

Cheng Lu

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212
papers

3,223
citations

33
h-index

43
g-index

231
ext. papers

3,791
ext. citations

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avg. IF

5.55
L-index

#	Paper	IF	Citations
212	Significant enhancement of bond strength in the accumulative roll bonding process using nano-sized SiO ₂ particles. <i>Journal of Materials Processing Technology</i> , 2009 , 209, 4830-4834	5.3	86
211	Effect of carbides on the creep properties of a Ni-base superalloy M963. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 397, 297-304	5.3	82
210	Finite element simulation of cold rolling of thin strip. <i>Journal of Materials Processing Technology</i> , 2003 , 140, 542-547	5.3	62
209	Crystal plasticity modeling of texture evolution and heterogeneity in equal channel angular pressing of aluminum single crystal. <i>Acta Materialia</i> , 2011 , 59, 3581-3592	8.4	60
208	Investigation of ultrafine grained AA1050 fabricated by accumulative roll bonding. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 614, 148-155	5.3	59
207	Asymmetric cryorolling for fabrication of nanostructural aluminum sheets. <i>Scientific Reports</i> , 2012 , 2, 772	4.9	53
206	Study of vacancy-type defects by positron annihilation in ultrafine-grained aluminum severely deformed at room and cryogenic temperatures. <i>Acta Materialia</i> , 2012 , 60, 4218-4228	8.4	53
205	Source strength and dispersion of CO ₂ releases from high-pressure pipelines: CFD model using real gas equation of state. <i>Applied Energy</i> , 2014 , 126, 56-68	10.7	51
204	Ultrafine grained AA1050/AA6061 composite produced by accumulative roll bonding. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 345-351	5.3	51
203	Atomistic simulation of tensile deformation behavior of Σ tilt grain boundaries in copper bicrystal. <i>Scientific Reports</i> , 2014 , 4, 5919	4.9	49
202	A review on atomistic simulation of grain boundary behaviors in face-centered cubic metals. <i>Computational Materials Science</i> , 2016 , 118, 180-191	3.2	49
201	Annealing effect on microstructure and mechanical properties of Al/Ti/Al laminate sheets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 660, 195-204	5.3	47
200	Mechanical properties and microstructure of a Ti-6Al-4V alloy subjected to cold rolling, asymmetric rolling and asymmetric cryorolling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 710, 10-16	5.3	45
199	Shear texture gradient in AA6061 aluminum alloy processed by accumulative roll bonding with high roll roughness. <i>Journal of Alloys and Compounds</i> , 2014 , 594, 12-22	5.7	45
198	Oxide scales growth of low-carbon steel at high temperatures. <i>Journal of Materials Processing Technology</i> , 2004 , 155-156, 1300-1306	5.3	45
197	Mechanical properties of AlMgBi alloy sheets produced using asymmetric cryorolling and ageing treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 568, 212-218	5.3	43
196	Deformation mechanisms in nanotwinned copper by molecular dynamics simulation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 687, 343-351	5.3	42

195	Special Rolling Techniques for Improvement of Mechanical Properties of Ultrafine-Grained Metal Sheets: a Review . <i>Advanced Engineering Materials</i> , 2016 , 18, 754-769	3.5	42
194	Decompression wave speed in CO2 mixtures: CFD modelling with the GERG-2008 equation of state. <i>Applied Energy</i> , 2015 , 140, 20-32	10.7	41
193	Effect of heat treatment on microstructures and tensile properties of Ni-base superalloy M963. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 398, 128-136	5.3	40
192	The negative Poisson's ratio and strengthening mechanism of nanolayered graphene/Cu composites. <i>Carbon</i> , 2019 , 143, 125-137	10.4	40
191	Enhanced mechanical properties of ARB-processed aluminum alloy 6061 sheets by subsequent asymmetric cryorolling and ageing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 674, 256-261	5.3	40
190	Fabrication of Nanostructured Aluminum Sheets Using Four-Layer Accumulative Roll Bonding. <i>Materials and Manufacturing Processes</i> , 2014 , 29, 448-453	4.1	39
189	Vibration-induced aerodynamic loads on large horizontal axis wind turbine blades. <i>Applied Energy</i> , 2017 , 185, 1109-1119	10.7	38
188	A combined experimental-numerical approach for determining mechanical properties of aluminum subjects to nanoindentation. <i>Scientific Reports</i> , 2015 , 5, 15072	4.9	38
187	Brittle versus ductile behaviour of nanotwinned copper: A molecular dynamics study. <i>Acta Materialia</i> , 2015 , 89, 1-13	8.4	38
186	High temperature oxide scale characteristics of low carbon steel in hot rolling. <i>Journal of Materials Processing Technology</i> , 2004 , 155-156, 1307-1312	5.3	38
185	Molecular dynamics simulation of effect of indenter shape on nanoscratch of Ni. <i>Wear</i> , 2009 , 267, 1998-2002	3.9	37
184	A study on crack healing in 1045 steel. <i>Journal of Materials Processing Technology</i> , 2006 , 177, 233-237	5.3	37
183	A deformation mechanism of hard metal surrounded by soft metal during roll forming. <i>Scientific Reports</i> , 2014 , 4, 5017	4.9	36
182	The shear response of copper bicrystals with ± 1 symmetric and asymmetric tilt grain boundaries by molecular dynamics simulation. <i>Nanoscale</i> , 2015 , 7, 7224-33	7.7	36
181	Surface characteristics of oxide scale in hot strip rolling. <i>Journal of Materials Processing Technology</i> , 2003 , 140, 76-83	5.3	35
180	Stacking fault tetrahedron induced plasticity in copper single crystal. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 680, 27-38	5.3	34
179	The formation and destruction of stacking fault tetrahedron in fcc metals: A molecular dynamics study. <i>Scripta Materialia</i> , 2017 , 136, 78-82	5.6	32
178	Effects of aerodynamic damping on the tower load of offshore horizontal axis wind turbines. <i>Applied Energy</i> , 2017 , 204, 1101-1114	10.7	32

177	Fabrication of ultra-thin nanostructured bimetallic foils by Accumulative Roll Bonding and Asymmetric Rolling. <i>Scientific Reports</i> , 2013 , 3, 2373	4.9	32
176	Simulation of rolling behaviour of cubic oriented al single crystal with crystal plasticity FEM. <i>Journal of Materials Processing Technology</i> , 2008 , 201, 79-84	5.3	32
175	Dynamic interaction between grain boundary and stacking fault tetrahedron. <i>Scripta Materialia</i> , 2018 , 144, 78-83	5.6	31
174	The influence of cryoECAP on microstructure and property of commercial pure aluminum. <i>Materials Letters</i> , 2008 , 62, 2821-2824	3.3	31
173	Computational fluid dynamics simulation of carbon dioxide dispersion in a complex environment. <i>Journal of Loss Prevention in the Process Industries</i> , 2016 , 40, 419-432	3.5	29
172	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. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2017 , 174, 315-322	6.7	28
171	Occurrence of surface defects on strips during hot rolling process by FEM. <i>International Journal of Advanced Manufacturing Technology</i> , 2013 , 67, 1161-1170	3.2	27
170	Tensile fracture of ultrafine grained aluminum 6061 sheets by asymmetric cryorolling for microforming. <i>International Journal of Damage Mechanics</i> , 2014 , 23, 1077-1095	3	27
169	Modeling of the inlet zone in the mixed lubrication situation of cold strip rolling. <i>Journal of Materials Processing Technology</i> , 2003 , 140, 569-575	5.3	27
168	High thermal stability and excellent mechanical properties of ultrafine-grained high-purity copper sheets subjected to asymmetric cryorolling. <i>Materials Characterization</i> , 2019 , 153, 34-45	3.9	26
167	Study of the consequences of CO ₂ released from high-pressure pipelines. <i>Atmospheric Environment</i> , 2015 , 116, 51-64	5.3	26
166	Crystal plasticity finite element method modelling of indentation size effect. <i>International Journal of Solids and Structures</i> , 2015 , 54, 42-49	3.1	26
165	High temperature processed high Nb X80 steel with excellent heat-affected zone toughness. <i>Materials Letters</i> , 2016 , 163, 171-174	3.3	25
164	Modeling texture evolution during ECAP of copper single crystal by crystal plasticity FEM. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 534, 68-74	5.3	25
163	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}		25
162	Interaction between nano-voids and migrating grain boundary by molecular dynamics simulation. <i>Acta Materialia</i> , 2019 , 173, 206-224	8.4	24
161	Coupled grain boundary motion in aluminium: the effect of structural multiplicity. <i>Scientific Reports</i> , 2016 , 6, 25427	4.9	24
160	Nanomechanical properties of TiCN and TiCN/Ti coatings on Ti prepared by Filtered Arc Deposition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 625, 56-64	5.3	23

159	Influence of cold rolling reduction on the deformation behaviour and crystallographic orientation development. <i>Computational Materials Science</i> , 2014 , 81, 2-9	3.2	23
158	An investigation into the tribological behaviour of a work roll material at high temperature. <i>Wear</i> , 2011 , 273, 43-48	3.5	23
157	A design of a third-order CVC roll profile. <i>Journal of Materials Processing Technology</i> , 2002 , 125-126, 645-648	3.9	23
156	Fatigue life analysis of slewing bearings in wind turbines. <i>International Journal of Fatigue</i> , 2018 , 111, 233-242	5	22
155	Numerical comparison between Berkovich and conical nano-indentations: Mechanical behaviour and micro-texture evolution. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 619, 57-65	5.3	22
154	A new insight into ductile fracture of ultrafine-grained Al-Mg alloys. <i>Scientific Reports</i> , 2015 , 5, 9568	4.9	22
153	An Investigation of Interface Bonding of Bimetallic Foils by Combined Accumulative Roll Bonding and Asymmetric Rolling Techniques. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014 , 45, 4038-4045	2.3	21
152	A new finite element model for multi-cycle accumulative roll-bonding process and experiment verification. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 726, 93-101	5.3	20
151	Influence of Nb, V and Ti on peak strain of deformed austenite in Mo-based micro-alloyed steels. <i>Journal of Materials Processing Technology</i> , 2002 , 125-126, 72-76	5.3	20
150	Innovative analysis of Luders band behaviour in X80 pipeline steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 683, 123-128	5.3	19
149	Deformation twinning and dislocation processes in nanotwinned copper by molecular dynamics simulations. <i>Computational Materials Science</i> , 2018 , 142, 59-71	3.2	19
148	Molecular dynamics study on the atomic mechanisms of coupling motion of [0 0 1] symmetric tilt grain boundaries in copper bicrystal. <i>Materials Research Express</i> , 2014 , 1, 015019	1.7	19
147	High temperature low cycle fatigue behavior of Ni-base superalloy M963. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 402, 33-41	5.3	19
146	Molecular dynamics study on the grain boundary dislocation source in nanocrystalline copper under tensile loading. <i>Materials Research Express</i> , 2015 , 2, 035009	1.7	18
145	High Strength and Ductility of Ultrathin Laminate Foils Using Accumulative Roll Bonding and Asymmetric Rolling. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 869-879	2.3	18
144	Progress in Indentation Study of Materials via Both Experimental and Numerical Methods. <i>Crystals</i> , 2017 , 7, 258	2.3	18
143	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. <i>Computational Materials Science</i> , 2014 , 81, 30-38	3.2	17
142	Precipitates and Particles Coarsening of 9Cr-1.7W-0.4Mo-Co Ferritic Heat-Resistant Steel after Isothermal Aging. <i>Scientific Reports</i> , 2017 , 7, 5859	4.9	17

141	Optimisation of dispersion parameters of Gaussian plume model for CO ₂ dispersion. <i>Environmental Science and Pollution Research</i> , 2015 , 22, 18288-99	5.1	17
140	Vacancy-assisted hardening in nanostructured metals. <i>Materials Letters</i> , 2011 , 65, 514-516	3.3	17
139	Strengthening mechanisms and dislocation processes in textured nanotwinned copper. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 676, 474-486	5.3	16
138	Nonlinear elastic response of single crystal Cu under uniaxial loading by molecular dynamics study. <i>Materials Letters</i> , 2018 , 227, 236-239	3.3	16
137	Shear response of grain boundaries with metastable structures by molecular dynamics simulations. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2018 , 26, 035008	2	14
136	Influence of outer corner angle (OCA) on the plastic deformation and texture evolution in equal channel angular pressing. <i>Computational Materials Science</i> , 2014 , 81, 79-88	3.2	14
135	Enhanced materials performance of Al/Ti/Al laminate sheets subjected to cryogenic roll bonding. <i>Journal of Materials Research</i> , 2017 , 32, 3761-3768	2.5	14
134	The structural rearrangement with secondary reinforcement in graphene/nanotwinned copper nanocomposites: A molecular dynamics study. <i>Composites Part B: Engineering</i> , 2020 , 182, 107610	10	14
133	A study on the texture evolution mechanism of nickel single crystal deformed by high pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 684, 239-248	5.3	13
132	Simultaneous Grain Growth and Grain Refinement in Bulk Ultrafine-Grained Copper under Tensile Deformation at Room Temperature. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 3785-3789	2.3	13
131	Optimization of cushion conditions in micro multi-point sheet forming. <i>Journal of Materials Processing Technology</i> , 2012 , 212, 672-677	5.3	13
130	Microstructure and Mechanical Properties of AA5005/AA6061 Laminated Composite Processed by Accumulative Roll Bonding. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2014 , 45, 515-522	2.5	13
129	Optimization of Short Stroke Control Preset for Automatic Width Control of Hot Rolling Mill. <i>Journal of Iron and Steel Research International</i> , 2010 , 17, 16-20	1.2	13
128	Atomic-scale anisotropy of nanoscratch behavior of single crystal iron. <i>Wear</i> , 2009 , 267, 1961-1966	3.5	13
127	Investigation of the consequence of high-pressure CO ₂ pipeline failure through experimental and numerical studies. <i>Applied Energy</i> , 2019 , 250, 32-47	10.7	12
126	Influence of hydrogen environment on dislocation nucleation and fracture response of <1 1 0> grain boundaries in nickel. <i>Computational Materials Science</i> , 2019 , 165, 40-50	3.2	12
125	Brittle versus ductile fracture behaviour in nanotwinned FCC crystals. <i>Materials Letters</i> , 2015 , 152, 65-67	3.3	12
124	Improvement in Strength and Ductility of Asymmetric-Cryorolled Copper Sheets Under Low-Temperature Annealing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 4398-4403	2.3	12

123	Crystal plasticity FEM study of nanoindentation behaviors of Cu bicrystals and Cu/Al bicrystals. <i>Journal of Materials Research</i> , 2015 , 30, 2485-2499	2.5	12
122	Experiment and molecular dynamics simulation of nanoindentation of body centered cubic iron. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 7307-13	1.3	12
121	Molecular Dynamics Simulation of the Negative Poisson's Ratio in Graphene/Cu Nanolayered Composites: Implications for Scaffold Design and Telecommunication Cables. <i>ACS Applied Nano Materials</i> , 2020 , 3, 496-505	5.6	12
120	Microstructure evolution of accumulative roll bonding processed pure aluminum during cryorolling. <i>Journal of Materials Research</i> , 2016 , 31, 797-805	2.5	12
119	Nanoporous Al sandwich foils using size effect of Al layer thickness during Cu/Al/Cu laminate rolling. <i>Philosophical Magazine</i> , 2018 , 98, 1537-1549	1.6	11
118	Deformation mechanisms and slip-twin interactions in nanotwinned body-centered cubic iron by molecular dynamics simulations. <i>Computational Materials Science</i> , 2018 , 147, 34-48	3.2	11
117	Advanced Rolling Technologies for Producing Ultrafine-grain/nanostructured Alloys. <i>Procedia Engineering</i> , 2014 , 81, 96-101		11
116	Finite Element Analysis of High Pressure Torsion. <i>Steel Research International</i> , 2013 , 84, 1246-1251	1.6	11
115	A FEM modelling of the elastic deformation zones in flat rolling. <i>Journal of Materials Processing Technology</i> , 2004 , 146, 167-174	5.3	11
114	Calculation analysis of yaw bearings with a hardened raceway. <i>International Journal of Mechanical Sciences</i> , 2018 , 144, 540-552	5.5	11
113	Hydrogen-modified interaction between lattice dislocations and grain boundaries by atomistic modelling. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 9174-9187	6.7	10
112	Hardened raceway calculation analysis of a three-row roller slewing bearing. <i>International Journal of Mechanical Sciences</i> , 2018 , 137, 133-144	5.5	10
111	A CFD decompression model for CO ₂ mixture and the influence of non-equilibrium phase transition. <i>Applied Energy</i> , 2018 , 227, 516-524	10.7	10
110	Influence of temperature and local structure on the shear-coupled grain boundary migration. <i>Physica Status Solidi (B): Basic Research</i> , 2017 , 254, 1600477	1.3	10
109	Investigation of sample size effect on the deformation heterogeneity and texture development during equal channel angular pressing. <i>Computational Materials Science</i> , 2013 , 74, 75-85	3.2	10
108	Three-dimensional thermo-mechanical finite element simulation of ribbed strip rolling with friction variation. <i>Finite Elements in Analysis and Design</i> , 2004 , 40, 1139-1155	2.2	10
107	Decompression of hydrogen/natural gas mixtures in high-pressure pipelines: CFD modelling using different equations of state. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 7428-7437	6.7	9
106	Investigation of X70 line pipe steel fracture during single edge-notched tensile testing using acoustic emission monitoring. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 640, 471-479	5.3	9

105	An improved dynamic stall model and its effect on wind turbine fatigue load prediction. <i>Renewable Energy</i> , 2020 , 156, 117-130	8.1	9
104	Investigation of closure of internal cracks during rolling by FE model considering crack surface roughness. <i>International Journal of Advanced Manufacturing Technology</i> , 2014 , 75, 1633-1640	3.2	9
103	Abnormally high residual dislocation density in pure aluminum after Al/Ti/Al laminate annealing for seven days. <i>Philosophical Magazine Letters</i> , 2014 , 94, 732-740	1	9
102	Modeling and optimization of threading process for shape control in tandem cold rolling. <i>Journal of Materials Processing Technology</i> , 2003 , 140, 562-568	5.3	9
101	Superstrength of nanograined steel with nanoscale intermetallic precipitates transformed from shock-compressed martensitic steel. <i>Scientific Reports</i> , 2016 , 6, 36810	4.9	9
100	A dual deformation mechanism of grain boundary at different stress stages. <i>Materials Letters</i> , 2016 , 167, 278-283	3.3	8
99	Investigation of terrain effects on the consequence distance of CO ₂ released from high-pressure pipelines. <i>International Journal of Greenhouse Gas Control</i> , 2017 , 66, 264-275	4.2	8
98	Annealing Behavior of Accumulative Roll Bonding Processed Aluminum Composites. <i>Steel Research International</i> , 2013 , 84, 1241-1245	1.6	8
97	Simulation of polycrystalline aluminum tensile test with crystal plasticity finite element method. <i>Transactions of Nonferrous Metals Society of China</i> , 2007 , 17, 1412-1416	3.3	8
96	Coupled effects of initial orientation scatter and grain-interaction to texture evolution: a crystal plasticity FE study. <i>International Journal of Material Forming</i> , 2019 , 12, 161-171	2	8
95	Ab-initio study of phase stability, elastic and thermodynamic properties of AlY alloy under pressure. <i>Journal of Alloys and Compounds</i> , 2015 , 648, 67-74	5.7	7
94	Microstructure evolution, lattice rotation retardation and grain orientation fragmentation in commercial purity aluminium deformed by high pressure torsion. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 6642-6654	5.5	7
93	Influence of solute hydrogen on the interaction of screw dislocations with vicinal twin boundaries in nickel. <i>Scripta Materialia</i> , 2019 , 173, 115-119	5.6	7
92	Molecular dynamics simulation of the grain boundary sliding behaviour for Al B (210). <i>Computational Materials Science</i> , 2014 , 81, 52-57	3.2	7
91	Effects of H segregation on shear-coupled motion of <110> grain boundaries in Fe. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 18616-18627	6.7	6
90	A crystal plasticity FEM study of through-thickness deformation and texture in a {112} aluminium single crystal during accumulative roll-bonding. <i>Scientific Reports</i> , 2019 , 9, 3401	4.9	6
89	Ductile-to-brittle fracture transition in polycrystalline nickel under tensile hydrostatic stress. <i>Computational Materials Science</i> , 2015 , 109, 147-156	3.2	6
88	Influence of the Vibration of Large-scale Wind Turbine Blade on the Aerodynamic Load. <i>Energy Procedia</i> , 2015 , 75, 873-879	2.3	6

87	Roles of microstructure, inclusion, and surface roughness on rolling contact fatigue of a wind turbine gear. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2020 , 43, 1368-1383	3	6
86	Anisotropy and microstructural evolutions of X70 pipeline steel during tensile deformation. <i>Journal of Materials Research</i> , 2018 , 33, 3512-3520	2.5	6
85	Evaluation of Mechanical Properties of $\Sigma(210)/[001]$ Tilt Grain Boundary with Self-Interstitial Atoms by Molecular Dynamics Simulation. <i>Journal of Nanomaterials</i> , 2017 , 2017, 1-11	3.2	6
84	The Wave Motion of the Rolling Force during Variable Gauge Rolling. <i>Steel Research International</i> , 2013 , 84, 1203-1208	1.6	6
83	A micro deep drawing of ARB processed aluminium foil AA1235. <i>International Journal of Materials and Product Technology</i> , 2013 , 47, 175	1	6
82	Effect of Temperature and Strain Amplitude on Dislocation Structure of M963 Superalloy during High-Temperature Low Cycle Fatigue. <i>Materials Transactions</i> , 2006 , 47, 67-71	1.3	6
81	High shock resistance and self-healing ability of graphene/nanotwinned Cu nanolayered composites. <i>Journal of Alloys and Compounds</i> , 2021 , 860, 158435	5.7	6
80	Transverse and z-Direction CVN Impact Tests of X65 Line Pipe Steels of Two Centerline Segregation Ratings. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 3919-3932	2.3	6
79	Texture Modeling of Accumulative Roll-Bonding Processed Aluminum Single Crystal $\{1\ 2\ 3\}$ by Crystal Plasticity FE. <i>Advanced Engineering Materials</i> , 2019 , 21, 1800827	3.5	6
78	Atomistic simulations of hydrogen effects on tensile deformation behaviour of $[0\ 0\ 1]$ twist grain boundaries in nickel. <i>Computational Materials Science</i> , 2019 , 159, 12-23	3.2	6
77	Microstructure and mechanical properties of large-volume gradient-structure aluminium sheets fabricated by cyclic skin-pass rolling. <i>Philosophical Magazine</i> , 2019 , 99, 2265-2284	1.6	5
76	Microstructural Evolution and Mechanical Property of AA5050 Alloy Deformed by Accumulative Roll Bonding. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2014 , 45, 399-403	2.5	5
75	Mechanical modelling of friction variation in slab edging with a finite element method approach. <i>Tribology International</i> , 2004 , 37, 733-742	4.9	5
74	Atomistic investigation of hydrogen induced decohesion of Ni grain boundaries. <i>Mechanics of Materials</i> , 2020 , 150, 103586	3.3	5
73	Texture Stability and Transition in an Accumulative Roll-Bonding-Processed Aluminum Single Crystal. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019 , 50, 1611-1615	2.3	5
72	Multi-phase decompression modeling of CO2 pipelines 2017 , 7, 665-679		4
71	A Combined Experiment and Crystal Plasticity FEM Study of Microstructure and Texture in Aluminium Processed by Reverse and Unidirectional Accumulative Roll-Bonding. <i>Crystals</i> , 2019 , 9, 119	2.3	4
70	Physics-based Constitutive Model for the Hot Deformation of 2Cr11Mo1VNbN Martensitic Stainless Steel. <i>Journal of Materials Engineering and Performance</i> , 2018 , 27, 4932-4940	1.6	4

69	A crystal plasticity FEM investigation of a Cu single crystal processed by accumulative roll-bonding. <i>Journal of Materials Research and Technology</i> , 2019 , 8, 5057-5065	5.5	4
68	Microstructural changes on railway track surfaces caused by electrical leakage between wheel and rail. <i>Tribology International</i> , 2019 , 140, 105875	4.9	4
67	The evolution of microtexture of pipeline steel from strip to bare pipe to coated pipe. <i>Procedia Engineering</i> , 2017 , 207, 1844-1849		4
66	Modelling of Texture Evolution in High Pressure Torsion by Crystal Plasticity Finite Element Method. <i>Applied Mechanics and Materials</i> , 2015 , 764-765, 56-60	0.3	4
65	Influence of Loading Conditions during Tensile Testing on Acoustic Emission. <i>Key Engineering Materials</i> , 2014 , 626, 121-126	0.4	4
64	Simulation of defects in micro-deep drawing of an aluminium alloy foil 2013 ,		4
63	A Numerical Model for Simulation of Crack Initiation Around Inclusion Under Tensile Load. <i>Journal of Computational and Theoretical Nanoscience</i> , 2012 , 9, 1745-1749	0.3	4
62	System modelling of a lateral force microscope. <i>Nanotechnology</i> , 2008 , 19, 455707	3.4	4
61	Molecular dynamics simulation about porous thin-film growth in secondary deposition. <i>Applied Surface Science</i> , 2007 , 253, 7471-7477	6.7	4
60	A homogeneous relaxation model for multi-phase CO ₂ jets following the release of supercritical CO ₂ pipelines. <i>Journal of Natural Gas Science and Engineering</i> , 2020 , 84, 103609	4.6	4
59	The mechanical behaviour of TiN and multi-layered coating of TiN/Ti on Ti6Al4V substrate during nano-indentation. <i>International Journal of Surface Science and Engineering</i> , 2014 , 8, 95	1	3
58	Study of Anisotropic Plastic Behavior in High Pressure Torsion of Aluminum Single Crystal by Crystal Plasticity Finite Element Method. <i>Crystals</i> , 2017 , 7, 362	2.3	3
57	A Study of Crack Propagation in BCC Iron by Molecular Dynamics Method. <i>Key Engineering Materials</i> , 2008 , 385-387, 453-456	0.4	3
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