B Holmedal

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6517457/publications.pdf

Version: 2024-02-01

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	A robust algorithm for rate-independent crystal plasticity. Computer Methods in Applied Mechanics and Engineering, 2022, 393, 114831.	3.4	6
2	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
3	Regularized Yield Surfaces for Crystal Plasticity of Metals. Crystals, 2020, 10, 1076.	1.0	6
4	Bauschinger effect modelled by yield surface distortions. International Journal of Plasticity, 2019, 123, 86-100.	4.1	21
5	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
6	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
7	Nano-scale characterisation of sheared Î²â€•precipitates in a deformed Al-Mg-Si alloy. Scientific Reports, 2019, 9, 17446.	1.6	25
8	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
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	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
11	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
12	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
13	Precipitation and strengthening modeling for disk-shaped particles in aluminum alloys: Size distribution considered. Materialia, 2018, 4, 431-443.	1.3	18
14	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
15	Modeling strain-path changes in aluminum and steel. International Journal of Solids and Structures, 2017, 117, 123-136.	1.3	31
16	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
17	A new tribological system test for integrated hot forming and die quenching of aluminium alloy sheets. AIP Conference Proceedings, 2017, , .	0.3	3
18	Modelling of Strain-Path Transients in Commercially Pure Aluminium. Materials Science Forum, 2016, 877, 662-667.	0.3	1

#	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	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
21	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
22	Recrystallization behaviour of AA6063 extrusions. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012057.	0.3	1
23	Precipitation, strength and work hardening of age hardened aluminium alloys. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012013.	0.3	19
24	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
25	Coupled FEM and Alamel-type Polycrystal Plasticity Modelling Applied to Extrusion of Aluminium Alloys. Materials Today: Proceedings, 2015, 2, 4898-4903.	0.9	4
26	Strength contributions from precipitates. Philosophical Magazine Letters, 2015, 95, 594-601.	0.5	26
27	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
28	On the basic relation between mean free slip length and work hardening of metals. Philosophical Magazine, 2015, 95, 2817-2830.	0.7	5
29	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
30	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
31	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
32	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
33	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
34	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
35	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
36	An explicit integration scheme for hypo-elastic viscoplastic crystal plasticity. Transactions of Nonferrous Metals Society of China, 2014, 24, 2401-2407.	1.7	5

#	Article	IF	Citations
37	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
38	Tensile bond strength of cold roll bonded aluminium sheets. Journal of Materials Processing Technology, 2013, 213, 955-960.	3.1	25
39	Layer continuity in accumulative roll bonding of dissimilar material combinations. Materials & Design, 2013, 52, 905-915.	5.1	44
40	On the criterion for compensation to avoid elasticâ€"plastic transients during strain rate change tests. Acta Materialia, 2013, 61, 653-659.	3.8	4
41	Additional relaxations in the Alamel texture model. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 580, 349-354.	2.6	22
42	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
43	Modelling work hardening of aluminium alloys containing dispersoids. Philosophical Magazine, 2013, 93, 3142-3153.	0.7	25
44	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
45	Modelling the Recrystallization Behaviour during Industrial Processing of Aluminium Alloys. Materials Science Forum, 2012, 715-716, 543-548.	0.3	3
46	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
47	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
48	Crystal Plasticity Calculations of Mechanical Anisotropy of Aluminium Compared to Experiments and to Yield Criterion Fittings. , 2012, , 915-920.		0
49	Modeling of Work-Hardening in an Age-Hardenable AA7108 Aluminum Alloy. , 2012, , 1785-1790.		0
50	Effect of Si Addition on Solid Solution Hardening of Al-Mn Alloys. , 2012, , 1825-1829.		0
51	Modeling of Transients as a Response to Changes in Strain path of Commercially Pure Aluminium. , 2012, , 849-854.		0
52	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
53	3D Crystal Plasticity Modelling of Complex Microstructures in Extruded Products. , 2011, , .		1
54	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

#	Article	IF	Citations
55	Anisotropy of Bending Properties in Industrial Heat-Treatable Extruded Aluminium Alloys. Materials Science Forum, 2010, 638-642, 487-492.	0.3	7
56	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
57	Warm forming simulation of Alâ€"Mg sheet. Journal of Materials Processing Technology, 2009, 209, 5636-5645.	3.1	44
58	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
59	A crystal plasticity model for strain-path changes in metals. International Journal of Plasticity, 2008, 24, 1360-1379.	4.1	61
60	Evaluation of identification methods for YLD2004-18p. International Journal of Plasticity, 2008, 24, 2248-2277.	4.1	68
61	On the formulation of the mechanical threshold stress model. Acta Materialia, 2007, 55, 2739-2746.	3.8	14
62	Strengthening mechanisms in solid solution aluminum alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 1999-2006.	1.1	370
63	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
64	Work Hardening Behaviour of Heat-Treatable Al-Mg-Si-Alloys. Materials Science Forum, 2006, 519-521, 1901-1906.	0.3	17
65	The Effect of Boundary Structure on the Mechanical Properties of Aluminium Alloys. Materials Science Forum, 2006, 519-521, 63-70.	0.3	1
66	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
67	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
68	Planform selection in Rayleighâ€"BÃ©nard convection between finite slabs. Journal of Fluid Mechanics, 2005, 537, 255.	1.4	8
69	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
70	The effect of boundary spacing on substructure strengthening. Materials Science and Technology, 2004, 20, 1377-1382.	0.8	21
71	Coupled FEM and Microstructure Modeling Applied to Rolling and Extrusion of Aluminium Alloys. Materials Science Forum, 2003, 426-432, 3777-3782.	0.3	6
72	Characterisation and Modelling of Work Hardening in Al-Mg and Al-Mn Alloys. Materials Science Forum, 2002, 396-402, 1145-1150.	0.3	4

#	Article	IF	Citations
73	Modelling the Evolution of Microstructure and Properties during Deformation of Aluminium. Materials Science Forum, 2002, 396-402, 315-326.	0.3	2
74	Diffusion of a chemically reactive species from a stretching sheet. International Journal of Heat and Mass Transfer, 1994, 37, 659-664.	2.5	193
75	MAGNETOHYDRODYNAMIC MELTING FLOW FROM A HORIZONTAL ROTATING DISK. Mathematical Models and Methods in Applied Sciences, 1993, 03, 373-393.	1.7	13
76	COMPUTATION OF THE INLET WALL JET IN A RECTANGULAR ENCLOSURE. International Journal of Computational Fluid Dynamics, 1993, 1, 217-232.	0.5	3
77	Work- and Age-Hardening Behaviour of a Commercial AA7108 Aluminium Alloy. Materials Science Forum, 0, 618-619, 555-558.	0.3	3
78	Modelling the Work Hardening Behaviour of AlMgMn Alloys. Materials Science Forum, 0, 638-642, 285-290.	0.3	2
79	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
80	Characterization and Modelling of the Microstructure and Texture Evolution in AlMgSi-Extrusions. Materials Science Forum, 0, 879, 1239-1244.	0.3	2
81	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