

# David P Field

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2114752/publications.pdf>

Version: 2024-02-01

178  
papers

6,082  
citations

94269

37  
h-index

82410

72  
g-index

184  
all docs

184  
docs citations

184  
times ranked

4514  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Review of Strain Analysis Using Electron Backscatter Diffraction. <i>Microscopy and Microanalysis</i> , 2011, 17, 316-329.	0.2	952
2	Friction stir welding/processing of metals and alloys: A comprehensive review on microstructural evolution. <i>Progress in Materials Science</i> , 2021, 117, 100752.	16.0	436
3	The role of annealing twins during recrystallization of Cu. <i>Acta Materialia</i> , 2007, 55, 4233-4241.	3.8	344
4	Recent advances in the application of orientation imaging. <i>Ultramicroscopy</i> , 1997, 67, 1-9.	0.8	215
5	Heterogeneity of crystallographic texture in friction stir welds of aluminum. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2001, 32, 2869-2877.	1.1	215
6	A study of the heterogeneity of plastic deformation in IF steel by EBSD. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 548, 56-63.	2.6	205
7	Analysis of local orientation gradients in deformed single crystals. <i>Ultramicroscopy</i> , 2005, 103, 33-39.	0.8	196
8	Influence of plastic deformation heterogeneity on development of geometrically necessary dislocation density in dual phase steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 667, 435-443.	2.6	166
9	Spall behavior of aluminum with varying microstructures. <i>Journal of Applied Physics</i> , 2006, 99, 023528.	1.1	110
10	A systematic comparison of static and dynamic ageing of two Al-Mg-Si alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 373, 65-71.	2.6	108
11	The effect of predeformation on the $\beta'$ and $\beta''$ precipitates and the role of $\beta$ phase in an Al-Mg-Si alloy; AA6022. <i>Scripta Materialia</i> , 2005, 53, 299-303.	2.6	101
12	Electron backscatter diffraction and orientation imaging microscopy. <i>Materials Science and Technology</i> , 1997, 13, 69-78.	0.8	96
13	Orientation dependence of dislocation structure evolution during cold rolling of aluminum. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 494, 28-35.	2.6	87
14	Towards an integrated materials characterization toolbox. <i>Journal of Materials Research</i> , 2011, 26, 1341-1383.	1.2	84
15	Deformation and fracture behavior of laser processed dense and porous Ti6Al4V alloy under static and dynamic loading. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 549, 213-221.	2.6	82
16	Mapping and Assessing Plastic Deformation Using EBSD. , 2009, , 251-262.		72
17	Interface cavitation damage in polycrystalline copper. <i>Acta Metallurgica Et Materialia</i> , 1992, 40, 1145-1157.	1.9	69
18	Quantification of dislocation structure heterogeneity in deformed polycrystals by EBSD. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2012, 20, 024007.	0.8	69

#	ARTICLE	IF	CITATIONS
19	Observation of twin boundary migration in copper during deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 372, 173-179.	2.6	64
20	Rodrigues parameterization for orientation and misorientation distributions. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1996, 73, 1113-1130.	0.8	63
21	A dislocation-density-based 3D crystal plasticity model for pure aluminum. <i>Acta Materialia</i> , 2009, 57, 5936-5946.	3.8	63
22	Grain boundary misorientation angles and stress-induced voiding in oxide passivated copper interconnects. <i>Applied Physics Letters</i> , 1997, 70, 1242-1244.	1.5	62
23	The flow stress behavior of OFHC polycrystalline copper. <i>Acta Materialia</i> , 2001, 49, 2065-2074.	3.8	62
24	Morphology and distribution of martensite in dual phase (DP980) steel and its relation to the multiscale mechanical behavior. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 659, 93-103.	2.6	61
25	The effect of cold deformation on the kinetics of the $\epsilon$ precipitates in an Al-Mg-Si alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2005, 36, 2059-2065.	1.1	55
26	Quantifying the effects of tempering on individual phase properties of DP980 steel with nanoindentation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 667, 240-249.	2.6	55
27	In-situ EBSD study on the cube texture evolution in 3 wt% Si steel complemented by ex-situ EBSD experiment " From nucleation to grain growth. <i>Acta Materialia</i> , 2019, 166, 100-112.	3.8	55
28	Room temperature equal-channel angular pressing of a magnesium alloy. <i>Acta Materialia</i> , 2013, 61, 3027-3036.	3.8	52
29	Formation of annealing twin boundaries in nickel. <i>Scripta Materialia</i> , 2014, 81, 52-55.	2.6	50
30	Analysis of Particle-Stimulated Nucleation (PSN)-Dominated Recrystallization for Hot-Rolled 7050 Aluminum Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 2062-2076.	1.1	50
31	Recent studies of local texture and its influence on failure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998, 257, 165-170.	2.6	46
32	Influence of grain size on the tensile response of aluminum under plate-impact loading. <i>Journal of Applied Physics</i> , 2007, 102, .	1.1	46
33	Geometrically Necessary Dislocation Density Evolution in Interstitial Free Steel at Small Plastic Strains. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 3274-3282.	1.1	45
34	Crystallographic Texture in the Friction-Stir-Welded Metal Matrix Composite Al6061 with 10 Vol% Al <sub>2</sub> O <sub>3</sub> . <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009, 40, 2109-2114.	1.1	44
35	Effects of shot peening parameters on gradient microstructure and mechanical properties of TRC AZ31. <i>Materials Characterization</i> , 2019, 148, 9-16.	1.9	44
36	Quantification of partially recrystallized polycrystals using electron backscatter diffraction. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1995, 190, 241-246.	2.6	39

#	ARTICLE	IF	CITATIONS
37	Present State of Electron Backscatter Diffraction and Prospective Developments. , 2009, , 1-20.		39
38	Thermal microstructural stability of AZ31 magnesium after severe plastic deformation. Materials Characterization, 2015, 101, 9-19.	1.9	39
39	High-Speed Friction Stir Welding of AA7075-T6 Sheet: Microstructure, Mechanical Properties, Micro-texture, and Thermal History. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 210-222.	1.1	39
40	Texture evolution during plane strain deformation of aluminum. Acta Metallurgica Et Materialia, 1995, 43, 1683-1692.	1.9	38
41	Analysis of grain-boundary structure in Al-Cu interconnects. Journal of Applied Physics, 1997, 82, 2383-2392.	1.1	38
42	Effect of strain and strain rate on the development of deformation heterogeneity during tensile deformation of a solution annealed 304 LN austenitic stainless steel: An EBSD study. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138854.	2.6	38
43	Transmission electron microscopy and differential scanning calorimetry studies on the precipitation sequence in an Al-Mg-Si alloy: AA6022. Journal of Materials Research, 2005, 20, 2705-2711.	1.2	34
44	Microstructural Characterization of Friction Stir Welded Aluminum-Steel Joints. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 2815-2829.	1.1	34
45	The role of shear stress in the formation of annealing twin boundaries in copper. Scripta Materialia, 2006, 54, 983-986.	2.6	33
46	Superior superplastic behavior in fine-grained Ti-6Al-4V sheet. Journal of Alloys and Compounds, 2002, 345, 221-227.	2.8	32
47	Effect of film thickness on the evolution of annealing texture in sputtered copper films. Journal of Electronic Materials, 2005, 34, 1500-1508.	1.0	31
48	Measurement and representation of grain-boundary texture. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1992, 23, 2501-2513.	1.4	30
49	Barrier layer, geometry and alloying effects on the microstructure and texture of electroplated copper thin films and damascene lines. Thin Solid Films, 2005, 471, 63-70.	0.8	30
50	Alloying effects on dislocation substructure evolution of aluminum alloys. International Journal of Plasticity, 2004, 20, 459-476.	4.1	29
51	Plastic anisotropy of electro-deposited pure $\hat{1}\pm$ -iron with sharp crystallographic $\hat{1}\pm$ texture in normal direction: Analysis by an explicitly dislocation-based crystal plasticity model. International Journal of Plasticity, 2014, 52, 18-32.	4.1	29
52	Explicit incorporation of cross-slip in a dislocation density-based crystal plasticity model. Philosophical Magazine, 2012, 92, 3084-3100.	0.7	28
53	Corrosion mechanism in PVD deposited nano-scale titanium nitride thin film with intercalated titanium for protecting the surface of silicon. Electrochimica Acta, 2018, 264, 69-82.	2.6	28
54	Local textures and grain boundaries in voided copper interconnects. Journal of Electronic Materials, 1997, 26, 996-1001.	1.0	27

#	ARTICLE	IF	CITATIONS
55	A study of the hot and cold deformation of twin-roll cast magnesium alloy AZ31. Philosophical Magazine, 2014, 94, 381-403.	0.7	27
56	Bimodal Grain Size Distribution Enhances Strength and Ductility Simultaneously in a Low-Carbon Low-Alloy Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 1948-1957.	1.1	24
57	Heterogeneity of intergranular damage in Copper Crept in Plane-Strain Tension. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1992, 23, 2515-2526.	1.4	23
58	Microstructural development in asymmetric processing of tantalum plate. Journal of Electronic Materials, 2005, 34, 1521-1525.	1.0	23
59	Mesoscale strain measurement in deformed crystals: A comparison of X-ray microdiffraction with electron backscatter diffraction. Philosophical Magazine, 2010, 90, 1451-1464.	0.7	22
60	Determination of Dislocation Interaction Strengths Using Discrete Dislocation Dynamics of Curved Dislocations. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012, 134, .	0.8	22
61	Creation of heterogeneous microstructures in copper using high-pressure torsion to enhance mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 756, 142-148.	2.6	22
62	A statistical theory of creep in polycrystalline materials. Acta Metallurgica Et Materialia, 1991, 39, 2405-2417.	1.9	21
63	Improving the Spatial Resolution of EBSD. Microscopy and Microanalysis, 2005, 11, .	0.2	21
64	3D microstructural evolution of primary recrystallization and grain growth in cold rolled single-phase aluminum alloys. Modelling and Simulation in Materials Science and Engineering, 2018, 26, 035011.	0.8	21
65	Influence of microstructural heterogeneity and plastic strain on geometrically necessary dislocation structure evolution in single-phase and two-phase alloys. Materials Characterization, 2020, 170, 110690.	1.9	21
66	Investigating the microstructure-reliability relationship in Cu damascene lines. Scripta Materialia, 2001, 45, 1069-1075.	2.6	19
67	Microstructural evolution and observed stress response during hot deformation of 5005 and 6022 Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 425, 205-212.	2.6	19
68	Material Flow during Friction Stir Welding of HSLA 65 Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 3167-3175.	1.1	19
69	Influence of strain amplitude on the development of dislocation structure during cyclic plastic deformation of 304 LN austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 762, 138090.	2.6	19
70	Predicting thickness dependent twin boundary formation in sputtered Cu films. Scripta Materialia, 2006, 54, 999-1003.	2.6	18
71	Using Coupled Mesoscale Experiments and Simulations to Investigate High Burn-Up Oxide Fuel Thermal Conductivity. Jom, 2014, 66, 2569-2577.	0.9	18
72	Effect of gradient microstructures on strengthening and toughening of AZ31. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138615.	2.6	18

#	ARTICLE	IF	CITATIONS
73	Hydrogen and deformation: Nano- and microindentation studies. <i>Jom</i> , 2003, 55, 47-50.	0.9	17
74	Quantitative characterization of carbon nanotube turf topology by SEM analysis. <i>Journal of Materials Science</i> , 2011, 46, 3119-3126.	1.7	17
75	Additive manufacturing of Ti-Ni bimetallic structures. <i>Materials and Design</i> , 2022, 215, 110461.	3.3	17
76	Micromechanics of hardening of elastic-plastic crystals with elastic inclusions: I Dilute concentration. <i>International Journal of Plasticity</i> , 2007, 23, 1901-1917.	4.1	15
77	Observation of Deformation and Lattice Rotation in a Cu Bicrystal. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011, 42, 676-683.	1.1	15
78	Gradient microstructure and enhanced mechanical performance of magnesium alloy by severe impact loading. <i>Journal of Materials Science and Technology</i> , 2020, 36, 45-49.	5.6	15
79	Modeling the Controlled Recrystallization of Particle-Containing Aluminum Alloys. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 207-213.	1.2	14
80	Comparison of Gradients in Orientation and Stress between Experiment and Simulation. <i>Materials Science Forum</i> , 0, 702-703, 463-468.	0.3	13
81	Texture and Grain Boundary Structure Dependence of Hillcock Formation in Thin Metal Films. <i>Materials Research Society Symposia Proceedings</i> , 1998, 516, 115.	0.1	12
82	In-Situ EBSD Investigation of Recrystallization in ECAE Processed Copper. <i>Materials Science Forum</i> , 2004, 467-470, 1401-1406.	0.3	12
83	Plasticity in Materials with Heterogeneous Microstructures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 6608-6620.	1.1	12
84	Advanced Software Capabilities for Automated EBSD. , 2000, , 141-152.		12
85	Microstructure mapping of interconnects by orientation imaging microscopy. <i>Journal of Electronic Materials</i> , 1996, 25, 1767-1771.	1.0	11
86	The effect of hot rolling on the microstructure, texture and mechanical properties of twin roll cast AZ31Mg. <i>Journal of Materials Processing Technology</i> , 2015, 216, 315-327.	3.1	11
87	Bifurcation in deformation behavior of Cu and Ta by accumulative roll-bonding at high temperature. <i>Scripta Materialia</i> , 2017, 136, 87-91.	2.6	11
88	Benefits of using multiple Raman laser wavelengths for characterizing defects in a $\text{UO}_2$ matrix. <i>Journal of Raman Spectroscopy</i> , 2022, 53, 988-1002.	1.2	11
89	Electromigration properties of multigrain aluminum thin film conductors as influenced by grain boundary structure. <i>Journal of Materials Research</i> , 2001, 16, 2124-2129.	1.2	10
90	The microstructure of Cu films deposited by the self-ion assisted technique. <i>Journal of Electronic Materials</i> , 2002, 31, 40-44.	1.0	10

#	ARTICLE	IF	CITATIONS
91	Microtextural Analysis of Grain Fragmentation in Aluminum. Materials Science Forum, 2003, 426-432, 3739-3744.	0.3	10
92	On the Use of EBSD to Study the Heterogeneity of Plastic Deformation. Materials Science Forum, 0, 702-703, 245-252.	0.3	10
93	Effects of Local Texture and Grain Structure on the Sputtering Performance of Tantalum. Materials Science Forum, 2002, 408-412, 1615-1620.	0.3	9
94	Simulation of structure evolution in Cu films. Thin Solid Films, 2009, 517, 1977-1982.	0.8	9
95	Post processing effects on GND calculations from EBSD-based orientation measurements. IOP Conference Series: Materials Science and Engineering, 2015, 89, 012049.	0.3	9
96	Phase Identification of Dual-Phase (DP980) Steels by Electron Backscatter Diffraction and Nanoindentation Techniques. Microscopy and Microanalysis, 2016, 22, 99-107.	0.2	9
97	An electron backscatter diffraction analysis of grain boundary initiated discontinuous precipitation in U <sup>10</sup> Mo. Journal of Nuclear Materials, 2020, 529, 151940.	1.3	9
98	The Dependence of Dislocation Density and Cell Size on Crystallographic Orientation in Aluminum. Materials Science Forum, 1994, 157-162, 1181-1188.	0.3	8
99	Characterization of low angle grain boundaries in yttrium orthovanadate. Journal of Materials Science, 2005, 40, 3347-3353.	1.7	8
100	The effect of shock-loading on the aging behavior of an Al-Mg-Si alloy. Journal of Materials Science, 2006, 41, 1711-1720.	1.7	8
101	Characterization of twin boundaries in an Fe <sup>17.5</sup> Mn <sup>0.56</sup> C twinning induced plasticity steel. Materials Characterization, 2013, 85, 100-110.	1.9	8
102	On the asymmetric domain of cubic misorientations. Scripta Metallurgica Et Materialia, 1995, 32, 67-70.	1.0	7
103	A parallel macro/micro elastoplasticity model for aluminum deformation and comparison with experiments. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 241-256.	1.1	7
104	Scalar Measures of Texture Heterogeneity. Materials Science Forum, 2005, 495-497, 207-212.	0.3	7
105	Impact of Local Texture on Recrystallization and Grain Growth via In Situ EBSD. Materials Science Forum, 2005, 495-497, 1121-1130.	0.3	7
106	A novel structural-based approach to model the age hardening behaviour of aluminium alloys. Modelling and Simulation in Materials Science and Engineering, 2006, 14, 905-921.	0.8	7
107	Characterization of Creep-Damaged Grain Boundaries of Alloy 617. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 4927-4936.	1.1	7
108	3D image reconstruction of fiber systems using electron tomography. Ultramicroscopy, 2015, 149, 21-25.	0.8	7

#	ARTICLE	IF	CITATIONS
109	Thermal behavior of AZ31 gradient microstructure after cold severe surface plastic deformation. <i>Materials Characterization</i> , 2020, 169, 110630.	1.9	7
110	The Effect of Homogenization Heat Treatment on the Texture Evolution in U-10Mo Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 3871-3879.	1.1	7
111	The Applicability of Conventional Fiber Texture Analysis Techniques in Electron Backscatter Diffraction. <i>Materials Science Forum</i> , 2003, 426-432, 3685-3690.	0.3	6
112	Effect of film thickness and laser energy density on the microstructure of a-GaAs films after excimer laser crystallization. <i>Journal of Applied Physics</i> , 2007, 102, 013519.	1.1	6
113	Excess Dislocation Density Measurement Dependence on EBSD Step Size. <i>Microscopy and Microanalysis</i> , 2007, 13, .	0.2	6
114	Microstructure and Texture Evolution of Magnesium alloy after Shear Assisted Processing and Extrusion (ShAPE <sup>TM</sup> ). <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 375, 012007.	0.3	6
115	Texture Evolution in Thin Cu Films and Lines. <i>Materials Science Forum</i> , 2005, 495-497, 1323-1332.	0.3	5
116	The Parameters and Fundamental Zones of Twin-Dependent Triple Junction Distributions. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 2273-2284.	1.1	5
117	Developing novel heterogenous microstructures to balance between strength and ductility without restoration processes in commercial Al alloys. <i>Mechanics of Advanced Materials and Structures</i> , 2022, 29, 2371-2379.	1.5	5
118	The role of second phase particles and grain boundaries on recrystallization: Quasi-in situ experiments and modeling in U-10Mo alloy system. <i>Journal of Nuclear Materials</i> , 2022, 559, 153445.	1.3	5
119	Unrecoverable Strain Hardening in Torsionally Strained OFHC Copper. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 1990, 112, 315-320.	0.8	4
120	Intergranular Cracking in Aluminum Alloys. <i>Canadian Metallurgical Quarterly</i> , 1995, 34, 203-210.	0.4	4
121	Local Orientation Gradient and Recrystallization of Deformed Copper. <i>Solid State Phenomena</i> , 2005, 105, 157-162.	0.3	4
122	Grain boundary networks in high-performance, heteroepitaxial, YBCO films on polycrystalline, cube-textured metals. <i>Philosophical Magazine Letters</i> , 2011, 91, 246-255.	0.5	4
123	Prediction of flow stress and textures of AZ31 magnesium alloy at elevated temperature. <i>Philosophical Magazine</i> , 2014, 94, 3353-3367.	0.7	4
124	Reliability of twin-dependent triple junction distributions measured from a section plane. <i>Acta Materialia</i> , 2016, 103, 809-822.	3.8	4
125	Intergranular Cracking in Aluminum Alloys. , 0, .		4
126	Analysis of Grain Boundary Cavitation Damage in Copper. <i>Textures and Microstructures</i> , 1991, 14, 977-982.	0.2	3



#	ARTICLE	IF	CITATIONS
127	Evidence for the Existence of a Special Class of Crystallographic Misorientations. Materials Science Forum, 1994, 157-162, 1175-1180.	0.3	3
128	Relationship Between Structure and Electromigration Characteristics of Pure Aluminum Films. Materials Research Society Symposia Proceedings, 1997, 473, 369.	0.1	3
129	The Microstructure and Electromigration Performance of Damascene-Fabricated Aluminum Interconnects. Materials Research Society Symposia Proceedings, 1997, 472, 313.	0.1	3
130	Tool Geometry Dependence of Local Texture in Friction Stir Welds of 7050 Aluminum Plate. Materials Science Forum, 2002, 408-412, 1507-1512.	0.3	3
131	A Novel Mechanical Method to Measure Shear Strength in Specimens Under Pressure. Materials Research Society Symposia Proceedings, 2006, 929, 1.	0.1	3
132	The trianvil test apparatus: Measurement of shear strength under pressure. Review of Scientific Instruments, 2010, 81, 013908.	0.6	3
133	High-Speed FSW Aluminum Alloy 7075 Microstructure and Corrosion Properties. Minerals, Metals and Materials Series, 2017, , 125-135.	0.3	3
134	Factors affecting Confidence Index in EBSD analysis. Ultramicroscopy, 2021, 225, 113269.	0.8	3
135	Observation of Structure Evolution During Annealing of 7xxx Series Al Deformed at High Temperature. , 2012, , 383-386.		3
136	Measurement of Interface Damage Heterogeneity. Textures and Microstructures, 1993, 20, 217-230.	0.2	3
137	Determination of Softening Kinetics in a Material by Measuring the Evolution of Hot Flow Stress. Journal of Testing and Evaluation, 1994, 22, 530-536.	0.4	3
138	Textured Structures. , 2004, , 215-226.		3
139	Microstructure of damascene processed Al-Cu interconnects for integrated circuit applications. , 1998, , .		2
140	On the Development of New Scalar Measures of Heterogeneity. Materials Science Forum, 2002, 408-412, 107-112.	0.3	2
141	Two- and Three-Dimensional EBSD Measurement of Dislocation Density in Deformed Structures. Solid State Phenomena, 2010, 160, 17-22.	0.3	2
142	Influence of pressure on the microstructural evolution of Ta during shear deformation. Scripta Materialia, 2014, 80, 21-24.	2.6	2
143	Quantifying and Qualifying Alloys Based on Level of Homogenization: A U-10Mo Alloy Case Study. Journal of Engineering Materials and Technology, Transactions of the ASME, 2020, 142, .	0.8	2
144	An Experimental Investigation of Grain Boundary Structure Effects on Grain Growth. Materials Science Forum, 1996, 204-206, 735-742.	0.3	1

#	ARTICLE	IF	CITATIONS
145	Effect of Texture on Hillock Formation in Aluminum Films. Materials Research Society Symposia Proceedings, 2002, 721, 1.	0.1	1
146	EBSDB Crystallochemical Analysis of (W,V)C Cemented Carbides. Microscopy and Microanalysis, 2004, 10, 710-711.	0.2	1
147	Superplastic Behavior Of Fine Grained Ti-6Al-4V. Materials Technology, 2006, 21, 84-87.	1.5	1
148	Evolution of Annealing Twins in Sputtered Cu Films. Journal of Electronic Materials, 2010, 39, 191-199.	1.0	1
149	Grain Boundary Analysis of HT9 Steel after Accelerated Creep Testing. Materials Research Society Symposia Proceedings, 2010, 1264, 1.	0.1	1
150	Modeling of Deformation Microstructure - Strain Hardening and Crystallographic Reorientation of Crystallites in a Columnar Polycrystal. Materials Science Forum, 2011, 702-703, 196-199.	0.3	1
151	Characterization of Curvature in CNT Turf Structures from Two-Dimensional Images. Materials Research Society Symposia Proceedings, 2011, 1283, 1.	0.1	1
152	Observations of Dislocation Structure in AA 7050 by EBSD. Materials Science Forum, 0, 702-703, 493-498.	0.3	1
153	Grain Boundary Analysis of Crept Alloy 617. Materials Research Society Symposia Proceedings, 2012, 1383, 153.	0.1	1
154	Damage Susceptibility of Grain Boundaries in HT9 Steel Subjected to High-Temperature Creep. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3539-3546.	1.1	1
155	Microstructural stability after severe plastic deformation of AZ31 Magnesium. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012077.	0.3	1
156	Dislocation density based crystal plasticity finite element simulation of Al bicrystal with grain boundary effects. Materials Research Society Symposia Proceedings, 2014, 1651, 1.	0.1	1
157	Hydrostatic pressure effect on mechanical behavior and texture evolution of Al and Brass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 679, 155-161.	2.6	1
158	Bifurcation in deformation mechanism to overcome strength-ductility paradox in metal-ceramic multilayer thin-films. Applied Physics Letters, 2018, 113, 101902.	1.5	1
159	Analyzing recrystallization behavior of heterogeneous structures single-phase Al alloys. Materialia, 2021, 19, 101190.	1.3	1
160	Development of Microstructural Heterogeneity in 304 LN Austenitic Stainless Steel: Effect of Temperature and Strain. Journal of Materials Engineering and Performance, 2022, 31, 9050-9059.	1.2	1
161	Investigation of Aluminum Thin Films Using Electron Backscatter Diffraction and the New Technique of Orientation Imaging Microscopy. Materials Research Society Symposia Proceedings, 1995, 403, 197.	0.1	0
162	EM activation energy in aluminum conductors tested by the drift velocity method. Scripta Materialia, 2000, 42, 621-626.	2.6	0

#	ARTICLE	IF	CITATIONS
163	The energy of activation of electromigration in aluminum conductors tested by the drift-velocity method. Russian Microelectronics, 2000, 29, 316-323.	0.1	0
164	Texture and microtexture of copper films prepared by the self-ion assisted deposition technique on barrier layers with different structure. Materials Research Society Symposia Proceedings, 2002, 721, 1.	0.1	0
165	Structure Evolution in Plated Cu Films. Materials Research Society Symposia Proceedings, 2005, 863, B5.2-1.	0.1	0
166	Effect of Film Thickness on the Annealing Texture in Sputtered and Electroplated Cu Films. Advanced Materials Research, 2006, 15-17, 982-988.	0.3	0
167	Texture Evolution in Cu Films and Lines. Materials Research Society Symposia Proceedings, 2007, 990, 1.	0.1	0
168	Electron Backscatter Diffraction: Operation and Applications. Microscopy and Microanalysis, 2008, 14, 506-507.	0.2	0
169	Development of a 3D Crystal Plasticity Model that Tracks Dislocation Density Evolution. Solid State Phenomena, 2010, 160, 57-62.	0.3	0
170	Dislocation Density Based Crystal Plasticity Finite Element Simulation of Alpha-Iron. Materials Research Society Symposia Proceedings, 2012, 1383, 147.	0.1	0
171	Measuring twin dependent triple junctions from a single section plane. IOP Conference Series: Materials Science and Engineering, 2015, 82, 012004.	0.3	0
172	Local Texture Evolution and Mechanical Performance of Ultra-High-Speed Friction Stir Weld of AA 6111-T4 Sheets. Minerals, Metals and Materials Series, 2018, , 249-257.	0.3	0
173	Transmission Kikuchi diffraction from nano-crystalline Ti and TiN thin-films. IOP Conference Series: Materials Science and Engineering, 2018, 375, 012009.	0.3	0
174	Observation of grain growth in U-10Mo alloy. Journal of Physics: Conference Series, 2019, 1270, 012029.	0.3	0
175	Multiscale Modeling of the Strength and Ductility Paradox for High-Pressure Torsion Samples With Gradient Microstructure. Journal of Engineering Materials and Technology, Transactions of the ASME, 2022, 144, .	0.8	0
176	Electron Backscatter Diffraction of Aluminum Alloys. , 2005, , 519-573.		0
177	Effect of Film Thickness and Laser Energy Density on the Structural Characteristics of Laser-Annealed Polycrystalline Gallium Arsenide Films. , 2006, , .		0
178	Dislocation Density Based Crystal Plasticity Finite Element Model of Polycrystals with Grain Boundary Effect. , 0, , 271-276.		0