plasma. <i>Journal of Nuclear Materials</i> , <b>2013</b> , 443, 452-457	3.3	46
115	Influence of grain size in the near-micrometre regime on the deformation microstructure in aluminium. <i>Acta Materialia</i> , <b>2013</b> , 61, 7072-7086	8.4	42
114	Dislocation content of geometrically necessary boundaries aligned with slip planes in rolled aluminium. <i>Philosophical Magazine</i> , <b>2013</b> , 93, 3118-3141	1.6	42

113	Coupling of Local Texture and Microstructure Evolution during Restoration Processes in Aluminum Deformed to Large Strains. <i>Materials Science Forum</i> , <b>2013</b> , 753, 251-256	0.4	
112	Hierarchical structures in cold-drawn pearlitic steel wire. <i>Acta Materialia</i> , <b>2013</b> , 61, 4898-4909	8.4	78
111	Triple Junction Motion [A New Recovery Mechanism in Metals Deformed to Large Strains. <i>Materials Science Forum</i> , <b>2013</b> , 753, 485-488	0.4	4
110	Formation of a Random Recrystallization Texture in Heavily Cold Rolled and Annealed Al-1%Si Alloy. <i>Materials Science Forum</i> , <b>2013</b> , 753, 243-246	0.4	2
109	High Strain Monotonic Deformation [Structure and Strength <b>2013</b> , 1-14		
108	Plastic deformation of submicron-sized crystals studied by in-situ Kikuchi diffraction and dislocation imaging. <i>Materials Characterization</i> , <b>2012</b> , 70, 21-27	3.9	17
107	Rapid hardening induced by electric pulse annealing in nanostructured pure aluminum. <i>Scripta Materialia</i> , <b>2012</b> , 66, 147-150	5.6	21
106	Orientation dependence of the deformation microstructure in compressed aluminum. <i>Scripta Materialia</i> , <b>2012</b> , 66, 359-362	5.6	30
105	Twin stability in highly nanotwinned Cu under compression, torsion and tension. <i>Scripta Materialia</i> , <b>2012</b> , 66, 872-877	5.6	57
104	Strain distribution during tensile deformation of nanostructured aluminum samples. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 7901-7907	4.3	6
103	Effect of hardness of martensite and ferrite on void formation in dual phase steel. <i>Materials Science and Technology</i> , <b>2012</b> , 28, 1092-1100	1.5	77
102	Preface to the special issue on ultrafine-grained materials. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 7717-7718	1.5	1
101	Cold rolled nanostructured super-pure Al (99.9996 %) containing 1 % Si particles: structure and strength. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 7914-7920	4.3	12
100	Hall-Petch and dislocation strengthening in graded nanostructured steel. <i>Acta Materialia</i> , <b>2012</b> , 60, 5933-5943	8.4	108
99	Ultrafine Structure and High Strength in Cold-Rolled Martensite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2012</b> , 43, 3517-3531	2.3	32
98	Thermal Behavior of Nickel Deformed to Ultra-High Strain by High Pressure Torsion. <i>Materials Science Forum</i> , <b>2012</b> , 715-716, 387-392	0.4	
97	String-of-pearls locking plate and cerclage wire stabilization of periprosthetic femoral fractures after total hip replacement in six dogs. <i>Veterinary Surgery</i> , <b>2012</b> , 41, 180-8	1.7	12
96	Stored Energy and Annealing Behavior of Heavily Deformed Aluminium. <i>Materials Science Forum</i> , <b>2012</b> , 715-716, 367-372	0.4	5

95	Recovery mechanisms in nanostructured aluminium. <i>Philosophical Magazine</i> , <b>2012</b> , 92, 4056-4074	1.6	21
94	Recovery by triple junction motion in aluminium deformed to ultrahigh strains. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2011</b> , 467, 3039-3065	2.4	67
93	Dislocations, boundaries and slip systems in cube grains of rolled aluminium. <i>Scripta Materialia</i> , <b>2011</b> , 65, 355-358	5.6	26
92	Enhancement of strength and stability of nanostructured Ni by small amounts of solutes. <i>Scripta Materialia</i> , <b>2011</b> , 65, 481-484	5.6	34
91	Effect of Grain Boundaries and Grain Orientation on Structure and Properties. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2011</b> , 42, 613-625	2.3	32
90	Microstructure and strengthening mechanisms in cold-drawn pearlitic steel wire. <i>Acta Materialia</i> , <b>2011</b> , 59, 3422-3430	8.4	215
89	Three-dimensional orientation mapping in the transmission electron microscope. <i>Science</i> , <b>2011</b> , 332, 833-4	33.3	103
88	Strong crystal size effect on deformation twinning. <i>Nature</i> , <b>2010</b> , 463, 335-8	50.4	460
87	Microstructure of Pure Ni Subjected to High Pressure Torsion. <i>Materials Science Forum</i> , <b>2010</b> , 667-669, 529-534	0.4	1
86	Dislocation-Source Hardening in Nanostructured Steel Produced by Severe Plastic Deformation. <i>Materials Science Forum</i> , <b>2010</b> , 638-642, 1959-1964	0.4	7
85	Quantitative TEM analysis of Al/Cu multilayer systems prepared by pulsed laser deposition. <i>Applied Physics A: Materials Science and Processing</i> , <b>2010</b> , 101, 677-680	2.6	5
84	Thermal behavior of Ni (99.967% and 99.5% purity) deformed to an ultra-high strain by high pressure torsion. <i>Acta Materialia</i> , <b>2010</b> , 58, 1698-1707	8.4	96
83	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> , <b>2010</b> , 58, 3103-3116	8.4	136
82	Strengthening mechanisms and optimization of structure and properties in a nanostructured IF steel. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 4761-4769	4.3	20
81	Evolution of cementite morphology in pearlitic steel wire during wet wire drawing. <i>Materials Characterization</i> , <b>2010</b> , 61, 65-72	3.9	68
80	Tailoring dislocation structures and mechanical properties of nanostructured metals produced by plastic deformation. <i>Scripta Materialia</i> , <b>2009</b> , 60, 1078-1082	5.6	41
79	Preface to the Viewpoint Set: Nanostructured metals [Advances in processing, characterization and application. <i>Scripta Materialia</i> , <b>2009</b> , 60, 1031-1032	5.6	2
78	Grain orientation dependence of deformation twinning in pure Cu subjected to dynamic plastic deformation. <i>Scripta Materialia</i> , <b>2009</b> , 61, 289-292	5.6	45



77	Strengthening mechanisms in nanostructured high-purity aluminium deformed to high strain and annealed. <i>Acta Materialia</i> , <b>2009</b> , 57, 4198-4208	8.4	409
76	Revealing the maximum strength in nanotwinned copper. <i>Science</i> , <b>2009</b> , 323, 607-10	33.3	1393
75	Structure and Strength of IF Steel After Large Strain Deformation <b>2009</b> , 33-42		
74	THz investigations of condensed phase biomolecular systems. <i>Methods in Cell Biology</i> , <b>2008</b> , 90, 417-34	1.8	6
73	Nanostructured Aluminum and IF Steel Produced by Rolling – Comparative Study. <i>ISIJ International</i> , <b>2008</b> , 48, 1080-1087	1.7	17
72	Property optimization of nanostructured ARB-processed Al by post-process deformation. <i>Journal of Materials Science</i> , <b>2008</b> , 43, 7397-7402	4.3	14
71	Thermal stability of aluminum cold rolled to large strain. <i>Journal of Materials Science</i> , <b>2008</b> , 43, 6254-6259	4.3	18
70	Tailoring structures through two-step annealing process in nanostructured aluminum produced by accumulative roll-bonding. <i>Journal of Materials Science</i> , <b>2008</b> , 43, 7313-7319	4.3	9
69	Grain orientation, deformation microstructure and flow stress. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 494, 61-67	5.3	55
68	Evolution of microstructural parameters and flow stresses toward limits in nickel deformed to ultra-high strains. <i>Acta Materialia</i> , <b>2008</b> , 56, 5451-5465	8.4	100
67	Strengthening mechanisms in nanostructured aluminum. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 483-484, 102-104	5.3	67
66	Increasing the ductility of nanostructured Al and Fe by deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 493, 184-189	5.3	23
65	Revealing deformation microstructures. <i>Materials Today</i> , <b>2007</b> , 10, 24-32	21.8	35
64	Investigation of the deformation structure in an aluminium magnesium alloy by high angular resolution three-dimensional X-ray diffraction. <i>Scripta Materialia</i> , <b>2007</b> , 56, 769-772	5.6	15
63	Characterization of nanostructured metals produced by plastic deformation. <i>Journal of Materials Science</i> , <b>2007</b> , 42, 1577-1583	4.3	14
62	Nanostructured Aluminium - Recovery and Recrystallization. <i>Materials Science Forum</i> , <b>2007</b> , 558-559, 201-206	0.4	2
61	Structural Change during Cold Rolling of Electrodeposited Copper. <i>Materials Science Forum</i> , <b>2007</b> , 539-543, 5013-5018	0.4	6
60	Through-Thickness Characterization of Microstructure and Texture in High Purity Aluminum Processed to High Strain by Accumulative Roll-Bonding. <i>Materials Transactions</i> , <b>2007</b> , 48, 1978-1985	1.3	38

59	Dislocation structures. Part II. Slip system dependence. <i>Philosophical Magazine</i> , <b>2007</b> , 87, 5215-5235	1.6	97
58	Dislocation structures. Part I. Grain orientation dependence. <i>Philosophical Magazine</i> , <b>2007</b> , 87, 5189-5214	1.6	163
57	Recovery of heavily cold-rolled aluminum: Effect of local texture. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2006</b> , 37, 1311-1322	2.3	48
56	Large Strain Deformation and Annealing of Aluminium. <i>Materials Science Forum</i> , <b>2006</b> , 519-521, 79-84	0.4	8
55	EBSD and TEM Characterization of Ultrafine Grained High Purity Aluminum Produced by Accumulative Roll-Bonding. <i>Materials Science Forum</i> , <b>2006</b> , 512, 91-96	0.4	8
54	Grain orientation and dislocation patterns. <i>Philosophical Magazine</i> , <b>2006</b> , 86, 3981-3994	1.6	43
53	Hardening by annealing and softening by deformation in nanostructured metals. <i>Science</i> , <b>2006</b> , 312, 249-51	33.3	528
52	Quantification of annealed microstructures in ARB processed aluminum. <i>Acta Materialia</i> , <b>2006</b> , 54, 3055-3066	3.0	127
51	The morphology and crystallography of lath martensite in alloy steels. <i>Acta Materialia</i> , <b>2006</b> , 54, 5323-5331	3.1	516
50	Effect of block size on the strength of lath martensite in low carbon steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 438-440, 237-240	5.3	380
49	Nucleation of recrystallization observed in situ in the bulk of a deformed metal. <i>Scripta Materialia</i> , <b>2005</b> , 53, 553-557	5.6	27
48	Extended dislocation boundaries in metals subjected to plane strain deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 409, 52-58	5.3	5
47	Effect of grain orientation on microstructures of aluminium in warm tension. <i>Materials Science and Technology</i> , <b>2005</b> , 21, 1471-1475	1.5	3
46	Precise determination of extended dislocation boundary plane in transmission electron microscopy. <i>Materials Science and Technology</i> , <b>2005</b> , 21, 1379-1382	1.5	5
45	Structural Refinement of Interstitial Free (IF) Steel by Deformation and Phase Transformation. <i>Materials Science Forum</i> , <b>2005</b> , 475-479, 37-42	0.4	2
44	Structural Refinement and Coarsening in Deformed Metals. <i>Solid State Phenomena</i> , <b>2005</b> , 101-102, 279-286	0.4	2
43	Microstructural Coarsening during Annealing of Cold Rolled Aluminum. <i>Materials Science Forum</i> , <b>2004</b> , 467-470, 209-216	0.4	2
42	In-Situ Measurements of Growth of Nuclei within the Bulk of Deformed Aluminium Single Crystals. <i>Materials Science Forum</i> , <b>2004</b> , 467-470, 189-192	0.4	3

41	Watching the growth of bulk grains during recrystallization of deformed metals. <i>Science</i> , <b>2004</b> , 305, 229-323	3.3	211
40	Structure and strength after large strain deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2004</b> , 387-389, 191-194	5.3	86
39	Flow stress and microstructures of fine grained copper. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2004</b> , 387-389, 186-190	5.3	27
38	Critical comparison of dislocation boundary alignment studied by TEM and EBSD: technical issues and theoretical consequences. <i>Acta Materialia</i> , <b>2004</b> , 52, 4437-4446	8.4	75
37	Grain orientation dependence of microstructures in a warm rolled IF steel. <i>Acta Materialia</i> , <b>2004</b> , 52, 5405-5418	8.4	29
36	Enhanced ductility in coarse grained Fe <sub>3</sub> Al alloys. <i>Intermetallics</i> , <b>2004</b> , 12, 1019-1023	3.5	2
35	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> , <b>2003</b> , 426-432, 405-410	0.4	19
34	Boundary characteristics in Heavily Deformed Metals. <i>Advanced Engineering Materials</i> , <b>2003</b> , 5, 317-322	3.5	4
33	Microstructural evolution during accumulative roll-bonding of commercial purity aluminum. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 340, 265-271	5.3	227
32	Crystal orientations before and after annealing in an Al single crystal strained in tension. <i>Acta Materialia</i> , <b>2003</b> , 51, 1827-1839	8.4	27
31	Deformation bands in a [110] aluminium single crystal strained in tension. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2003</b> , 459, 85-108	2.4	32
30	Microstructures of Nickel Deformed by High Pressure Torsion to High Strains. <i>Materials Science Forum</i> , <b>2003</b> , 426-432, 2819-2824	0.4	16
29	Extended planar boundary inclinations in fcc single crystals and polycrystals subjected to plane strain deformation. <i>Philosophical Magazine</i> , <b>2003</b> , 83, 969-983	1.6	22
28	Microstructure and strength of commercial purity aluminium (AA 1200) cold-rolled to large strains. <i>Acta Materialia</i> , <b>2002</b> , 50, 3789-3802	8.4	260
27	Microtexture of Lamellar Structures in Al Heavily Deformed by Accumulative Roll-Bonding (ARB). <i>Materials Science Forum</i> , <b>2002</b> , 408-412, 715-720	0.4	7
26	Determination of $\beta$ Boundary Planes in Bulk Copper Samples with Different Textures. <i>Materials Science Forum</i> , <b>2002</b> , 408-412, 493-498	0.4	1
25	Electron Backscatter Diffraction Analysis of Recrystallized Grains Formed in Deformation Band in Aluminum Single Crystal. <i>Materials Transactions</i> , <b>2001</b> , 42, 1938-1944	1.3	19
24	Polycrystal deformation and single crystal deformation: dislocation structure and flow stress in copper. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 319-321, 237-241	5.3	43

23	Microstructural evolution and hardening parameters. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 317, 3-11	5.3	155
22	Superplastic deformation in a coarse-grained Fe <sub>3</sub> Al based alloy. <i>Scripta Materialia</i> , <b>2001</b> , 44, 501-505	5.6	7
21	Dislocation Boundaries and Slip Systems in Uniaxially Deformed Crystals. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 683, 1		
20	Crystallographic and macroscopic orientation of planar dislocation boundaries correlation with grain orientation. <i>Acta Materialia</i> , <b>2000</b> , 48, 2187-2198	8.4	88
19	Crystallography and morphology of cementite precipitates formed during rapid solidification of a ferritic stainless steel. <i>Acta Materialia</i> , <b>2000</b> , 48, 4073-4082	8.4	18
18	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> , <b>2000</b> , 31, 3155-3166	2.3	63
17	Grain Orientation Effect on Microstructure in Tensile Strained Copper. <i>Scripta Materialia</i> , <b>1998</b> , 38, 1697-1703	5.103	110
16	Microstructure and flow stress of polycrystals and single crystals. <i>Acta Materialia</i> , <b>1998</b> , 46, 1827-1836	8.4	234
15	Determination of crystallographic and macroscopic orientation of planar structures in TEM. <i>Ultramicroscopy</i> , <b>1998</b> , 74, 123-130	3.1	26
14	TEM Study of Twin Segments in Annealed Copper. <i>Materials Science Forum</i> , <b>1998</b> , 294-296, 401-404	0.4	9
13	Planar colony of needle precipitates formed during solidification of a ferritic stainless steel. <i>Scripta Materialia</i> , <b>1997</b> , 36, 1219-1226	5.6	5
12	Grain orientation dependence of microstructure in aluminium deformed in tension. <i>Scripta Materialia</i> , <b>1997</b> , 37, 1-7	5.6	131
11	Dislocation structures and flow stress. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1997</b> , 234-236, 602-605	5.3	11
10	Mechanism of dynamic continuous recrystallization during superplastic deformation in a microduplex stainless steel. <i>Acta Materialia</i> , <b>1996</b> , 44, 4491-4499	8.4	75
9	Change in Boundary Misorientation with Subgrain Growth in a Microduplex Stainless Steel. <i>Materials Science Forum</i> , <b>1996</b> , 204-206, 417-422	0.4	1
8	Deformation microstructures. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 27, 1447-1452		34
7	TEM method for rapid and precise evaluation of continuous recrystallization. <i>Materials Characterization</i> , <b>1992</b> , 29, 271-276	3.9	2
6	Mechanical twinning during superplastic deformation of an Al-Li-Cu-Mg-Zr alloy. <i>Journal of Materials Science Letters</i> , <b>1991</b> , 10, 932-934		2

- 5 Superplasticity in a SiCw-6061Al composite. *Journal of Materials Science Letters*, **1991**, 10, 964-966 61
- 4 Microstructural changes during superplastic deformation of an Al-Li-Cu-Mg-Zr alloy. *Journal of Materials Science Letters*, **1991**, 10, 779-782 2
- 3 The characteristics of cavitation during superplastic deformation of a warm-rolled Al?Li?Cu?Mg?Zr alloy. *Scripta Metallurgica Et Materialia*, **1991**, 25, 387-392 1
- 2 Reversible Texture Transition during Accumulative Roll Bonding. *Ceramic Transactions*, 669-680 0.1
- 1 Graphene Growth across the Twin Boundaries of Copper Substrate. *Advanced Functional Materials*, 22024156 4.56