László Toth

List of Publications by Year in descending order

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Version: 2024-02-01

187	7,697	44	80
papers	citations	h-index	g-index
189	189	189	3312
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	A dislocation-based model for all hardening stages in large strain deformation. Acta Materialia, 1998, 46, 5509-5522.	7.9	573
2	Texture evolution in equal-channel angular extrusion. Progress in Materials Science, 2009, 54, 427-510.	32.8	433
3	Effect of rate sensitivity on the stability of torsion textures. Acta Metallurgica, 1988, 36, 3077-3091.	2.1	234
4	Nanomaterials by severe plastic deformation: review of historical developments and recent advances. Materials Research Letters, 2022, 10, 163-256.	8.7	215
5	Ultrafine-grain metals by severe plastic deformation. Materials Characterization, 2014, 92, 1-14.	4.4	206
6	A model of grain fragmentation based on lattice curvature. Acta Materialia, 2010, 58, 1782-1794.	7.9	201
7	Strain Hardening at Large Strains as Predicted by Dislocation Based Polycrystal Plasticity Model. Journal of Engineering Materials and Technology, Transactions of the ASME, 2002, 124, 71-77.	1.4	186
8	Analysis of texture evolution in equal channel angular extrusion of copper using a new flow field. Acta Materialia, 2004, 52, 1885-1898.	7.9	179
9	Severe plastic deformation of metals by high-pressure tube twisting. Scripta Materialia, 2009, 60, 175-177.	5.2	159
10	Analysis of texture evolution in magnesium during equal channel angular extrusion. Acta Materialia, 2008, 56, 200-214.	7.9	157
11	Ideal orientations and persistence characteristics of hexagonal close packed crystals in simple shear. Acta Materialia, 2007, 55, 2695-2705.	7.9	156
12	Stress response and persistence characteristics of the ideal orientations of shear textures. Acta Metallurgica, 1989, 37, 2197-2210.	2.1	146
13	Discretization Techniques for Orientation Distribution Functions. Textures and Microstructures, 1992, 19, 229-244.	0.2	136
14	Tuning a self consistent viscoplastic model by finite element results—I. Modeling. Acta Metallurgica Et Materialia, 1994, 42, 2453-2458.	1.8	125
15	Analysis of microstructure and texture evolution in pure magnesium during symmetric and asymmetric rolling. Acta Materialia, 2009, 57, 5061-5077.	7.9	123
16	Development of ferrite rolling textures in low- and extra low-carbon steels. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1990, 21, 2985-3000.	1.4	109
17	Evolution of texture and microstructure during hot torsion of a magnesium alloy. Acta Materialia, 2013, 61, 5263-5277.	7.9	107
18	Texture evolution in commercially pure titanium after warm equal channel angular extrusion. Acta Materialia, 2011, 59, 1121-1133.	7.9	104

#	Article	IF	CITATIONS
19	Microstructure and texture gradient in copper deformed by equal channel angular pressing. Acta Materialia, 2007, 55, 2013-2024.	7.9	100
20	Dislocation structure and work hardening in polycrystalline ofhc copper rods deformed by torsion and tension. Acta Metallurgica, 1986, 34, 1257-1267.	2.1	96
21	Recrystallization of high-purity aluminium during equal channel angular pressing. Acta Materialia, 2007, 55, 2211-2218.	7.9	90
22	Microstructure, texture and mechanical properties of aluminum processed by high-pressure tube twisting. Acta Materialia, 2012, 60, 4393-4408.	7.9	89
23	On the stability of the ideal orientations of rolling textures for F.C.C. polycrystals. Acta Metallurgica Et Materialia, 1992, 40, 3179-3193.	1.8	80
24	Texture Development and Length Changes in Copper Bars Subjected to Free End Torsion. Textures and Microstructures, 1992, 19, 245-262.	0.2	76
25	Dislocation mediated variant selection for secondary twinning in compression of pure titanium. Acta Materialia, 2017, 124, 59-70.	7.9	75
26	Geometrically necessary dislocations favor the Taylor uniform deformation mode in ultra-fine-grained polycrystals. Acta Materialia, 2016, 117, 35-42.	7.9	74
27	Role of twinning on texture evolution of silver during equal channel angular extrusion. Philosophical Magazine, 2007, 87, 885-906.	1.6	73
28	New experimental insight into the mechanisms of nanoplasticity. Acta Materialia, 2013, 61, 7271-7284.	7.9	72
29	Evolution of crystallographic texture during equal channel angular extrusion of silver. Scripta Materialia, 2003, 49, 1203-1208.	5.2	69
30	A modified model for simulating latent hardening during the plastic deformation of rate-dependent FCC polycrystals. International Journal of Plasticity, 1993, 9, 961-978.	8.8	67
31	Texture Evolution in Severe Plastic Deformation by Equal Channel Angular Extrusion. Advanced Engineering Materials, 2003, 5, 308-316.	3.5	67
32	Effect of grain refinement by severe plastic deformation on the next-neighbor misorientation distribution. Acta Materialia, 2010, 58, 6706-6716.	7.9	66
33	A new design for equal channel angular extrusion. Journal of Materials Processing Technology, 2006, 173, 29-33.	6.3	65
34	Twist Extrusion as a Potent Tool for Obtaining Advanced Engineering Materials: A Review. Advanced Engineering Materials, 2017, 19, 1600873.	3.5	64
35	Modelling oriented nucleation and selective growth during dynamic recrystallization. Scripta Metallurgica Et Materialia, 1992, 27, 1575-1580.	1.0	62
36	Large strain shear and torsion of rate-sensitive FCC polycrystals. International Journal of Plasticity, 1990, 6, 45-61.	8.8	61

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37	On the role of texture development in the forming limits of sheet metals. International Journal of Mechanical Sciences, 1996, 38, 1117-1126.	6.7	55
38	Evolution of crystallographic texture during equal channel angular extrusion of copper: The role of material variables. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 739-753.	2.2	55
39	Strain localisation patterns under equal-channel angular pressing. Journal of the Mechanics and Physics of Solids, 2009, 57, 122-136.	4.8	55
40	Microstructure, texture and mechanical properties of cyclic expansion–extrusion deformed pure copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 628, 423-432.	5.6	54
41	Room temperature equal-channel angular pressing of a magnesium alloy. Acta Materialia, 2013, 61, 3027-3036.	7.9	52
42	Tuning a self consistent viscoplastic model by finite element results—II. Application to torsion textures. Acta Metallurgica Et Materialia, 1994, 42, 2459-2466.	1.8	51
43	Contribution of non-octahedral slip to texture evolution of fcc polycrystals in simple shear. Acta Materialia, 2009, 57, 2440-2453.	7.9	50
44	Analysis of texture and R value variations in asymmetric rolling of IF steel. Journal of Materials Processing Technology, 2012, 212, 509-515.	6.3	46
45	Twinning effects in a polycrystalline magnesium alloy under cyclic deformation. Acta Materialia, 2014, 62, 212-224.	7.9	46
46	Length changes during free end torsion: A rate sensitive analysis. International Journal of Plasticity, 1990, 6, 83-108.	8.8	44
47	Evolution of texture during equal channel angular extrusion of commercially pure aluminum: Experiments and simulations. Materials Science & Experiments and Structural Materials: Properties, Microstructure and Processing, 2009, 520, 134-146.	5.6	44
48	Deformation field variations in equal channel angular extrusion due to back pressure. Scripta Materialia, 2008, 58, 771-774.	5.2	43
49	Unexpected brass-type texture in rolling of ultrafine-grained copper. Scripta Materialia, 2014, 92, 51-54.	5.2	43
50	Modelling the texture changes produced by dynamic recrystallization. Scripta Metallurgica Et Materialia, 1992, 27, 359-363.	1.0	42
51	Modelling of strain hardening and microstructural evolution in equal channel angular extrusion. Computational Materials Science, 2005, 32, 568-576.	3.0	42
52	Texture after ECAP of a cube-oriented Ni single crystal. Acta Materialia, 2008, 56, 3439-3449.	7.9	42
53	Strain hardening, twinning and texture evolution in magnesium alloy using the all twin variant polycrystal modelling approach. International Journal of Plasticity, 2020, 128, 102660.	8.8	42
54	Texture and Mechanical Behavior of Magnesium During Free-End Torsion. Journal of Engineering Materials and Technology, Transactions of the ASME, 2009, 131, .	1.4	41

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55	Application of chord length distributions and principal component analysis for quantification and representation of diverse polycrystalline microstructures. Materials Characterization, 2018, 145, 671-685.	4.4	40
56	Forming limit predictions with the perturbation method using stress potential functions of polycrystal viscoplasticity. International Journal of Mechanical Sciences, 1996, 38, 805-824.	6.7	39
57	Non-equal channel angular pressing of aluminum alloy. Scripta Materialia, 2009, 61, 1121-1124.	5 . 2	39
58	Spatial correlation in grain misorientation distribution. Acta Materialia, 2009, 57, 5382-5395.	7.9	37
59	Cyclic plasticity phenomena as predicted by polycrystal plasticity. Mechanics of Materials, 2000, 32, 99-113.	3.2	36
60	Validation of the tangent formulation for the solution of the non-linear Eshelby inclusion problem. International Journal of Plasticity, 2004, 20, 291-307.	8.8	36
61	Extension of the Derby relation to metals severely deformed to their steady-state ultrafine-grain size. Scripta Materialia, 2014, 72-73, 59-62.	5.2	36
62	Grain size dependent texture evolution in severely rolled pure copper. Materials Characterization, 2015, 101, 180-188.	4.4	36
63	Notes on representing grain size distributions obtained by electron backscatter diffraction. Materials Characterization, 2013, 84, 67-71.	4.4	35
64	Modelling of the Evolution of Dislocation Cell Misorientation under Severe Plastic Deformation. Materials Science Forum, 2006, 503-504, 675-680.	0.3	34
65	Severe plastic deformation processes for thin samples. Journal of Materials Science, 2010, 45, 4554-4560.	3.7	34
66	Development of new routes of severe plastic deformation through cyclic expansion–extrusion process. Materials Science & Description A: Structural Materials: Properties, Microstructure and Processing, 2014, 613, 357-364.	5.6	34
67	Materials knowledge system for nonlinear composites. Computer Methods in Applied Mechanics and Engineering, 2019, 346, 180-196.	6.6	34
68	Effect of initial powder type on the hydrogen storage properties of high-pressure torsion consolidated Mg. International Journal of Hydrogen Energy, 2017, 42, 22438-22448.	7.1	33
69	An analytical model to predict strain-hardening behaviour and twin volume fraction in a profoundly twinning magnesium alloy. International Journal of Plasticity, 2019, 119, 273-290.	8.8	33
70	Asymmetric Rolling of Interstitial-Free Steel Using One Idle Roll. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1328-1340.	2.2	32
71	The equivalent strain in high pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 607, 530-535.	5.6	31
72	Asymmetric Rolling of Interstitial-Free Steel Using Differential Roll Diameters. Part I: Mechanical Properties and Deformation Textures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 4346-4359.	2.2	30

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73	The self-similarity theory of high pressure torsion. Beilstein Journal of Nanotechnology, 2016, 7, 1267-1277.	2.8	30
74	Analytical solutions for the ideal orientations of f.c.c. rolling textures. Acta Metallurgica Et Materialia, 1991, 39, 2921-2930.	1.8	29
75	Thermal Response on the Microstructure and Texture of ECAP and Cold-Rolled Pure Magnesium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2598-2613.	2.2	29
76	Elastic-plastic effects during cyclic loading as predicted by the Taylor-Lin model of polycrystal elasto-viscoplasticity. International Journal of Plasticity, 1996, 12, 343-360.	8.8	26
77	Effect of strain path on grain refinement in severely plastically deformed copper. Scripta Materialia, 2011, 64, 284-287.	5.2	26
78	Modeling of deformation and texture development of copper in a 120° ECAE die. Scripta Materialia, 2006, 54, 1667-1672.	5.2	24
79	Role of strain-rate sensitivity in the crystal plasticity of hexagonal structures. International Journal of Plasticity, 2007, 23, 227-243.	8.8	24
80	A comparison of continuous SPD processes for improving the mechanical properties of aluminum alloy 6111. Journal of Materials Research, 2009, 24, 459-469.	2.6	24
81	Principles of Nonequal Channel Angular Pressing. Journal of Engineering Materials and Technology, Transactions of the ASME, 2010, 132, .	1.4	24
82	Stress and strain gradients in high-pressure tube twisting. Scripta Materialia, 2012, 66, 773-776.	5.2	24
83	The plastic flow machining: A new SPD process for producing metal sheets with gradient structures. Materials Characterization, 2018, 138, 208-214.	4.4	24
84	Analytic Prediction of Texture and Length Changes During Free-End Torsion. Textures and Microstructures, 1989, 10, 195-209.	0.2	24
85	Texture Formation during ECAP of Aluminum Alloy AA 5109. Materials Science Forum, 2006, 503-504, 99-106.	0.3	23
86	Modeling of large strain hardening during grain refinement. Scripta Materialia, 2012, 66, 250-253.	5.2	23
87	Onâ€axis versus offâ€axis Transmission Kikuchi Diffraction technique: application to the characterisation of severe plastic deformationâ€induced ultrafineâ€grained microstructures. Journal of Microscopy, 2017, 267, 70-80.	1.8	23
88	High Pressure Tube Twisting for Producing Ultra Fine Grained Materials: A Review. Materials Transactions, 2019, 60, 1177-1191.	1.2	23
89	Self-consistent polycrystal modelling of dynamic recrystallization during the shear deformation of a Ti IF steel. Acta Materialia, 1999, 47, 447-460.	7.9	22
90	On microstructure and texture heterogeneities in single crystals deformed by equal channel angular extrusion. Scripta Materialia, 2008, 59, 1087-1090.	5.2	22

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91	Analysis of heterogeneities in strain and microstructure in aluminum alloy and magnesium processed by high-pressure torsion. Materials Characterization, 2017, 123, 159-165.	4.4	22
92	Experiments and Modelling of ECAE Textures of f.c.c. Polycrystals. Materials Science Forum, 2005, 495-497, 839-844.	0.3	19
93	Effect of strain reversal on texture and grain refinement in route C equal channel angular pressed copper. Scripta Materialia, 2011, 65, 167-170.	5.2	19
94	A microstructure based analytical model for tensile twinning in a rod textured Mg alloy. International Journal of Plasticity, 2015, 72, 151-167.	8.8	19
95	Biaxial low cycle fatigue under non-proportional loading of a magnesium-lithium alloy. Engineering Fracture Mechanics, 1996, 54, 513-522.	4.3	18
96	Texture Evolution in Commercially Pure Al during Equal Channel Angular Extrusion (ECAE) as a Function of Processing Routes. Solid State Phenomena, 2005, 105, 357-362.	0.3	18
97	The origin of strain reversal texture in equal channel angular pressing. Acta Materialia, 2011, 59, 5749-5757.	7.9	18
98	Modeling strain and density distributions during high-pressure torsion of pre-compacted powder materials. Materials Research Letters, 2017, 5, 179-186.	8.7	18
99	Texture development and grain refinement in non-equal-channel angular-pressed Al. Scripta Materialia, 2012, 67, 33-36.	5.2	17
100	Effect of Strain Heterogeneities on Microstructure, Texture, Hardness, and H-Activation of High-Pressure Torsion Mg Consolidated from Different Powders. Materials, 2018, 11, 1335.	2.9	17
101	Influence of severe plastic deformation on the precipitation hardening of a FeSiTi steel. Journal of Materials Science, 2012, 47, 7939-7945.	3.7	16
102	Effects of varying twist and twist rate sensitivities on the interpretation of torsion testing data. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 591, 9-17.	5.6	16
103	Gradient Structure in High Pressure Torsion Compacted Iron Powder. Advanced Engineering Materials, 2015, 17, 1748-1753.	3.5	16
104	Shear-Coupled Grain Growth and Texture Development in a Nanocrystalline Ni-Fe Alloy during Cold Rolling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 6632-6644.	2.2	16
105	Modelling of Texture Development and Deformation Mechanisms in a Ti20V Alloy Using a Self Consistent Polycrystal Approach. Textures and Microstructures, 1995, 25, 45-61.	0.2	15
106	Texture Gradient in ECAP Silver Measured by Synchrotron Radiation. Materials Science Forum, 2005, 495-497, 821-826.	0.3	15
107	Texture Gradient in ECAP Copper Measured by Synchrotron Radiation. Solid State Phenomena, 2005, 105, 327-332.	0.3	15
108	A fan-type flow-line model in equal channel angular extrusion. Scripta Materialia, 2009, 61, 24-27.	5.2	15

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109	Asymmetric Rolling of Interstitial-Free Steel Using Differential Roll Diameters. Part II: Microstructure and Annealing Effects. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 447-454.	2.2	15
110	Large-strain hardening curves corrected for texture development. Modelling and Simulation in Materials Science and Engineering, 1999, 7, 875-891.	2.0	14
111	Texture Evolution in FCC Metals during Equal Channel Angular Extrusion (ECAE) as a Function of Stacking Fault Energy. Solid State Phenomena, 2005, 105, 345-350.	0.3	14
112	Polycrystal modeling of tensile twinning in a Mg alloy during cyclic loading. Scripta Materialia, 2012, 67, 673-676.	5.2	14
113	Role of Grain Boundary Sliding in Texture Evolution for Nanoplasticity. Advanced Engineering Materials, 2018, 20, 1700212.	3.5	14
114	Mechanical Modelling of the Plastic Flow Machining Process. Materials, 2018, 11, 1218.	2.9	14
115	Effect of strain path change on texture and microstructure evolution in asymmetric rolled extra-low carbon steel. Materials Characterization, 2020, 169, 110578.	4.4	14
116	A Recrystallisation Based Investigation for Efficiency of Processing Routes during Equal Channel Angular Extrusion. Materials Science Forum, 2004, 467-470, 1325-1332.	0.3	13
117	Effective strain rate sensitivity of two phase materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 524, 186-192.	5.6	13
118	Local texture and microstructure in cube-oriented nickel single crystal deformed by equal channel angular extrusion. Philosophical Magazine, 2011, 91, 281-299.	1.6	13
119	Ideal elasto-plastic behavior in torsional deformation of Zr44Ti11Cu10Ni10Be25 bulk metallic glass. Journal of Alloys and Compounds, 2012, 542, 85-89.	5.5	13
120	Dry friction of steel under high pressure in quasi-static conditions. Tribology International, 2013, 67, 27-35.	5.9	13
121	Combined Effects of Texture and Grain Size Distribution on the Tensile Behavior of \hat{l}_{\pm} -Titanium. Materials, 2018, 11, 1088.	2.9	13
122	Influence of Dynamic Recrystallisation on Texture Formation in ECAP deformed Nickel. Materials Science Forum, 2007, 558-559, 575-580.	0.3	12
123	Modeling of disorientation axis distribution in severely deformed copper. Scripta Materialia, 2013, 69, 183-186.	5.2	12
124	Some Physical Characteristics of Strain Hardening in Severe Plastic Deformation. Advanced Engineering Materials, 2015, 17, 1783-1791.	3.5	12
125	Microstructure and strain in protrusions formed during severe plastic deformation of aluminum. Materials Letters, 2015, 159, 253-256.	2.6	12
126	Gradient Structures in Thinâ€Walled Metallic Tubes Produced by Continuous High Pressure Tube Shearing Process. Advanced Engineering Materials, 2017, 19, 1700345.	3.5	12

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127	The plastic behaviour of polycrystalline Cu-1 at% Co alloy deformed by simultaneous torsion and extension at 78 K. Journal of Materials Science, 1982, 17, 43-53.	3.7	11
128	Modelling High Temperature Rolling Textures of FCC Metals. Textures and Microstructures, 1992, 19, 211-227.	0.2	11
129	Self consistent modelling of the creep behavior of mixtures of camphor and octachloropropane. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 175, 231-236.	5.6	11
130	Oblique Cube Texture Formation in High Purity Aluminum during Equal Channel Angular Pressing. Solid State Phenomena, 2005, 105, 351-356.	0.3	11
131	Texture Heterogeneity in ECAP Deformed Copper. Solid State Phenomena, 0, 160, 47-54.	0.3	11
132	The mechanics of High Pressure Compressive Shearing with application to ARMCO® steel. Materials Characterization, 2019, 154, 127-137.	4.4	11
133	Texture evolution and grain refinement of ultrafine-grained copper during micro-extrusion. Philosophical Magazine, 2011, 91, 263-280.	1.6	10
134	Texture induced grain coarsening in severe plastic deformed low carbon steel. Scripta Materialia, 2014, 86, 36-39.	5.2	10
135	The New Plastic Flow Machining Process for Producing Thin Sheets. Advances in Materials Science and Engineering, 2018, 2018, 1-8.	1.8	10
136	Effects of Processing Conditions on Texture and Microstructure Evolution in Extra-Low Carbon Steel during Multi-Pass Asymmetric Rolling. Materials, 2018, 11, 1327.	2.9	10
137	Tailoring One-Pass Asymmetric Rolling of Extra Low Carbon Steel for Shear Texture and Recrystallization. Materials, 2019, 12, 1935.	2.9	10
138	Structure and Mechanical Properties of Asymmetrically Rolled IF Steel Sheet. Materials Science Forum, 2010, 654-656, 1255-1258.	0.3	9
139	Tensile Yield Strength of a Material Preprocessed by Simple Shear. Journal of Engineering Materials and Technology, Transactions of the ASME, 2016, 138, .	1.4	9
140	Revealing Grain Boundary Sliding from Textures of a Deformed Nanocrystalline Pd–Au Alloy. Materials, 2018, 11, 190.	2.9	9
141	Modeling the Effect of Primary and Secondary Twinning on Texture Evolution during Severe Plastic Deformation of a Twinning-Induced Plasticity Steel. Materials, 2018, 11, 863.	2.9	9
142	Modeling of Crystallographic Texture in Plastic Flow Machining. Advanced Engineering Materials, 2020, 22, 1900661.	3.5	9
143	Unlocking Deformation Path in Asymmetric Rolling by Texture Simulation. Materials, 2020, 13, 101.	2.9	9
144	Microstructure, Texture and Mechanical Properties in Aluminum Produced by Friction-Assisted Lateral Extrusion. Materials, 2021, 14, 2465.	2.9	9

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145	Heterogeneity of Deformation in Pure Ni Single Crystal of Cube Orientation Deformed by Equal Channel Angular Extrusion. Materials Science Forum, 2005, 495-497, 833-838.	0.3	8
146	Texture evolution during micro-drawing of ultrafine grained copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 4633-4640.	5.6	8
147	A new method to determine plastic deformation at the grain scale. Materials Characterization, 2014, 92, 106-117.	4.4	8
148	Contribution of shear deformation to grain refinement and densification of iron powder consolidated by high pressure torsion. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012032.	0.6	8
149	Improving Mechanical Properties of cp Titanium by Heat Treatment Optimization. Advanced Engineering Materials, 2018, 20, 1700237.	3.5	8
150	Shortening behaviour of drawn and twisted copper wires. Materials Science and Technology, 1991, 7, 458-463.	1.6	7
151	Pure Ni Single Crystal of Cube Orientation Deformed by Equal Channel Angular Extrusion. Solid State Phenomena, 2005, 105, 333-338.	0.3	7
152	Development of Asymmetric Rolling for the Better Control over Structure and Mechanical Properties in IF Steel. Materials Science Forum, 0, 706-709, 2788-2793.	0.3	7
153	Crystal Plasticity Modeling of Anisotropic Hardening and Texture Due to Dislocation Transmutation in Twinning. Materials, 2018, 11, 1855.	2.9	7
154	A new macroscopic strain hardening function based on microscale crystal plasticity and its application in polycrystal modeling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 823, 141634.	5.6	7
155	Modelling the Effects of Static and Dynamic Recrystallization on Texture Development. Materials Science Forum, 1994, 157-162, 1713-1730.	0.3	6
156	Modeling of axial strain in free-end torsion of textured copper. International Journal of Materials Research, 2005, 96, 1038-1043.	0.8	6
157	Comments on the paper "Influences of crystallographic orientations on deformation mechanism and grain refinement of Al single crystals subjected to one-pass equal-channel angular pressing― Scripta Materialia, 2008, 59, 381-384.	5.2	6
158	Plastic instability and Lýders bands in the tensile test: the role of crystal orientation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 358, 17-25.	5.6	5
159	Simulation of Texture Development of Plane Carbon Steel in Multipass Rolling Using Analytical Flow Function. Materials Science Forum, 2005, 495-497, 1603-1608.	0.3	5
160	Equal channel angular pressing processing routes and associated structure modification: a differential scanning calorimetry and X-ray line profile analysis. Powder Diffraction, 2012, 27, 194-199.	0.2	5
161	Microstructure and mechanical properties of Al-3Fe alloy processed by equal channel angular extrusion. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012079.	0.6	5
162	Nano-enabled orientation alignment via extreme shear strains. Scripta Materialia, 2015, 98, 52-55.	5.2	5

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163	Analytical Representation of Polycrystal Yield Surfaces., 1991,, 183-186.		5
164	Modeling of Length Changes and Textures during Free End Torsion of Cylindrical Bars. Materials Science Forum, 2005, 495-497, 1609-1614.	0.3	4
165	Deformation Field Analysis in Equal Channel Angular Extrusion of Metals Using Asymmetric Flow Function. Advanced Engineering Materials, 2015, 17, 1760-1772.	3.5	4
166	Calculation of shear deformation at large strains. Scripta Metallurgica, 1988, 22, 1893-1896.	1.2	3
167	Grain Fragmentation in Equal Channel Angular Pressed Copper. Materials Science Forum, 2010, 654-656, 1570-1573.	0.3	3
168	A New Flow Function to Model Texture Evolution in Symmetric and Asymmetric Rolling. , 2009, , 415-420.		3
169	Effect of internal oxidation on the mechanical properties of a Cu-Co-Si alloy. Journal of Materials Science, 1982, 17, 2841-2844.	3.7	2
170	The plastic behaviour of ?100? and ?111? textured polycrystalline metals during simultaneous torsion and extension. Journal of Materials Science, 1985, 20, 3983-3987.	3.7	2
171	Prediction of Forming Limits of Titanium Sheets Using the Perturbation Analysis with Texture Development. Materials Science Forum, 1994, 157-162, 1875-1880.	0.3	2
172	Simulation of Persistence Characteristics of Textures During Plastic Deformation. , 2009, , 225-246.		2
173	On Homogeneous Nucleation of Dislocation Loops in Nanocrystalline Materials. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3883-3888.	2.2	2
174	A Modified Self Consistent Viscoplastic Model Based on Finite Element Results. Materials Science Forum, 1994, 157-162, 1869-1874.	0.3	1
175	Texture and Hardness in Wire Drawn [001] Copper Single Crystals. Textures and Microstructures, 1998, 31, 1-19.	0.2	1
176	Microstructure and mechanical properties of continuous equal channel angular pressed Titanium. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012067.	0.6	1
177	3D simulation of texture evolution induced grain coarsening in FCC polycrystals during severe plastic deformation. IOP Conference Series: Materials Science and Engineering, 2021, 1121, 012045.	0.6	1
178	Plastic energy-based analytical approach to predict the mechanical response of two-phase materials with application to dual-phase steels. European Journal of Mechanics, A/Solids, 2022, 91, 104414.	3.7	1
179	Texture Gradient in ECAP Copper Measured by Synchrotron Radiation. Solid State Phenomena, 0, , 327-332.	0.3	1
180	Polycrystal Simulation of Texture-Induced Grain Coarsening during Severe Plastic Deformation. Materials, 2020, 13, 5834.	2.9	1

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181	Connection between stress state and plastic strain increments determined by a computer method. Journal of Materials Science, 1985, 20, 2128-2132.	3.7	O
182	Work hardening and fracture properties of AlZnMg alloys. Crystal Research and Technology, 1985, 20, 419-424.	1.3	0
183	Comments on the paper "The alastic unloading of torsion bars subjected to prior plastic deformation― Scripta Metallurgica, 1985, 19, 241-243.	1.2	0
184	Simulation of Texture Evolution in Equal Channel Angular Extrusion of Copper Using a New Flow Field. Solid Mechanics and Its Applications, 2004, , 191-198.	0.2	0
185	Large Strain Effects during Free-End Torsion of Copper Bars. , 1991, , 319-322.		0
186	The yield function of a ?100? textured polycrystalline CuCoSi alloy wire for simultaneous torsion and extension. Journal of Materials Science, 1984, 19, 683-688.	3.7	0
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