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List of Publications by Year
in descending order

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81 papers	2,112 citations	236833 25 h-index	243529 44 g-index
82 all docs	82 docs citations	82 times ranked	1425 citing authors

#	Article	IF	Citations
1	Strengthening mechanisms in solid solution aluminum alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 1999-2006.	1.1	370
2	Diffusion of a chemically reactive species from a stretching sheet. International Journal of Heat and Mass Transfer, 1994, 37, 659-664.	2.5	193
3	Multi-level modelling of mechanical anisotropy of commercial pure aluminium plate: Crystal plasticity models, advanced yield functions and parameter identification. International Journal of Plasticity, 2015, 66, 3-30.	4.1	127
4	Evaluation of identification methods for YLD2004-18p. International Journal of Plasticity, 2008, 24, 2248-2277.	4.1	68
5	Strain-path change induced transients in flow stress, work hardening and r-values in aluminum. International Journal of Plasticity, 2015, 69, 1-20.	4.1	68
6	Modeling over-ageing in Al-Mg-Si alloys by a multi-phase CALPHAD-coupled Kampmann-Wagner Numerical model. Acta Materialia, 2017, 122, 178-186.	3.8	65
7	A crystal plasticity model for strain-path changes in metals. International Journal of Plasticity, 2008, 24, 1360-1379.	4.1	61
8	A combined isotropic, kinematic and distortional hardening model for aluminum and steels under complex strain-path changes. International Journal of Plasticity, 2018, 101, 156-169.	4.1	48
9	Assessment of advanced Taylor models, the Taylor factor and yield-surface exponent for FCC metals. International Journal of Plasticity, 2019, 114, 144-160.	4.1	48
10	Modelling grain boundary strengthening in ultra-fine grained aluminum alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 178-182.	2.6	44
11	Warm forming simulation of Alâ€“Mg sheet. Journal of Materials Processing Technology, 2009, 209, 5636-5645.	3.1	44
12	Layer continuity in accumulative roll bonding of dissimilar material combinations. Materials & Design, 2013, 52, 905-915.	5.1	44
13	Through thickness variations of deformation texture in round profile extrusions of 6063-type aluminium alloy: Experiments, FEM and crystal plasticity modelling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 722, 20-29.	2.6	42
14	Precipitation of Non-spherical Particles in Aluminum Alloys Part II: Numerical Simulation and Experimental Characterization During Aging Treatment of an Al-Mg-Si Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 589-599.	1.1	40
15	Precipitation of Non-Spherical Particles in Aluminum Alloys Part I: Generalization of the Kampmannâ€“Wagner Numerical Model. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 581-588.	1.1	37
16	Review of the Taylor ambiguity and the relationship between rate-independent and rate-dependent full-constraints Taylor models. International Journal of Plasticity, 2014, 55, 152-181.	4.1	36
17	Influence of dispersoids on microstructure evolution and work hardening of aluminium alloys during tension and cold rolling. Philosophical Magazine, 2013, 93, 2995-3011.	0.7	35
18	Ageing and work-hardening behaviour of a commercial AA7108 aluminium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 524, 151-157.	2.6	32

#	Article	IF	Citations
19	A physically-based constitutive model applied to AA6082 aluminium alloy at large strains, high strain rates and elevated temperatures. Materials and Design, 2016, 103, 391-405.	3.3	31
20	Modeling strain-path changes in aluminum and steel. International Journal of Solids and Structures, 2017, 117, 123-136.	1.3	31
21	Sub-structure strengthening and work hardening of an ultra-fine grained aluminiumâ€“magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 483-484, 51-53.	2.6	30
22	The effect of silicon on the strengthening and work hardening of aluminum at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 563, 147-151.	2.6	30
23	Modelling the plastic anisotropy of aluminum alloy 3103 sheets by polycrystal plasticity. Modelling and Simulation in Materials Science and Engineering, 2014, 22, 075015.	0.8	30
24	Experimental characterization and modeling of aluminum alloy AA3103 for complex single and double strain-path changes. International Journal of Plasticity, 2019, 112, 158-171.	4.1	28
25	Three-Point Bending of Heat-Treatable Aluminum Alloys: Influence of Microstructure and Texture on Bendability and Fracture Behavior. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3386-3398.	1.1	26
26	Strength contributions from precipitates. Philosophical Magazine Letters, 2015, 95, 594-601.	0.5	26
27	Tensile bond strength of cold roll bonded aluminium sheets. Journal of Materials Processing Technology, 2013, 213, 955-960.	3.1	25
28	Modelling work hardening of aluminium alloys containing dispersoids. Philosophical Magazine, 2013, 93, 3142-3153.	0.7	25
29	Nano-scale characterisation of sheared Î²â€²precipitates in a deformed Al-Mg-Si alloy. Scientific Reports, 2019, 9, 17446.	1.6	25
30	Large strain work hardening of aluminum alloys and the effect of mg in solid solution. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 2007-2013.	1.1	24
31	A robust and efficient substepping scheme for the explicit numerical integration of a rateâ€dependent crystal plasticity model. International Journal for Numerical Methods in Engineering, 2014, 99, 239-262.	1.5	24
32	Additional relaxations in the Alamel texture model. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 580, 349-354.	2.6	22
33	The effect of boundary spacing on substructure strengthening. Materials Science and Technology, 2004, 20, 1377-1382.	0.8	21
34	Bauschinger effect modelled by yield surface distortions. International Journal of Plasticity, 2019, 123, 86-100.	4.1	21
35	Precipitation, strength and work hardening of age hardened aluminium alloys. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012013.	0.3	19
36	Multi-component solid solution and cluster hardening of Alâ€“Mnâ€“Si alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 625, 153-157.	2.6	19

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37	Precipitation and strengthening modeling for disk-shaped particles in aluminum alloys: Size distribution considered. Materialia, 2018, 4, 431-443.	1.3	18
38	Work Hardening Behaviour of Heat-Treatable Al-Mg-Si-Alloys. Materials Science Forum, 2006, 519-521, 1901-1906.	0.3	17
39	Comparison of the influence of Si and Fe in 99.999% purity aluminum and in commercial-purity aluminum. Scripta Materialia, 2012, 67, 217-220.	2.6	17
40	Modelling and experimental validation of microstructure evolution during the cooling stage of homogenization heat treatment of Alâ€“Mgâ€“Si alloys. Materialia, 2018, 4, 70-80.	1.3	16
41	A unified microstructural metal plasticity model applied in testing, processing, and forming of aluminium alloys. International Journal of Materials Research, 2005, 96, 532-545.	0.8	14
42	On the formulation of the mechanical threshold stress model. Acta Materialia, 2007, 55, 2739-2746.	3.8	14
43	MAGNETOHYDRODYNAMIC MELTING FLOW FROM A HORIZONTAL ROTATING DISK. Mathematical Models and Methods in Applied Sciences, 1993, 03, 373-393.	1.7	13
44	Characterizing Hardening on Annealing of Cold-Rolled Aluminum AA3103 Strips. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 1597-1608.	1.1	10
45	Influence of dispersoids on grain subdivision and texture evolution in aluminium alloys during cold rolling. Transactions of Nonferrous Metals Society of China, 2014, 24, 2072-2078.	1.7	9
46	Planform selection in Rayleighâ€“BÃ©nard convection between finite slabs. Journal of Fluid Mechanics, 2005, 537, 255.	1.4	8
47	Work-hardening behaviour of a heat-treatable AA7108 aluminium alloy deformed to intermediate strains by compression. Journal of Materials Science, 2010, 45, 5323-5331.	1.7	8
48	Anisotropy of Bending Properties in Industrial Heat-Treatable Extruded Aluminium Alloys. Materials Science Forum, 2010, 638-642, 487-492.	0.3	7
49	Coupled FEM and Microstructure Modeling Applied to Rolling and Extrusion of Aluminium Alloys. Materials Science Forum, 2003, 426-432, 3777-3782.	0.3	6
50	Stability of squares and rolls in Rayleighâ€“BÃ©nard convection in an infinite-Prandtl-number fluid between slabs. Journal of Fluid Mechanics, 2005, 537, 271.	1.4	6
51	Influence of thermomechanical processing sequence on properties of AA6082-IF steel cold roll bonded composite sheet. Procedia Manufacturing, 2018, 15, 152-160.	1.9	6
52	Relationship between Al-Ni intermetallic Phases and Bond Strength in Roll Bonded Steel-Aluminum Composites with Nickel Interlayers. Metals, 2019, 9, 827.	1.0	6
53	Spin and vorticity with vanishing rigid-body rotation during shear in continuum mechanics. Journal of the Mechanics and Physics of Solids, 2020, 137, 103835.	2.3	6
54	Regularized Yield Surfaces for Crystal Plasticity of Metals. Crystals, 2020, 10, 1076.	1.0	6

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55	A robust algorithm for rate-independent crystal plasticity. Computer Methods in Applied Mechanics and Engineering, 2022, 393, 114831.	3.4	6
56	An explicit integration scheme for hypo-elastic viscoplastic crystal plasticity. Transactions of Nonferrous Metals Society of China, 2014, 24, 2401-2407.	1.7	5
57	On the basic relation between mean free slip length and work hardening of metals. Philosophical Magazine, 2015, 95, 2817-2830.	0.7	5
58	Characterisation and Modelling of Work Hardening in Al-Mg and Al-Mn Alloys. Materials Science Forum, 2002, 396-402, 1145-1150.	0.3	4
59	Effect of alloying elements on stage-III work-hardening behaviour of Alâ€“Znâ€“Mg(â€“Cu) alloys. International Journal of Materials Research, 2012, 103, 603-608.	0.1	4
60	On the criterion for compensation to avoid elasticâ€“plastic transients during strain rate change tests. Acta Materialia, 2013, 61, 653-659.	3.8	4
61	Coupled FEM and Alamel-type Polycrystal Plasticity Modelling Applied to Extrusion of Aluminium Alloys. Materials Today: Proceedings, 2015, 2, 4898-4903.	0.9	4
62	Influence of Stacking Sequence and Intermediate Layer Thickness in AA6082-IF Steel Tri-Layered Cold Roll Bonded Composite Sheets. Key Engineering Materials, 0, 767, 316-322.	0.4	4
63	COMPUTATION OF THE INLET WALL JET IN A RECTANGULAR ENCLOSURE. International Journal of Computational Fluid Dynamics, 1993, 1, 217-232.	0.5	3
64	Work- and Age-Hardening Behaviour of a Commercial AA7108 Aluminium Alloy. Materials Science Forum, 0, 618-619, 555-558.	0.3	3
65	Modelling the Recrystallization Behaviour during Industrial Processing of Aluminium Alloys. Materials Science Forum, 2012, 715-716, 543-548.	0.3	3
66	Permanent effect of a cryogenic spill on fracture properties of structural steels. IOP Conference Series: Materials Science and Engineering, 2015, 102, 012004.	0.3	3
67	A new tribological system test for integrated hot forming and die quenching of aluminium alloy sheets. AIP Conference Proceedings, 2017, , .	0.3	3
68	Modelling the Evolution of Microstructure and Properties during Deformation of Aluminium. Materials Science Forum, 2002, 396-402, 315-326.	0.3	2
69	Modelling the Work Hardening Behaviour of AlMgMn Alloys. Materials Science Forum, 0, 638-642, 285-290.	0.3	2
70	Use of Plane-Strain Tension and Shear Tests to Evaluate Yield Surfaces for AA1050 Aluminium Sheet. Materials Science Forum, 0, 794-796, 596-601.	0.3	2
71	Characterization and Modelling of the Microstructure and Texture Evolution in AlMgSi-Extrusions. Materials Science Forum, 0, 879, 1239-1244.	0.3	2
72	The Effect of Elastic Strain and Small Plastic Deformation on Tensile Strength of a Lean Alâ€“Mgâ€“Si Alloy. Metals, 2019, 9, 1276.	1.0	2

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73	The Effect of Boundary Structure on the Mechanical Properties of Aluminium Alloys. Materials Science Forum, 2006, 519-521, 63-70.	0.3	1
74	3D Crystal Plasticity Modelling of Complex Microstructures in Extruded Products. , 2011, , .		1
75	Stability of rolls in finite-amplitude Rayleighâ€“BÃ©nard convection in a high-Prandtl-number fluid between a perfectly conducting boundary and a slab of finite thickness and finite conductivity. European Journal of Mechanics, B/Fluids, 2012, 34, 115-120.	1.2	1
76	Recrystallization behaviour of AA6063 extrusions. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012057.	0.3	1
77	Modelling of Strain-Path Transients in Commercially Pure Aluminium. Materials Science Forum, 2016, 877, 662-667.	0.3	1
78	Crystal Plasticity Calculations of Mechanical Anisotropy of Aluminium Compared to Experiments and to Yield Criterion Fittings. , 2012, , 915-920.		0
79	Modeling of Work-Hardening in an Age-Hardenable AA7108 Aluminum Alloy. , 2012, , 1785-1790.		0
80	Effect of Si Addition on Solid Solution Hardening of Al-Mn Alloys. , 2012, , 1825-1829.		0
81	Modeling of Transients as a Response to Changes in Strain path of Commercially Pure Aluminium. , 2012, , 849-854.		0