Cheng Lu

List of Publications by Year in Descending Order

212 papers	3,223 citations	33 h-index	43 g-index
231 ext. papers	3,791 ext. citations	3.8 avg, IF	5.55 L-index

#	Paper	IF	Citations
212	Decompression modelling of natural gas-hydrogen mixtures using the Peng-Robinson equation of state. *International Journal of Hydrogen Energy*, **2021**, 46, 15793-15806	6.7	2
211	High shock resistance and self-healing ability of graphene/nanotwinned Cu nanolayered composites. *Journal of Alloys and Compounds*, **2021**, 860, 158435	5.7	6
210	Hydrogen effects on the mechanical behaviour and deformation mechanisms of inclined twin boundaries. *International Journal of Hydrogen Energy*, **2021**, 46, 16127-16140	6.7	1
209	Strong strain hardening in graphene/nanotwinned metal composites revealed by molecular dynamics simulations. *International Journal of Mechanical Sciences*, **2021**, 201, 106460	5.5	2
208	The wrinkling and buckling of graphene induced by nanotwinned copper matrix: A molecular dynamics study. *Nano Materials Science*, **2021**, 3, 95-103	10.2	2
207	Dispersion of carbon dioxide released from buried high-pressure pipeline over complex terrain. *Environmental Science and Pollution Research*, **2021**, 28, 6635-6648	5.1	1
206	A crystal plasticity FE study of macro- and micro-subdivision in aluminium single crystals {001} multi-pass rolled to a high reduction. *Journal of Materials Science and Technology*, **2021**, 76, 231-246	9.1	1
205	Study on convection and dispersion characteristics of dense gases in urban environment considering trees. *Journal of Loss Prevention in the Process Industries*, **2021**, 72, 104577	3.5	0
204	Microstructural evolution in pure copper during accumulative skin pass rolling: experimental and crystal plasticity numerical investigations. *Journal of Materials Research and Technology*, **2021**, 14, 1903-1913	5.5	0
203	An approach of quantitative risk assessment for release of supercritical CO2 pipelines. *Journal of Natural Gas Science and Engineering*, **2021**, 94, 104131	4.6	0
202	Enhancing strength while preserving elongation: A study on copper after accumulative skin pass rolling. *International Journal of Mechanical Sciences*, **2021**, 210, 106756	5.5	0
201	Microstructure evolution, lattice rotation retardation and grain orientation fragmentation in commercial purity aluminium deformed by high pressure torsion. *Journal of Materials Research and Technology*, **2020**, 9, 6642-6654	5.5	7
200	An improved dynamic stall model and its effect on wind turbine fatigue load prediction. *Renewable Energy*, **2020**, 156, 117-130	8.1	9
199	Hydrogen-modified interaction between lattice dislocations and grain boundaries by atomistic modelling. *International Journal of Hydrogen Energy*, **2020**, 45, 9174-9187	6.7	10
198	Roles of microstructure, inclusion, and surface roughness on rolling contact fatigue of a wind turbine gear. *Fatigue and Fracture of Engineering Materials and Structures*, **2020**, 43, 1368-1383	3	6
197	Molecular Dynamics Simulation of the Negative Poisson Ratio in Graphene/Cu Nanolayered Composites: Implications for Scaffold Design and Telecommunication Cables. *ACS Applied Nano Materials*, **2020**, 3, 496-505	5.6	12
196	The structural rearrangement with secondary reinforcement in graphene/nanotwinned copper nanocomposites: A molecular dynamics study. *Composites Part B: Engineering*, **2020**, 182, 107610	10	14

195	A crystal plasticity FEM study on macro- and micro-subdivision of an aluminium single crystal after multi-pass unidirectional rolling, reverse rolling and accumulative roll-bonding. *International Journal of Advanced Manufacturing Technology*, **2020**, 111, 37-51	3.2	0
194	Atomistic investigation of hydrogen induced decohesion of Ni grain boundaries. *Mechanics of Materials*, **2020**, 150, 103586	3.3	5
193	A homogeneous relaxation model for multi-phase CO2 jets following the release of supercritical CO2 pipelines. *Journal of Natural Gas Science and Engineering*, **2020**, 84, 103609	4.6	4
192	Introduction of the delta concept for characterising pipe yield strength. *International Journal of Material Forming*, **2020**, 13, 623-637	2	0
191	Consequence modelling of CO2 pipeline failure. *Energy Procedia*, **2019**, 158, 5109-5115	2.3	
190	Improved dynamic stall prediction of wind turbine airfoils. *Energy Procedia*, **2019**, 158, 1021-1026	2.3	2
189	A Combined Experiment and Crystal Plasticity FEM Study of Microstructure and Texture in Aluminium Processed by Reverse and Unidirectional Accumulative Roll-Bonding. *Crystals*, **2019**, 9, 119	2.3	4
188	Effects of H segregation on shear-coupled motion of <110> grain boundaries in □Fe. *International Journal of Hydrogen Energy*, **2019**, 44, 18616-18627	6.7	6
187	Interaction between nano-voids and migrating grain boundary by molecular dynamics simulation. *Acta Materialia*, **2019**, 173, 206-224	8.4	24
186	Investigation of the consequence of high-pressure CO2 pipeline failure through experimental and numerical studies. *Applied Energy*, **2019**, 250, 32-47	10.7	12
185	High thermal stability and excellent mechanical properties of ultrafine-grained high-purity copper sheets subjected to asymmetric cryorolling. *Materials Characterization*, **2019**, 153, 34-45	3.9	26
184	Influence of hydrogen environment on dislocation nucleation and fracture response of <1 1 0> grain boundaries in nickel. *Computational Materials Science*, **2019**, 165, 40-50	3.2	12
183	Decompression of hydrogen□atural gas mixtures in high-pressure pipelines: CFD modelling using different equations of state. *International Journal of Hydrogen Energy*, **2019**, 44, 7428-7437	6.7	9
182	A crystal plasticity FEM study of through-thickness deformation and texture in a {112} aluminium single crystal during accumulative roll-bonding. *Scientific Reports*, **2019**, 9, 3401	4.9	6
181	Pitch bearing/raceway fretting: Influence of contact angle. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, **2019**, 233, 1734-1749	1.3	1
180	Influence of solute hydrogen on the interaction of screw dislocations with vicinal twin boundaries in nickel. *Scripta Materialia*, **2019**, 173, 115-119	5.6	7
179	A crystal plasticity FEM investigation of a Cu single crystal processed by accumulative roll-bonding. *Journal of Materials Research and Technology*, **2019**, 8, 5057-5065	5.5	4
178	Microstructure and mechanical properties of large-volume gradient-structure aluminium sheets fabricated by cyclic skin-pass rolling. *Philosophical Magazine*, **2019**, 99, 2265-2284	1.6	5

177	Microstructural changes on railway track surfaces caused by electrical leakage between wheel and rail. *Tribology International*, **2019**, 140, 105875	4.9	4
176	Cyclic transition of deformation in {1 2 3} single crystal processed by accumulative roll-bonding. *Materials Science and Technology*, **2019**, 35, 2150-2156	1.5	
175	Crystal plasticity modelling of microbands in a rolled aluminium single crystal. *Materialia*, **2019**, 8, 100488	3.2	
174	The negative Poisson's ratio and strengthening mechanism of nanolayered graphene/Cu composites. *Carbon*, **2019**, 143, 125-137	10.4	40
173	Correlation Between Crystal Rotation and Redundant Shear Strain in Rolled Single Crystals: A Crystal Plasticity FE Analysis. *Acta Metallurgica Sinica (English Letters)*, **2019**, 32, 452-460	2.5	1
172	Texture Stability and Transition in an Accumulative Roll-Bonding-Processed Aluminum Single Crystal. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 1611-1615	2.3	5
171	Grain boundary induced deformation mechanisms in nanocrystalline Al by molecular dynamics simulation: From interatomic potential perspective. *Computational Materials Science*, **2019**, 156, 421-433	3.2	25
170	Effect of Temperature on Deformation and Fracture Behaviour of Nanostructured Polycrystalline Ni Under Tensile Hydrostatic Stress by Molecular Dynamics Simulation. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 2723-2731	1.3	
169	Texture Modeling of Accumulative Roll-Bonding Processed Aluminum Single Crystal {1 2 3} by Crystal Plasticity FE. *Advanced Engineering Materials*, **2019**, 21, 1800827	3.5	6
168	Atomistic simulations of hydrogen effects on tensile deformation behaviour of [0 0 1] twist grain boundaries in nickel. *Computational Materials Science*, **2019**, 159, 12-23	3.2	6
167	Coupled effects of initial orientation scatter and grain-interaction to texture evolution: a crystal plasticity FE study. *International Journal of Material Forming*, **2019**, 12, 161-171	2	8
166	Nanoporous Al sandwich foils using size effect of Al layer thickness during Cu/Al/Cu laminate rolling. *Philosophical Magazine*, **2018**, 98, 1537-1549	1.6	11
165	A new finite element model for multi-cycle accumulative roll-bonding process and experiment verification. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 726, 93-101	5.3	20
164	Fatigue life analysis of slewing bearings in wind turbines. *International Journal of Fatigue*, **2018**, 111, 233-242	5	22
163	Deformation mechanisms and slip-twin interactions in nanotwinned body-centered cubic iron by molecular dynamics simulations. *Computational Materials Science*, **2018**, 147, 34-48	3.2	11
162	Shear response of grain boundaries with metastable structures by molecular dynamics simulations. *Modelling and Simulation in Materials Science and Engineering*, **2018**, 26, 035008	2	14
161	Hardened raceway calculation analysis of a three-row roller slewing bearing. *International Journal of Mechanical Sciences*, **2018**, 137, 133-144	5.5	10
160	Mechanical properties and microstructure of a Ti-6Al-4V alloy subjected to cold rolling, asymmetric rolling and asymmetric cryorolling. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 710, 10-16	5.3	45

159	A CFD decompression model for CO2 mixture and the influence of non-equilibrium phase transition. *Applied Energy*, **2018**, 227, 516-524	10.7	10
158	Deformation twinning and dislocation processes in nanotwinned copper by molecular dynamics simulations. *Computational Materials Science*, **2018**, 142, 59-71	3.2	19
157	Dynamic interaction between grain boundary and stacking fault tetrahedron. *Scripta Materialia*, **2018**, 144, 78-83	5.6	31
156	A dual fracture transition mechanism in nanotwinned Ni. *Materials Letters*, **2018**, 210, 243-247	3.3	1
155	Anisotropy and microstructural evolutions of X70 pipeline steel during tensile deformation. *Journal of Materials Research*, **2018**, 33, 3512-3520	2.5	6
154	Improvement in Strength and Ductility of Asymmetric-Cryorolled Copper Sheets Under Low-Temperature Annealing. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 4398-4403	2.3	12
153	Microstructure and mechanical properties of pure copper subjected to skin pass asymmetric rolling. *MATEC Web of Conferences*, **2018**, 185, 00003	0.3	2
152	Atomistic Simulation of the Interaction Between Point Defects and Twin Boundary. *Physica Status Solidi (B): Basic Research*, **2018**, 255, 1800228	1.3	2
151	Physics-based Constitutive Model for the Hot Deformation of 2Cr11Mo1VNbN Martensitic Stainless Steel. *Journal of Materials Engineering and Performance*, **2018**, 27, 4932-4940	1.6	4
150	Atomistic Simulation of the Interaction Between Point Defects and Twin Boundary (Phys. Status Solidi B 9/2018). *Physica Status Solidi (B): Basic Research*, **2018**, 255, 1870133	1.3	
149	Nonlinear elastic response of single crystal Cu under uniaxial loading by molecular dynamics study. *Materials Letters*, **2018**, 227, 236-239	3.3	16
148	Calculation analysis of yaw bearings with a hardened raceway. *International Journal of Mechanical Sciences*, **2018**, 144, 540-552	5.5	11
147	Vibration-induced aerodynamic loads on large horizontal axis wind turbine blades. *Applied Energy*, **2017**, 185, 1109-1119	10.7	38
146	Multi-phase decompression modeling of CO2 pipelines **2017**, 7, 665-679		4
145	The formation and destruction of stacking fault tetrahedron in fcc metals: A molecular dynamics study. *Scripta Materialia*, **2017**, 136, 78-82	5.6	32
144	Effects of aerodynamic damping on the tower load of offshore horizontal axis wind turbines. *Applied Energy*, **2017**, 204, 1101-1114	10.7	32
143	A study on the texture evolution mechanism of nickel single crystal deformed by high pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 684, 239-248	5.3	13
142	Innovative analysis of Luders band behaviour in X80 pipeline steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 683, 123-128	5.3	19

141	Deformation mechanisms in nanotwinned copper by molecular dynamics simulation. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 687, 343-351	5.3	42
140	Enhanced materials performance of Al/Ti/Al laminate sheets subjected to cryogenic roll bonding. *Journal of Materials Research*, **2017**, 32, 3761-3768	2.5	14
139	Decompression Modelling of Pipelines Carrying CO 2 -N 2 Mixture and the Influence of Non-equilibrium Phase Transition. *Energy Procedia*, **2017**, 105, 4204-4209	2.3	1
138	Precipitates and Particles Coarsening of 9Cr-1.7W-0.4Mo-Co Ferritic Heat-Resistant Steel after Isothermal Aging. *Scientific Reports*, **2017**, 7, 5859	4.9	17
137	Investigation of terrain effects on the consequence distance of CO 2 released from high-pressure pipelines. *International Journal of Greenhouse Gas Control*, **2017**, 66, 264-275	4.2	8
136	Tower Load Analysis of Offshore Wind Turbines and the Effects of Aerodynamic Damping. *Energy Procedia*, **2017**, 105, 373-378	2.3	2
135	Algae biomass as a precursor for synthesis of nitrogen-and sulfur-co-doped carbon dots: A better probe in Arabidopsis guard cells and root tissues. *Journal of Photochemistry and Photobiology B: Biology*, **2017**, 174, 315-322	6.7	28
134	Influence of temperature and local structure on the shear-coupled grain boundary migration. *Physica Status Solidi (B): Basic Research*, **2017**, 254, 1600477	1.3	10
133	Stacking fault tetrahedron induced plasticity in copper single crystal. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 680, 27-38	5.3	34
132	The evolution of microtexture of pipeline steel from strip to bare pipe to coated pipe. *Procedia Engineering*, **2017**, 207, 1844-1849		4
131	Progress in Indentation Study of Materials via Both Experimental and Numerical Methods. *Crystals*, **2017**, 7, 258	2.3	18
130	Study of Anisotropic Plastic Behavior in High Pressure Torsion of Aluminum Single Crystal by Crystal Plasticity Finite Element Method. *Crystals*, **2017**, 7, 362	2.3	3
129	Evaluation of Mechanical Properties of Σ5(210)/[001] Tilt Grain Boundary with Self-Interstitial Atoms by Molecular Dynamics Simulation. *Journal of Nanomaterials*, **2017**, 2017, 1-11	3.2	6
128	Tension/compression asymmetry of grain boundaries with non-planar structure. *Materials Research Express*, **2016**, 3, 085025	1.7	2
127	Coupled grain boundary motion in aluminium: the effect of structural multiplicity. *Scientific Reports*, **2016**, 6, 25427	4.9	24
126	Simultaneous Grain Growth and Grain Refinement in Bulk Ultrafine-Grained Copper under Tensile Deformation at Room Temperature. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 3785-3789	2.3	13
125	A review on atomistic simulation of grain boundary behaviors in face-centered cubic metals. *Computational Materials Science*, **2016**, 118, 180-191	3.2	49
124	Computational fluid dynamics simulation of carbon dioxide dispersion in a complex environment. *Journal of Loss Prevention in the Process Industries*, **2016**, 40, 419-432	3.5	29

123	A dual deformation mechanism of grain boundary at different stress stages. *Materials Letters*, **2016**, 167, 278-283	3.3	8
122	Annealing effect on microstructure and mechanical properties of Al/Ti/Al laminate sheets. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2016**, 660, 195-204	5.3	47
121	High temperature processed high Nb X80 steel with excellent heat-affected zone toughness. *Materials Letters*, **2016**, 163, 171-174	3.3	25
120	Transverse and z-Direction CVN Impact Tests of X65 Line Pipe Steels of Two Centerline Segregation Ratings. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 3919-3932	2.3	6
119	Special Rolling Techniques for Improvement of Mechanical Properties of Ultrafine-Grained Metal Sheets: a Review . *Advanced Engineering Materials*, **2016**, 18, 754-769	3.5	42
118	Superstrength of nanograined steel with nanoscale intermetallic precipitates transformed from shock-compressed martensitic steel. *Scientific Reports*, **2016**, 6, 36810	4.9	9
117	Microstructure evolution of accumulative roll bonding processed pure aluminum during cryorolling. *Journal of Materials Research*, **2016**, 31, 797-805	2.5	12
116	Strengthening mechanisms and dislocation processes in textured nanotwinned copper. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 676, 474-486	5.3	16
115	Enhanced mechanical properties of ARB-processed aluminum alloy 6061 sheets by subsequent asymmetric cryorolling and ageing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 674, 256-261	5.3	40
114	Study of the consequences of CO2 released from high-pressure pipelines. *Atmospheric Environment* , **2015**, 116, 51-64	5.3	26
113	Ductile-to-brittle fracture transition in polycrystalline nickel under tensile hydrostatic stress. *Computational Materials Science*, **2015**, 109, 147-156	3.2	6
112	Ab-initio study of phase stability, elastic and thermodynamic properties of AlY alloy under pressure. *Journal of Alloys and Compounds*, **2015**, 648, 67-74	5.7	7
111	Brittle versus ductile fracture behaviour in nanotwinned FCC crystals. *Materials Letters*, **2015**, 152, 65-67	3.3	12
110	Molecular dynamics study on the grain boundary dislocation source in nanocrystalline copper under tensile loading. *Materials Research Express*, **2015**, 2, 035009	1.7	18
109	Influence of the Vibration of Large-scale Wind Turbine Blade on the Aerodynamic Load. *Energy Procedia*, **2015**, 75, 873-879	2.3	6
108	Investigation of X70 line pipe steel fracture during single edge-notched tensile testing using acoustic emission monitoring. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 640, 471-479	5.3	9
107	Nanomechanical properties of TiCN and TiCN/Ti coatings on Ti prepared by Filtered Arc Deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2015**, 625, 56-64	5.3	23
106	Crystal plasticity finite element method modelling of indentation size effect. *International Journal of Solids and Structures*, **2015**, 54, 42-49	3.1	26

105	Decompression wave speed in CO2 mixtures: CFD modelling with the GERG-2008 equation of state. *Applied Energy*, **2015**, 140, 20-32	10.7	41
104	High Strength and Ductility of Ultrathin Laminate Foils Using Accumulative Roll Bonding and Asymmetric Rolling. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 869-879	2.3	18
103	Crystal plasticity FEM study of nanoindentation behaviors of Cu bicrystals and Cu□Al bicrystals. *Journal of Materials Research*, **2015**, 30, 2485-2499	2.5	12
102	A combined experimental-numerical approach for determining mechanical properties of aluminum subjects to nanoindentation. *Scientific Reports*, **2015**, 5, 15072	4.9	38
101	The shear response of copper bicrystals with □11 symmetric and asymmetric tilt grain boundaries by molecular dynamics simulation. *Nanoscale*, **2015**, 7, 7224-33	7.7	36
100	A new insight into ductile fracture of ultrafine-grained Al-Mg alloys. *Scientific Reports*, **2015**, 5, 9568	4.9	22
99	Modelling of Texture Evolution in High Pressure Torsion by Crystal Plasticity Finite Element Method. *Applied Mechanics and Materials*, **2015**, 764-765, 56-60	0.3	4
98	Optimisation of dispersion parameters of Gaussian plume model for CO□dispersion. *Environmental Science and Pollution Research*, **2015**, 22, 18288-99	5.1	17
97	Brittle versus ductile behaviour of nanotwinned copper: A molecular dynamics study. *Acta Materialia*, **2015**, 89, 1-13	8.4	38
96	Atomistic simulation of tensile deformation behavior of □5 tilt grain boundaries in copper bicrystal. *Scientific Reports*, **2014**, 4, 5919	4.9	49
95	A deformation mechanism of hard metal surrounded by soft metal during roll forming. *Scientific Reports*, **2014**, 4, 5017	4.9	36
94	A crystal plasticity study of the effect of friction on the evolution of texture and mechanical behaviour in the nano-indentation of an aluminium single crystal. *Computational Materials Science*, **2014**, 81, 30-38	3.2	17
93	Microstructural Evolution and Mechanical Property of AA5050 Alloy Deformed by Accumulative Roll Bonding. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2014**, 45, 399-403	2.5	5
92	Source strength and dispersion of CO2 releases from high-pressure pipelines: CFD model using real gas equation of state. *Applied Energy*, **2014**, 126, 56-68	10.7	51
91	Influence of outer corner angle (OCA) on the plastic deformation and texture evolution in equal channel angular pressing. *Computational Materials Science*, **2014**, 81, 79-88	3.2	14
90	An Investigation of Interface Bonding of Bimetallic Foils by Combined Accumulative Roll Bonding and Asymmetric Rolling Techniques. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2014**, 45, 4038-4045	2.3	21
89	Advanced Rolling Technologies for Producing Ultrafine-grain/nanostructured Alloys. *Procedia Engineering*, **2014**, 81, 96-101		11
88	Investigation of ultrafine grained AA1050 fabricated by accumulative roll bonding. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 614, 148-155	5.3	59

87	Numerical comparison between Berkovich and conical nano-indentations: Mechanical behaviour and micro-texture evolution. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 619, 57-65	5.3	22
86	Influence of cold rolling reduction on the deformation behaviour and crystallographic orientation development. *Computational Materials Science*, **2014**, 81, 2-9	3.2	23
85	Shear texture gradient in AA6061 aluminum alloy processed by accumulative roll bonding with high roll roughness. *Journal of Alloys and Compounds*, **2014**, 594, 12-22	5.7	45
84	Molecular dynamics simulation of the grain boundary sliding behaviour for Al Σ5 (210). *Computational Materials Science*, **2014**, 81, 52-57	3.2	7
83	The mechanical behaviour of TiN and multi-layered coating of TiN/Ti on Ti6Al4V substrate during nano-indentation. *International Journal of Surface Science and Engineering*, **2014**, 8, 95	1	3
82	Effect of stress state on deformation and fracture of nanocrystalline copper: Molecular dynamics simulation. *Chinese Physics B*, **2014**, 23, 098102	1.2	0
81	Investigation of closure of internal cracks during rolling by FE model considering crack surface roughness. *International Journal of Advanced Manufacturing Technology*, **2014**, 75, 1633-1640	3.2	9
80	Fabrication of Nanostructured Aluminum Sheets Using Four-Layer Accumulative Roll Bonding. *Materials and Manufacturing Processes*, **2014**, 29, 448-453	4.1	39
79	Deformation Behavior and Wear Resistance of Hard TiCN and TiCN/Ti Coatings on Ti6Al4V Alloy. *Advanced Materials Research*, **2014**, 939, 451-458	0.5	1
78	Influence of Loading Conditions during Tensile Testing on Acoustic Emission. *Key Engineering Materials*, **2014**, 626, 121-126	0.4	4
77	Abnormally high residual dislocation density in pure aluminum after Al/Ti/Al laminate annealing for seven days. *Philosophical Magazine Letters*, **2014**, 94, 732-740	1	9
76	Tensile fracture of ultrafine grained aluminum 6061 sheets by asymmetric cryorolling for microforming. *International Journal of Damage Mechanics*, **2014**, 23, 1077-1095	3	27
75	Molecular dynamics study on the atomic mechanisms of coupling motion of [0 0 1] symmetric tilt grain boundaries in copper bicrystal. *Materials Research Express*, **2014**, 1, 015019	1.7	19
74	Molecular Dynamics Simulation on Σ5 Grain Boundaries of Copper Bicrystal under Tensile and Shear Deformation. *Materials Research Society Symposia Proceedings*, **2014**, 1651, 1		2
73	Multiscale model of elastic nanocontacts. *Computational Materials Science*, **2014**, 81, 98-103	3.2	2
72	Microstructure and Mechanical Properties of AA5005/AA6061 Laminated Composite Processed by Accumulative Roll Bonding. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2014**, 45, 515-522	2.5	13
71	Abnormal Ductility Increase of Commercial Purity Al During Accumulative Roll Bonding. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2014**, 45, 404-408	2.5	
70	Response of the Al Σ5 <001> {310} Symmetric Tilt Grain Boundary to the Shear Deformation Simulated by Molecular Dynamics. *Science of Advanced Materials*, **2014**, 6, 1322-1329	2.3	2

69	Vacancy-Type Defects Study on Ultra-Fine Grained Aluminium Processed by Severe Plastic Deformation. *Science of Advanced Materials*, **2014**, 6, 1338-1345	2.3	3
68	Occurrence of surface defects on strips during hot rolling process by FEM. *International Journal of Advanced Manufacturing Technology*, **2013**, 67, 1161-1170	3.2	27
67	Finite Element Analysis of High Pressure Torsion. *Steel Research International*, **2013**, 84, 1246-1251	1.6	11
66	Mechanical properties of Al–Mg–Si alloy sheets produced using asymmetric cryorolling and ageing treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 568, 212-218	5.3	43
65	Fabrication of ultra-thin nanostructured bimetallic foils by Accumulative Roll Bonding and Asymmetric Rolling. *Scientific Reports*, **2013**, 3, 2373	4.9	32
64	Crystal Plasticity FEM Study on the Influence of Crystallographic Orientation in Copper Single Crystals Subjected to Equal Channel Angular Pressing. *Steel Research International*, **2013**, 84, 1258-1266	1.6	1
63	A Molecular Dynamics Simulation of Fracture in Nanocrystalline Copper. *Journal of Nano Research*, **2013**, 23, 50-56	1	1
62	Investigation of sample size effect on the deformation heterogeneity and texture development during equal channel angular pressing. *Computational Materials Science*, **2013**, 74, 75-85	3.2	10
61	Ultrafine grained AA1050/AA6061 composite produced by accumulative roll bonding. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 559, 345-351	5.3	51
60	Simulation of defects in micro-deep drawing of an aluminium alloy foil **2013**,		4
59	A Misorientation Dependent Criterion of Crack Opening in FCC Single Crystal. *Materials Science Forum*, **2013**, 773-774, 293-311	0.4	
58	Optimization and Application of Process Parameters in an AZ61 Alloy Twin-Roll Strip Casting. *Materials Science Forum*, **2013**, 773-774, 130-136	0.4	2
57	Crystal Plasticity Study of the Effect of the Initial Orientation on the Indentation Surface Profile Patterns and Micro-Textures of Aluminum Single Crystal. *Steel Research International*, **2013**, 84, 1196-1202	1.6	2
56	Fatigue Analysis of a Motorcycle Frame System Based on a Road Test and the Finite Element Method. *Materials Science Forum*, **2013**, 773-774, 842-850	0.4	
55	Grain Refinement in the Formability of Aluminium Thin Cup. *Materials Science Forum*, **2013**, 773-774, 166-175	0.4	
54	Effect of Pre-Heating on the Microstructural Evolution and Super-Plasticity of Al Deformed by Accumulative Roll Bonding. *Steel Research International*, **2013**, 84, 1209-1215	1.6	
53	Investigation of Deformation Behavior during Cold Rolling Cladding Process of Four-Layer Composite Aluminum Alloys. *Advanced Materials Research*, **2013**, 651, 424-429	0.5	1
52	The Wave Motion of the Rolling Force during Variable Gauge Rolling. *Steel Research International*, **2013**, 84, 1203-1208	1.6	6

51	Annealing Behavior of Accumulative Roll Bonding Processed Aluminum Composites. *Steel Research International*, **2013**, 84, 1241-1245	1.6	8
50	A micro deep drawing of ARB processed aluminium foil AA1235. *International Journal of Materials and Product Technology*, **2013**, 47, 175	1	6
49	Recent Developments in Flat Rolling Technologies **2013**, 2139-2146		1
48	Recent Developments in Flat Rolling Technologies **2013**, 2139-2146		
47	Modeling texture evolution during ECAP of copper single crystal by crystal plasticity FEM. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 534, 68-74	5.3	25
46	Optimization of cushion conditions in micro multi-point sheet forming. *Journal of Materials Processing Technology*, **2012**, 212, 672-677	5.3	13
45	Asymmetric cryorolling for fabrication of nanostructural aluminum sheets. *Scientific Reports*, **2012**, 2, 772	4.9	53
44	Study of vacancy-type defects by positron annihilation in ultrafine-grained aluminum severely deformed at room and cryogenic temperatures. *Acta Materialia*, **2012**, 60, 4218-4228	8.4	53
43	Fracture Behaviors of TiN and TiN/Ti Multilayer Coatings on Ti Substrate during Nanoindentation **2012**, 963-970		1
42	A Numerical Model for Simulation of Crack Initiation Around Inclusion Under Tensile Load. *Journal of Computational and Theoretical Nanoscience*, **2012**, 9, 1745-1749	0.3	4
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