Gregory Rohrer

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7023361/publications.pdf

Version: 2024-02-01

324 papers	13,855 citations	18465 62 h-index	31818 101 g-index
331 all docs	331 docs citations	331 times ranked	9808 citing authors

#	Article	IF	Citations
1	Grain boundary complexions. Acta Materialia, 2014, 62, 1-48.	3.8	660
2	Photocatalysts with internal electric fields. Nanoscale, 2014, 6, 24-42.	2.8	654
3	Grain boundary energy anisotropy: a review. Journal of Materials Science, 2011, 46, 5881-5895.	1.7	355
4	Distribution of grain boundaries in magnesia as a function of five macroscopic parameters. Acta Materialia, 2003, 51, 3663-3674.	3.8	228
5	Spatial Separation of Photochemical Oxidation and Reduction Reactions on the Surface of Ferroelectric BaTiO3. Journal of Physical Chemistry B, 2001, 105, 8275-8277.	1.2	220
6	Openâ€ core screw dislocations in GaN epilayers observed by scanning force microscopy and highâ€resolution transmission electron microscopy. Applied Physics Letters, 1995, 67, 2284-2286.	1.5	218
7	The distribution of internal interfaces in polycrystals. International Journal of Materials Research, 2004, 95, 197-214.	0.8	198
8	Orientation Dependence of Photochemical Reactions on TiO2Surfaces. Journal of Physical Chemistry B, 1998, 102, 3216-3226.	1.2	194
9	Variant selection and intervariant crystallographic planes distribution in martensite in a Tiâ€“6Alâ€“4V alloy. Acta Materialia, 2014, 80, 478-489.	3.8	190
10	Grain boundary energies in body-centered cubic metals. Acta Materialia, 2015, 88, 346-354.	3.8	185
11	Measuring the five-parameter grain-boundary distribution from observations of planar sections. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 1981-1989.	1.1	183
12	Distribution of grain boundaries in aluminum as a function of five macroscopic parameters. Acta Materialia, 2004, 52, 3649-3655.	3.8	181
13	Spatially Selective Photochemical Reduction of Silver on the Surface of Ferroelectric Barium Titanate. Chemistry of Materials, 2001, 13, 241-242.	3.2	179
14	Annealing twin development during recrystallization and grain growth in pure nickel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 295-303.	2.6	175
15	Anisotropic Photochemical Reactivity of Bulk TiO2 Crystals. Journal of Physical Chemistry B, 1998, 102, 7323-7327.	1.2	173
16	Relative grain boundary area and energy distributions in nickel. Acta Materialia, 2009, 57, 4304-4311.	3.8	161
17	The relative free energies of grain boundaries in magnesia as a function of five macroscopic parameters. Acta Materialia, 2003, 51, 3675-3686.	3.8	155
18	Nucleation Barrier for Volumeâ€Conserving Shape Changes of Faceted Crystals. Journal of the American Ceramic Society, 2000, 83, 214-16.	1.9	150

#	Article	IF	Citations
19	Five-parameter grain boundary distribution of commercially grain boundary engineered nickel and copper. Acta Materialia, 2008, 56, 2363-2373.	3.8	142
20	Three-Dimensional Characterization of Microstructure by Electron Back-Scatter Diffraction. Annual Review of Materials Research, 2007, 37, 627-658.	4.3	138
21	Structure of the Reduced TiO2(110) Surface Determined by Scanning Tunneling Microscopy. Science, 1990, 250, 1239-1241.	6.0	133
22	Segregation-induced ordered superstructures at general grain boundaries in a nickel-bismuth alloy. Science, 2017, 358, 97-101.	6.0	130
23	Spatially selective visible light photocatalytic activity of TiO2/BiFeO3 heterostructures. Journal of Materials Chemistry, 2011, 21, 4168.	6.7	124
24	The relative grain boundary area and energy distributions in a ferritic steel determined from three-dimensional electron backscatter diffraction maps. Acta Materialia, 2013, 61, 1404-1412.	3.8	118
25	Residualâ€Stress Predictions in Polycrystalline Alumina. Journal of the American Ceramic Society, 2001, 84, 2947-2954.	1.9	117
26	Measuring the Influence of Grainâ€Boundary Misorientation on Thermal Groove Geometry in Ceramic Polycrystals. Journal of the American Ceramic Society, 1999, 82, 1529-1536.	1.9	106
27	Changes in the five-parameter grain boundary character distribution in Î±-brass brought about by iterative thermomechanical processing. Acta Materialia, 2006, 54, 4489-4502.	3.8	105
28	Comparing calculated and measured grain boundary energies in nickel. Acta Materialia, 2010, 58, 5063-5069.	3.8	101
29	Grain Boundary Complexion Transitions. Annual Review of Materials Research, 2020, 50, 465-492.	4.3	96
30	Surface Energy Anisotropy of SrTiO3at 1400Â°C in Air. Journal of the American Ceramic Society, 2003, 86, 1933-1939.	1.9	95
31	Photochemical Reactivity of Titania Films on BaTiO₃Substrates: Origin of Spatial Selectivity. Chemistry of Materials, 2010, 22, 5823-5830.	3.2	93
32	A scanning tunneling microscopy and spectroscopy study of the TiO2â^'x(110) surface. Surface Science, 1992, 278, 146-156.	0.8	91
33	Distribution of Grain Boundaries in SrTiO₃ as a Function of Five Macroscopic Parameters. Journal of the American Ceramic Society, 2004, 87, 670-676.	1.9	90
34	Mechanism for the development of anisotropic grain boundary character distributions during normal grain growth. Acta Materialia, 2009, 57, 1-7.	3.8	90
35	Visible light photochemical activity of heterostructured PbTiO3â€“TiO2 coreâ€“shell particles. Catalysis Science and Technology, 2012, 2, 1945.	2.1	90
36	The distribution of intervariant crystallographic planes in a lath martensite using five macroscopic parameters. Acta Materialia, 2014, 63, 86-98.	3.8	89

#	Article	IF	Citations
37	INFLUENCE OF INTERFACE ANISOTROPY ON GRAIN GROWTH AND COARSENING. Annual Review of Materials Research, 2005, 35, 99-126.	4.3	87
38	Sparse data structure and algorithm for the phase field method. Modelling and Simulation in Materials Science and Engineering, 2006, 14, 1189-1195.	0.8	87
39	Characterization of the Grainâ€Boundary Character and Energy Distributions of Yttria Using Automated Serial Sectioning and EBSD in the FIB. Journal of the American Ceramic Society, 2009, 92, 1580-1585.	1.9	87
40	Deriving grain boundary character distributions and relative grain boundary energies from three-dimensional EBSD data. Materials Science and Technology, 2010, 26, 661-669.	0.8	86
41	Measuring and Interpreting the Structure of Grainâ€Boundary Networks. Journal of the American Ceramic Society, 2011, 94, 633-646.	1.9	86
42	Five-parameter grain boundary distribution in grain boundary engineered brass. Scripta Materialia, 2005, 52, 633-637.	2.6	84
43	Towards an integrated materials characterization toolbox. Journal of Materials Research, 2011, 26, 1341-1383.	1.2	84
44	Scanning Probe Microscopy of Cleaved Molybdates: Î±-MoO3(010), Mo18O52(100), Mo8O23(010), and Î²-Mo4O11(100). Journal of Solid State Chemistry, 1996, 124, 104-115.	1.4	80
45	Effect of ferrite-to-austenite phase transformation path on the interface crystallographic character distributions in a duplex stainless steel. Acta Materialia, 2018, 145, 196-209.	3.8	80
46	Misorientation texture development during grain growth. Part I: Simulation and experiment. Acta Materialia, 2009, 57, 6102-6112.	3.8	78
47	The origin of photochemical anisotropy in SrTiO3. Topics in Catalysis, 2007, 44, 529-533.	1.3	77
48	Observation of annealing twin nucleation at triple lines in nickel during grain growth. Acta Materialia, 2015, 99, 63-68.	3.8	73
49	Expanding timeâ€“temperature-transformation (TTT) diagrams to interfaces: A new approach for grain boundary engineering. Acta Materialia, 2016, 106, 78-86.	3.8	73
50	Effect of anisotropic grain boundary properties on grain boundary plane distributions during grain growth. Scripta Materialia, 2005, 53, 351-355.	2.6	72
51	Five-parameter intervariant boundary characterization of martensite in commercially pure titanium. Acta Materialia, 2018, 154, 147-160.	3.8	72
52	Distribution and Energies of Grain Boundaries in Magnesia as a Function of Five Degrees of Freedom. Journal of the American Ceramic Society, 2002, 85, 3081-3083.	1.9	70
53	Heterostructured Ceramic Powders for Photocatalytic Hydrogen Production: Nanostructured <scp><scp>TiO</scp></scp>₂ Shells Surrounding Microcrystalline (<scp><scp>Ba</scp></scp>,<scp><scp>Sr</scp></scp>)<scp><scp>TiO</scp></scp>₃ Cores. Journal of the American Ceramic Society, 2012, 95, 1414-1420.	1.9	70
54	Heat affected zone microstructures and their influence on toughness in two microalloyed HSLA steels. Acta Materialia, 2015, 97, 380-391.	3.8	70

#	Article	IF	Citations
55	Interface Character Distributions in WCâ€“Co Composites. Journal of the American Ceramic Society, 2008, 91, 996-1001.	1.9	69
56	The five parameter grain boundary character distribution of polycrystalline silicon. Journal of Materials Science, 2014, 49, 4938-4945.	1.7	69
57	Habits of Grains in Dense Polycrystalline Solids. Journal of the American Ceramic Society, 2004, 87, 724-726.	1.9	68
58	Validating computed grain boundary energies in fcc metals using the grain boundary character distribution. Acta Materialia, 2011, 59, 5250-5256.	3.8	67
59	Structure Se nsitivity of Photochemical Oxidation and Reduction Reactions on SrTiO₃ Surfaces. Journal of the American Ceramic Society, 2003, 86, 1182-1189.	1.9	66
60	Five-parameter grain boundary analysis of a titanium alloy before and after low-temperature annealing. Scripta Materialia, 2008, 58, 183-186.	2.6	66
61	Grain boundary planes: New dimensions in the grain boundary character distribution. Scripta Materialia, 2006, 54, 1005-1009.	2.6	65
62	Stress hot spots in viscoplastic deformation of polycrystals. Modelling and Simulation in Materials Science and Engineering, 2010, 18, 074005.	0.8	65
63	Grain boundary energy and grain growth in Al films: Comparison of experiments and simulations. Scripta Materialia, 2006, 54, 1059-1063.	2.6	63
64	Composition Dependence of the Photochemical reduction of Ag by Ba_{1â^'x}Sr_xTiO₃. Chemistry of Materials, 2010, 22, 3527-3534.	3.2	63
65	Grain boundary velocity and curvature are not correlated in Ni polycrystals. Science, 2021, 374, 189-193.	6.0	63
66	The Relative Energies of Normally and Abnormally Growing Grain Boundaries in Alumina Displaying Different Complexions. Journal of the American Ceramic Society, 2010, 93, 1796-1802.	1.9	62
67	The five-parameter grain boundary character and energy distributions of a fully austenitic high-manganese steel using three dimensional data. Acta Materialia, 2014, 70, 281-289.	3.8	62
68	Grain boundary segregation in oxide ceramics. Journal of the European Ceramic Society, 2003, 23, 2841-2848.	2.8	61
69	Effect of Crystal and Domain Orientation on the Visible-Light Photochemical Reduction of Ag on BiFeO₃. ACS Applied Materials & Interfaces, 2011, 3, 1562-1567.	4.0	61
70	Synthesis of di- and trivalent Î²â€³-aluminas by ion exchange. Journal of Solid State Chemistry, 1986, 65, 231-240.	1.4	60
71	Photochemical Reactivity of Titania Films on BaTiO₃Substrates: Influence of Titania Phase and Orientation. Chemistry of Materials, 2010, 22, 5831-5837.	3.2	60
72	A scanning probe microscopy study of the (001) surfaces of V2O5 and V6O13. Surface Science, 1996, 367, 87-95.	0.8	59

#	Article	IF	Citations
73	Challenges in Ceramic Science: A Report from the Workshop on Emerging Research Areas in Ceramic Science. Journal of the American Ceramic Society, 2012, 95, 3699-3712.	1.9	59
74	The Distribution of Grain Boundary Planes in Interstitial Free Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 115-124.	1.1	59
75	Consistent representations of and conversions between 3D rotations. Modelling and Simulation in Materials Science and Engineering, 2015, 23, 083501.	0.8	59
76	Extracting Grain Boundary and Surface Energy from Measurement of Triple Junction Geometry. Journal of Materials Science, 1999, 7, 321-337.	1.2	58
77	Geometric and Crystallographic Characterization of WC Surfaces and Grain Boundaries in WC-Co Composites. Journal of Materials Science, 2004, 12, 19-27.	1.2	57
78	The role of grain boundary energy in grain boundary complexion transitions. Current Opinion in Solid State and Materials Science, 2016, 20, 231-239.	5.6	57
79	The five parameter grain boundary character distribution of Î±-Ti determined from three-dimensional orientation data. Acta Materialia, 2016, 111, 22-30.	3.8	56
80	On the crystallographic characteristics of nanobainitic steel. Acta Materialia, 2017, 127, 426-437.	3.8	55
81	Formation of Annealing Twins during Recrystallization and Grain Growth in 304L Austenitic Stainless Steel. Materials Science Forum, 0, 753, 113-116.	0.3	54
82	The equilibrium crystal shape of strontium titanate and its relationship to the grain boundary plane distribution. Acta Materialia, 2015, 82, 32-40.	3.8	54
83	Nucleation Energy Barriers for Volumeâ€Conserving Shape Changes of Crystals with Nonequilibrium Morphologies. Journal of the American Ceramic Society, 2001, 84, 2099-2104.	1.9	53
84	Abnormal grain growth in the Potts model incorporating grain boundary complexion transitions that increase the mobility of individual boundaries. Acta Materialia, 2015, 96, 390-398.	3.8	53
85	Evolution of microstructure and mechanical properties in 2205 duplex stainless steels during additive manufacturing and heat treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 835, 142695.	2.6	53
86	Coarsening of Faceted Crystals. Journal of the American Ceramic Society, 2002, 85, 675-682.	1.9	52
87	The Influence of the Dipolar Field Effect on the Photochemical Reactivity of Sr2Nb2O7 and BaTiO3 Microcrystals. Topics in Catalysis, 2008, 49, 18-23.	1.3	52
88	Piezotronic modulations in electro- and photochemical catalysis. MRS Bulletin, 2018, 43, 946-951.	1.7	52
89	Visible-Light Photochemical Activity of Heterostructured Coreâ€“Shell Materials Composed of Selected Ternary Titanates and Ferrites Coated by TiO₂. ACS Applied Materials & Interfaces, 2013, 5, 5064-5071.	4.0	51
90	Modeling the relationship between microstructural features and the strength of WCâ€“Co composites. International Journal of Refractory Metals and Hard Materials, 2006, 24, 89-100.	1.7	50

#	Article	IF	Citations
91	The Protonation of MoO3during the Partial Oxidation of Alcohols. Journal of Catalysis, 1998, 173, 219-228.	3.1	49
92	Combinatorial substrate epitaxy: A high-throughput method for determining phase and orientation relationships and its application to BiFeO3/TiO2 heterostructures. Acta Materialia, 2012, 60, 6486-6493.	3.8	49
93	â€œIntroduction to Grains, Phases, and Interfacesâ€”an Interpretation of Microstructure,â€•Trans. AIME, 1948, vol. 175, pp. 15â€“51, by C.S. Smith. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 1063-1100.	1.1	48
94	Recrystallization Textures. , 2017, , 431-468.		48
95	Heteroepitaxial growth of TiO2 films by ion-beam sputter deposition. Journal of Crystal Growth, 1996, 166, 779-785.	0.7	47
96	Orientation relationships of copper crystals on c-plane sapphire. Acta Materialia, 2011, 59, 5320-5331.	3.8	47
97	Misorientation Dependence of the Grain Boundary Energy in Magnesia. Journal of Materials Science, 2000, 8, 131-140.	1.2	46
98	Origin of domain structure in hexagonal silicon carbide boules grown by the physical vapor transport method. Journal of Crystal Growth, 2000, 220, 308-315.	0.7	43
99	The distribution of grain boundary planes in polycrystals. Jom, 2007, 59, 38-42.	0.9	43
100	Grain Boundary Character Distribution of Nanocrystalline Cu Thin Films Using Stereological Analysis of Transmission Electron Microscope Orientation Maps. Microscopy and Microanalysis, 2013, 19, 111-119.	0.2	43
101	Heterostructured (Ba,Sr)TiO3/TiO2 core/shell photocatalysts: Influence of processing and structure on hydrogen production. International Journal of Hydrogen Energy, 2013, 38, 6948-6959.	3.8	43
102	Thermo-mechanical factors influencing annealing twin development in nickel during recrystallization. Journal of Materials Science, 2015, 50, 5191-5203.	1.7	43
103	An Atomic Force Microscopy Study of the Morphological Evolution of the MoO3(010) Surface during Reduction Reactions. Journal of Catalysis, 1996, 163, 12-17.	3.1	42
104	Crystallographic texture in pulsed laser deposited hydroxyapatite bioceramic coatings. Acta Materialia, 2007, 55, 131-139.	3.8	42
105	The observation of oxygen disorder on the V2O5(001) surface using scanning tunneling microscopy. Surface Science, 1995, 322, 293-300.	0.8	41
106	An atomic force microscopy study of super-dislocation/micropipe complexes on the 6H-SiC(0 0 0 1) growth surface. Journal of Crystal Growth, 1997, 181, 351-362.	0.7	41
107	Polar Domains at the Surface of Centrosymmetric BiVO₄. Chemistry of Materials, 2014, 26, 2774-2776.	3.2	41
108	The five-parameter grain boundary curvature distribution in an austenitic and ferritic steel. Acta Materialia, 2017, 123, 136-145.	3.8	39

#	Article	IF	Citations
109	Grain boundary character distribution in an additively manufactured austenitic stainless steel. Scripta Materialia, 2021, 192, 115-119.	2.6	39
110	Effect of downscaling nano-copper interconnects on the microstructure revealed by high resolution TEM-orientation-mapping. Nanotechnology, 2012, 23, 135702.	1.3	37
111	Enhanced photochemical activity of Î±-Fe2O3 films supported on SrTiO3 substrates under visible light illumination. Chemical Communications, 2012, 48, 2012.	2.2	37
112	Misorientation texture development during grain growth. Part II: Theory. Acta Materialia, 2010, 58, 14-19.	3.8	36
113	Fiveâ€Parameter Grain Boundary Analysis by 3D EBSD of an Ultra Fine Grained CuZr Alloy Processed by Equal Channel Angular Pressing. Advanced Engineering Materials, 2011, 13, 237-244.	1.6	36
114	Focused ion beam and scanning electron microscopy for 3D materials characterization. MRS Bulletin, 2014, 39, 361-365.	1.7	36
115	Enhanced ionic conductivity in electroceramics by nanoscale enrichment of grain boundaries with high solute concentration. Nanoscale, 2017, 9, 17293-17302.	2.8	36
116	Influence of interface energies on solute partitioning mechanisms in doped aluminas. Acta Materialia, 2010, 58, 5097-5108.	3.8	35
117	Controlling the Relative Areas of Photocathodic and Photoanodic Terraces on the SrTiO₃(111) Surface. Chemistry of Materials, 2016, 28, 5155-5162.	3.2	35
118	The five-parameter grain boundary character distribution of nanocrystalline tungsten. Scripta Materialia, 2013, 69, 413-416.	2.6	34
119	High visible-light photochemical activity of titania decorated on single-wall carbon nanotube aerogels. RSC Advances, 2016, 6, 22285-22294.	1.7	34
120	Experimental Method for Determining Surface Energy Anisotropy and Its Application to Magnesia. Journal of the American Ceramic Society, 2000, 83, 1226-1232.	1.9	33
121	Determining Crystal Habits from Observations of Planar Sections. Journal of the American Ceramic Society, 2002, 85, 2799-2804.	1.9	33
122	Crystallographic Characteristics of Grain Boundaries in Dense Yttria-Stabilized Zirconia. International Journal of Applied Ceramic Technology, 2011, 8, 1218-1228.	1.1	32
123	Influence of grain boundary energy on the nucleation of complexion transitions. Scripta Materialia, 2014, 88, 1-4.	2.6	32
124	Conversion of Diaspore to Corundum: A New Î±â€Alumina Transformation Sequence. Journal of the American Ceramic Society, 1997, 80, 2677-2680.	1.9	31
125	Changes in the Grain Boundary Character and Energy Distributions Resulting from a Complexion Transition in Ca-Doped Yttria. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3532-3538.	1.1	31
126	Tail Departure of Log-Normal Grain Size Distributions in Synthetic Three-Dimensional Microstructures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 2810-2822.	1.1	31

#	Article	IF	Citations
127	Comparison of grain size distributions in a Ni-based superalloy in three and two dimensions using the Saltykov method. Scripta Materialia, 2012, 66, 554-557.	2.6	31
128	Complexion time-temperature-transformation (TTT) diagrams: Opportunities and challenges. Current Opinion in Solid State and Materials Science, 2016, 20, 316-323.	5.6	31
129	Experimental and simulated tunneling spectra of the polar ZnO surfaces. Surface Science, 1994, 318, 379-394.	0.8	30
130	Three-dimensional observations of grain volume changes during annealing of polycrystalline Ni. Acta Materialia, 2019, 167, 40-50.	3.8	30
131	Orientation and Phase Relationships between Titania Films and Polycrystalline BaTiO₃ Substrates as Determined by Electron Backscatter Diffraction Mapping. Journal of the American Ceramic Society, 2010, 93, 2530-2533.	1.9	29
132	Enhanced Photochemical Reactivity at the Ferroelectric Phase Transition in Ba_{1â^'x}Sr_xTiO₃. Journal of the American Ceramic Society, 2010, 93, 4129-4134.	1.9	29
133	Evolution of the Annealing Twin Density during Î´-Supersolvus Grain Growth in the Nickel-Based Superalloy Inconelâ„¢ 718. Metals, 2016, 6, 5.	1.0	29
134	Equilibrium crystal shape of Bi-saturated Cu crystals at 1223K. Acta Materialia, 2005, 53, 4057-4064.	3.8	28
135	â€œIntroduction to Grains, Phases, and Interfacesâ€”an Interpretation of Microstructure,â€• Trans. AIME, 1948, vol. 175, pp. 15â€“51, by C.S. Smith. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2010, 41, 457-494.	1.0	28
136	Textures and grain boundary character distributions in a cold rolled and annealed Pbâ€“Ca based alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3695-3706.	2.6	28
137	The Morphological Evolution of the MoO3(010) Surface during Reactions in Methanolâ€“Air Mixtures. Journal of Catalysis, 1998, 180, 270-278.	3.1	27
138	Mesoscale Simulation of the Evolution of the Grain Boundary Character Distribution. Materials Science Forum, 2004, 467-470, 1063-1068.	0.3	27
139	The influence of residual thermal stresses on the mechanical properties of multilayer Î±-Al2O3/TiCxN1â^'x coatings on WC/Co cutting tools. Surface and Coatings Technology, 2013, 215, 119-126.	2.2	27
140	Influence of <scp><scp>Y</scp></scp> and <scp><scp>La</scp></scp> Additions on Grain Growth and the Grainâ€Boundary Character Distribution of Alumina. Journal of the American Ceramic Society, 2014, 97, 622-630.	1.9	27
141	Identification of prismatic slip bands in 4H SiC boules grown by physical vapor transport. Journal of Electronic Materials, 2000, 29, L5-L8.	1.0	26
142	The most frequent interfaces in olivine aggregates: the GBCD and its importance for grain boundary related processes. Contributions To Mineralogy and Petrology, 2015, 170, 1.	1.2	26
143	Imaging surface/crystallographic shear plane intersections on the Mo18O52(100) surface using scanning tunneling microscopy. Surface Science, 1993, 292, 261-266.	0.8	25
144	Plastic Deformation and Residual Stresses in SiC Boules Grown by PVT. Materials Science Forum, 2000, 338-342, 67-70.	0.3	25

#	Article	IF	Citations
145	Surface engineering along the close-packed direction of SrTiO3. Journal of Crystal Growth, 2001, 225, 178-182.	0.7	25
146	The temperature dependence of the relative grainâ€boundary energy of yttriaâ€doped alumina. Journal of the American Ceramic Society, 2017, 100, 783-791.	1.9	25
147	Competitive Growth of Scrutinyite (Î±-PbO₂) and Rutile Polymorphs of SnO₂ on All Orientations of Columbite CoNb₂O₆ Substrates. Crystal Growth and Design, 2017, 17, 3929-3939.	1.4	25
148	Brightness degradation in electroluminescent ZnS:Cu. Solid State Ionics, 1999, 123, 19-24.	1.3	24
149	Topological characteristics of plane sections of polycrystals. Acta Materialia, 2010, 58, 3805-3814.	3.8	24
150	Grain boundary plane distributions in aluminas evolving by normal and abnormal grain growth and displaying different complexions. International Journal of Materials Research, 2010, 101, 50-56.	0.1	24
151	Combinatorial substrate epitaxy: a new approach to growth of complex metastable compounds. CrystEngComm, 2013, 15, 5434.	1.3	24
152	On the grain boundary network characteristics in a martensitic Tiâ€“6Alâ€“4V alloy. Journal of Materials Science, 2020, 55, 15299-15321.	1.7	24
153	Tunneling spectroscopic analysis of optically active wide band-gap semiconductors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1991, 9, 551.	1.6	23
154	Modeling the Influence of Orientation Texture on the Strength of WC?Co Composites. Journal of the American Ceramic Society, 2007, 90, 199-204.	1.9	23
155	The orientation dependence of the photochemical reactivity of BiVO₄. Journal of Materials Chemistry A, 2015, 3, 2370-2377.	5.2	23
156	The role of ceramic and glass science research in meeting societal challenges: Report from an <scp>NSF</scp>â€sponsored workshop. Journal of the American Ceramic Society, 2017, 100, 1777-1803.	1.9	23
157	Anti-thermal grain growth in SrTiO3: Coupled reduction of the grain boundary energy and grain growth rate constant. Acta Materialia, 2018, 149, 11-18.	3.8	23
158	Effect of Segregating Impurities on the Grainâ€Boundary Character Distribution of Magnesium Oxide. Journal of the American Ceramic Society, 2009, 92, 3044-3051.	1.9	22
159	The Role of Thermomechanical Routes on the Distribution of Grain Boundary and Interface Plane Orientations in Transformed Microstructures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 2781-2790.	1.1	22
160	The grain boundary character distribution of highly twinned nanocrystalline thin film aluminum compared to bulk microcrystalline aluminum. Journal of Materials Science, 2017, 52, 9819-9833.	1.7	22
161	Electrical Properties of Individual Zinc Oxide Grain Boundaries Determined by Spatially Resolved Tunneling Spectroscopy. Journal of the American Ceramic Society, 1990, 73, 3026-3032.	1.9	21
162	The geometric and electronic structure of the ZnO(0001Ì„) surface. Surface Science, 1991, 247, L195-L200.	0.8	21

#	Article	IF	Citations
163	Termination layer variations on the cleaved (0001) surface determined by scanning tunneling microscopy. Surface Science, 1993, 291, 395-401.	0.8	21
164	Formation of thermal decomposition cavities in physical vapor transport of silicon carbide. Journal of Electronic Materials, 2000, 29, 347-352.	1.0	21
165	Experimental Evidence for the Development of Bimodal Grain Size Distributions by the Nucleation-Limited Coarsening Mechanism. Journal of the American Ceramic Society, 2007, 90, 211-216.	1.9	21
166	Microstructure design of lead-free piezoelectric ceramics. Journal of the European Ceramic Society, 2013, 33, 313-326.	2.8	21
167	Grain-boundary character distribution and correlations with electrical and optoelectronic properties of CuInSe2 thin films. Acta Materialia, 2016, 118, 244-252.	3.8	21
168	Grain boundary character distribution in electroplated nanotwinned copper. Journal of Materials Science, 2017, 52, 4070-4085.	1.7	21
169	High-throughput measurement of the influence of pH on hydrogen production from BaTiO3/TiO2 core/shell photocatalysts. Applied Catalysis B: Environmental, 2020, 269, 118750.	10.8	21
170	Three-Dimensional Microstructure Reconstruction Using FIB-OIM. Materials Science Forum, 2007, 558-559, 915-920.	0.3	20
171	The Orientation Distributions of Lines, Surfaces, and Interfaces around Threeâ€Phase Boundaries in Solid Oxide Fuel Cell Cathodes. Journal of the American Ceramic Society, 2011, 94, 4045-4051.	1.9	20
172	Understanding materials microstructure and behavior at the mesoscale. MRS Bulletin, 2015, 40, 951-960.	1.7	20
173	Atomistic simulations of grain boundary energies in austenitic steel. Journal of Materials Science, 2019, 54, 5570-5583.	1.7	20
174	Grain boundary energy function for Î± iron. Materialia, 2021, 19, 101186.	1.3	20
175	Microstructure evolution of 316L stainless steel during solid-state additive friction stir deposition. Philosophical Magazine, 2022, 102, 618-633.	0.7	20
176	Ferroelastic domains improve photochemical reactivity: a comparative study of monoclinic and tetragonal (Bi_{1â^'0.5x}Na_{0.5x})(V_{1â^'x}Mo_x)O₄ ceramics. Journal of Materials Chemistry A, 2016, 4, 2951-2959.	5.2	19
177	Determination of the five parameter grain boundary character distribution of nanocrystalline alpha-zirconium thin films using transmission electron microscopy. Acta Materialia, 2017, 130, 164-176.	3.8	19
178	Atomistic simulations of grain boundary energies in tungsten. Materials Letters, 2017, 186, 116-118.	1.3	19
179	Probing the surface chemistry of polycrystalline ZnO with scanning tunneling microscopy and tunneling spectroscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1991, 9, 783.	1.6	18
180	Growth morphologies of heteroepitaxial rutile films on sapphire substrates. Journal of Crystal Growth, 1997, 174, 424-433.	0.7	18

#	Article	IF	Citations
181	Grain Boundary Plane Distributions in Modified 316 LN Steel Exposed at Elevated and Cryogenic Temperatures. Journal of Materials Science, 2007, 42, 9543-9547.	1.7	18
182	Copper crystals on the (11 $$f{ar{2}}$$ 0) sapphire plane: orientation relationships, triple line ridges and interface shape equilibrium. Journal of Materials Science, 2013, 48, 3013-3026.	1.7	18
183	Multidomain simulations of coated ferroelectrics exhibiting spatially selective photocatalytic activity with high internal quantum efficiencies. Journal of Materials Chemistry A, 2016, 4, 16085-16093.	5.2	18
184	Nano-Photoelectrochemical Cell Arrays with Spatially Isolated Oxidation and Reduction Channels. ACS Nano, 2017, 11, 2150-2159.	7.3	18
185	Influence of Diaspore Seeding and Chloride Concentration on the Transformation of â€œDiasporicâ€• Precursors to Corundum. Journal of the American Ceramic Society, 2001, 84, 1896-1902.	1.9	17
186	Eutaxial growth of hematite Fe2O3 films on perovskite SrTiO3 polycrystalline substrates. Thin Solid Films, 2013, 548, 220-224.	0.8	17
187	New insights into the interface characteristics of a duplex stainless steel subjected to accelerated ferrite-to-austenite transformation. Journal of Materials Science, 2020, 55, 5322-5339.	1.7	17
188	Evaluating Anisotropic Surface Energies Using the Capillarity Vector Reconstruction Method. Journal of Materials Science, 2001, 9, 35-42.	1.2	16
189	The Relationship between Grain Boundary Energy, Grain Boundary Complexion Transitions, and Grain Size in Ca-Doped Yttria. Materials Science Forum, 0, 753, 87-92.	0.3	16
190	The grain boundary stiffness and its impact on equilibrium shapes and boundary migration: Analysis of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si43.svg"><mml:mstyle mathvariant="normal"><mml:mi>Î£</mml:mi></mml:mstyle></mml:math>5, 7, 9, and 11 boundaries in Ni. Acta Materialia, 2021, 218, 117220.	3.8	16
191	Electrical conductivity in Pb(II)- and Na(I)-Pb(II)-Î²â€³-alumina. Journal of Solid State Chemistry, 1990, 85, 299-314.	1.4	15
192	The Structure Sensitivity of HxMoO3Precipitation on MoO3(010) during Reactions with Methanol. Journal of Catalysis, 1999, 184, 49-58.	3.1	15
193	Shape Evolution of SrTiO3 Crystals During Coarsening in a Titania-Rich Liquid. Journal of the American Ceramic Society, 2005, 88, 993-996.	1.9	15
194	Measuring Relative Grain-Boundary Energies in Block-Copolymer Microstructures. Physical Review Letters, 2012, 108, 107801.	2.9	15
195	Computational Model of Domain-Specific Reactivity on Coated Ferroelectric Photocatalysts. Journal of Physical Chemistry C, 2016, 120, 12673-12684.	1.5	15
196	Buried Charge at the TiO₂/SrTiO₃ (111) Interface and Its Effect on Photochemical Reactivity. ACS Applied Materials & Interfaces, 2017, 9, 7843-7851.	4.0	15
197	Spatial selectivity of photodeposition reactions on polar surfaces of centrosymmetric ferroelastic Î³-WO₃. Journal of Materials Chemistry A, 2017, 5, 8261-8266.	5.2	15
198	The inter-connections of â‹ 3 boundaries in pure iron. Scripta Materialia, 2017, 128, 18-22.	2.6	15

#	Article	IF	Citations
199	Grain boundary inter-connections in polycrystalline aluminum with random orientation. Materials Characterization, 2018, 144, 411-423.	1.9	15
200	Scanning Tunneling Microscopy and Crystal Chemical Models of the Na0.82WO3 (001) Surface. Journal of Solid State Chemistry, 1994, 109, 359-371.	1.4	14
201	Origin of Threading Dislocation Arrays in SiC Boules Grown by PVT. Materials Science Forum, 2000, 338-342, 477-480.	0.3	14
202	Microtexture and hardness of CVD deposited Î±-Al2O3 and TiCxN1âˆ'x coatings. International Journal of Refractory Metals and Hard Materials, 2009, 27, 458-464.	1.7	14
203	Effect of densification mechanism on the Î£2 grain boundary plane distribution in WCâ€“Co composites. Materials Letters, 2013, 92, 86-89.	1.3	14
204	Controlling the termination and photochemical reactivity of the SrTiO₃(110) surface. Physical Chemistry Chemical Physics, 2017, 19, 7910-7918.	1.3	14
205	Five-parameter crystallographic characteristics of the interfaces formed during ferrite to austenite transformation in a duplex stainless steel. Philosophical Magazine, 2018, 98, 1284-1306.	0.7	14
206	Modeling the interface area aspect ratio of carbide grains in WCâ€“Co composites. International Journal of Refractory Metals and Hard Materials, 2014, 44, 7-11.	1.7	13
207	Grain size dependence of the twin length fraction in nanocrystalline Cu thin films via transmission electron microscopy based orientation mapping. Journal of Materials Research, 2015, 30, 528-537.	1.2	13
208	Recrystallization of Single-Phase Alloys. , 2017, , 245-304.		13
209	Influence of the Magnitude of Ferroelectric Domain Polarization on the Photochemical Reactivity of BaTiO₃. ACS Applied Materials & Interfaces, 2018, 10, 41450-41457.	4.0	13
210	Importance of outliers: A three-dimensional study of coarsening in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> -phase iron. Physical Review Materials, 2019, 3, .	0.9	13
211	Statistical behaviour of interfaces subjected to curvature flow and torque effects applied to microstructural evolutions. Acta Materialia, 2022, 222, 117459.	3.8	13
212	Five-Parameter Grain Boundary Character Distribution in Fe-1%Si. Materials Science Forum, 2004, 467-470, 727-732.	0.3	12
213	Crystallographic Distribution of Internal Interfaces in Spinel Polycrystals. Materials Science Forum, 2004, 467-470, 783-788.	0.3	12
214	Influence of Dipolar Fields on the Photochemical Reactivity of Thin Titania Films on BaTiO3 Substrates. Journal of the American Ceramic Society, 2006, 89, 060623005134019-???.	1.9	12
215	Growth of Ca2MnO4 Ruddlesden-Popper structured thin films using combinatorial substrate epitaxy. Journal of Applied Physics, 2014, 116, .	1.1	12
216	Pulsed laser deposition of Sr2FeMoO6thin films grown on spark plasma sintered Sr2MgWO6substrates. Journal Physics D: Applied Physics, 2017, 50, 235301.	1.3	12

#	Article	IF	Citations
217	Influence of pH and Surface Orientation on the Photochemical Reactivity of SrTiO₃. ACS Applied Materials & Interfaces, 2020, 12, 23617-23626.	4.0	12
218	Anisotropic grain boundary area and energy distributions in tungsten. Scripta Materialia, 2022, 209, 114384.	2.6	12
219	Importance of interfacial step alignment in hetero-epitaxy and orientation relationships: the case of Ag equilibrated on Ni substrates. Part 2 experiments. Journal of Materials Science, 2015, 50, 5276-5285.	1.7	11
220	Static Softening in a Ni-30Fe Austenitic Model Alloy After Hot Deformation: Microstructure and Texture Evolution. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 855-867.	1.1	11
221	The role of phase transformation mechanism on the grain boundary network in a commercially pure titanium. Materials Characterization, 2020, 169, 110640.	1.9	11
222	Inhibition of Sintering and Surface Area Loss in Phosphorus-Doped Corundum Derived from Diaspore. Journal of the American Ceramic Society, 2002, 85, 2325-2330.	1.9	10
223	Distribution of Grain Boundary Planes at Coincident Site Lattice Misorientations. Materials Research Society Symposia Proceedings, 2004, 819, N7.2.1.	0.1	10
224	Anisotropic phenomena at interfaces in bismuthâ€“saturated copper. Scripta Materialia, 2004, 50, 565-569.	2.6	10
225	Three-dimensional digital approximations of grain boundary networks in polycrystals. Modelling and Simulation in Materials Science and Engineering, 2014, 22, 025017.	0.8	10
226	Grain boundary inter-connections of â^5 boundaries in a high purity iron with a uniform microstructure. Scripta Materialia, 2019, 170, 62-66.	2.6	10
227	Grain boundary curvatures in polycrystalline SrTiO 3 : Dependence on grain size, topology, and crystallography. Journal of the American Ceramic Society, 2019, 102, 7003-7014.	1.9	10
228	Determining grain boundary energies from triple junction geometries without discretizing the five-parameter space. Acta Materialia, 2019, 166, 126-134.	3.8	10
229	Monte Carlo simulations of Mg(Al)O solid solutions based on crystal chemical rules. Chemistry of Materials, 1994, 6, 501-507.	3.2	9
230	A Microscopic Evaluation of the Surface Structure of OMVPE Deposited Î±-GaN Epilayers. Materials Research Society Symposia Proceedings, 1995, 395, 381.	0.1	9
231	The Relationship Between Micropipes and Screw Dislocations in Pvt Grown 6H-Sic. Materials Research Society Symposia Proceedings, 1996, 423, 539.	0.1	9
232	Distribution of misorientations and grain boundary planes in grain boundary engineered brass. Materials Science and Technology, 2005, 21, 1287-1292.	0.8	9
233	Effect of plastic deformation on the Î£2 grain boundary plane distribution in WCâ€“Co cemented carbides. International Journal of Refractory Metals and Hard Materials, 2014, 47, 38-43.	1.7	9
234	The Orientation Dependence of the Photochemical Activity of Î±â€Fe 2 O 3. Journal of the American Ceramic Society, 2016, 99, 2428-2435.	1.9	9

#	Article	IF	Citations
235	Three-dimensional characteristics of the grain boundary networks of conventional and grain boundary engineered 316L stainless steel. Materials Characterization, 2017, 133, 60-69.	1.9	9
236	Mobility and Migration of Boundaries. , 2017, , 145-197.		9
237	The effect of pH on the photochemical reactivity of BaTiO3. Surface Science, 2018, 675, 83-90.	0.8	9
238	Five-parameter grain boundary characterisation of randomly textured AZ31 Mg alloy. Philosophical Magazine, 2020, 100, 456-466.	0.7	9
239	Effect of manganese on the grain boundary network of lath martensite in precipitation hardenable stainless steels. Journal of Alloys and Compounds, 2021, 886, 161333.	2.8	9
240	The reactivity of selected divalent Î²â€³-aluminas with water. Materials Research Bulletin, 1988, 23, 1747-1755.	2.7	8
241	Orientation Distribution of Î£3 Grain Boundary Planes in Ni before and after Grain Boundary Engineering. Materials Science Forum, 2007, 558-559, 641-647.	0.3	8
242	Orientation relationships of copper crystals on sapphire (1 0 1Ì„ 0) m-plane and (1 0 1Ì„ 2) r-plane substrates. Journal of Crystal Growth, 2015, 418, 57-63.	0.7	8
243	Control of Recrystallization. , 2017, , 527-567.		8
244	Grain Growth Following Recrystallization. , 2017, , 375-429.		8
245	Recrystallization of Two-Phase Alloys. , 2017, , 321-359.		8
246	Hot Deformation and Dynamic Restoration. , 2017, , 469-508.		8
247	The Facet Structure and Photochemical Reactivity of Arbitrarily Oriented Strontium Titanate Surfaces. Advanced Materials Interfaces, 2019, 6, 1900731.	1.9	8
248	Measurement of the Five-Parameter Grain Boundary Distribution from Planar Sections. , 2009, , 215-229.		8
249	Reconstruction and simplification of high-quality multiple-region models from planar sections. Engineering With Computers, 2009, 25, 221-235.	3.5	7
250	Crystallography of Interfaces and Grain Size Distributions in <scp><scp>Sr</scp></scp>â€Doped <scp><scp>LaMnO</scp></scp>₃. Journal of the American Ceramic Society, 2014, 97, 2623-2630.	1.9	7
251	The Structure and Energy of Grain Boundaries. , 2017, , 109-143.		7
252	Recovery After Deformation. , 2017, , 199-244.		7

#	Article	IF	Citations
253	Quantitative differences in the Y grain boundary excess at boundaries delimiting large and small grains in Y doped Al2O3. Journal of the European Ceramic Society, 2018, 38, 1829-1835.	2.8	7
254	Metastable monoclinic [110] layered perovskite Dy₂Ti₂O₇ thin films for ferroelectric applications. RSC Advances, 2019, 9, 19895-19904.	1.7	7
255	Habit planes of twins in a deformed Mg alloy determined from three-dimensional microstructure analysis. Materials Characterization, 2020, 159, 110014.	1.9	7
256	Hydration of selected divalent .beta.''-aluminas. Chemistry of Materials, 1991, 3, 325-332.	3.2	6
257	Direct measurement of local properties of interfaces with scanning tunneling microscopy. Acta Metallurgica Et Materialia, 1992, 40, S161-S171.	1.9	6
258	The Structural Evolution Of Lely Seeds During The Initial Stages Of Sic Sublimation Growth. Materials Research Society Symposia Proceedings, 1997, 483, 295.	0.1	6
259	The Structural Evolution of Seed Surfaces During the Initial Stages of Physical Vapor Transport SiC Growth. Materials Science Forum, 1998, 264-268, 37-40.	0.3	6
260	A Model for the Origin of Anisotropic Grain Boundary Character Distributions in Polycrystalline Materials. Ceramic Transactions, 2008, , 343-353.	0.1	6
261	Preferential orientation relationships in Ca2MnO4 Ruddlesden-Popper thin films. Journal of Applied Physics, 2015, 118, .	1.1	6
262	Spatially selective photochemical activity on surfaces of ferroelastics with local polarization. Semiconductor Science and Technology, 2017, 32, 103001.	1.0	6
263	Continuous Recrystallization During and After Large Strain Deformation. , 2017, , 509-526.		6
264	Influence of particle size and shape on the rate of hydrogen produced by Alâ€doped SrTiO₃ photocatalysts. Journal of the American Ceramic Society, 2022, 105, 5336-5346.	1.9	6
265	Detection of Optically Excited States in Wide-Band-Gap Semiconductors with Tunneling Spectroscopy. Journal of the American Ceramic Society, 1990, 73, 3257-3263.	1.9	5
266	Structure and properties of tin(II)-.beta.''-alumina. Chemistry of Materials, 1990, 2, 395-403.	3.2	5
267	Photochemical Reduction and Oxidation Reactions on Barium Titanate Surfaces. Materials Research Society Symposia Proceedings, 2000, 654, 741.	0.1	5
268	Changes in the distribution of interfaces in PMN-35 mol% PT as a function of time. International Journal of Materials Research, 2005, 96, 207-210.	0.8	5
269	Grain Boundary Plane Distributions in a Hot Rolled 5A06 Aluminum Alloy. Advanced Engineering Materials, 2014, 16, 1105-1110.	1.6	5
270	The role of thermomechanical processing routes on the grain boundary network of martensite in Tiâ€“6Alâ€“4V. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 822, 141665.	2.6	5

#	Article	IF	Citations
271	The influence of parent austenite characteristics on the intervariant boundary network in a lath martensitic steel. Journal of Materials Science, 2022, 57, 8904-8923.	1.7	5
272	The effect of thermal history on the ionic conductivity of Pb(II)-Î²â€³-alumina. Solid State Ionics, 1988, 28-30, 354-357.	1.3	4
273	Grain Boundary Energy and Grain Growth in Highly-Textured Al Films and Foils: Experiment and Simulation. Materials Science Forum, 2005, 495-497, 1255-1260.	0.3	4
274	Evolution of Microstructure in Pure Nickel during Processing for Grain Boundary Engineering. Materials Science Forum, 2013, 753, 97-100.	0.3	4
275	The Deformed State. , 2017, , 13-79.		4
276	Three-dimensional geometrical and topological characteristics of grains in conventional and grain boundary engineered 316L stainless steel. Micron, 2018, 109, 58-70.	1.1	4
277	Combinatorial substrate epitaxy investigation of polytypic growth of AEMnO₃ (AEÂ=ÂCa, Sr). Journal of the American Ceramic Society, 2020, 103, 2225-2234.	1.9	4
278	Grain boundary energies in yttriaâ€stabilized zirconia. Journal of the American Ceramic Society, 2022, 105, 2925-2931.	1.9	4
279	Defect formation in silver(I), lead(II), tin(II) and bismuth(III) .beta."-aluminas. Chemistry of Materials, 1989, 1, 438-444.	3.2	3
280	The Formation of Super-Disolcation/Micropipe Complexes in 6H-SiC. Materials Science Forum, 1998, 264-268, 371-374.	0.3	3
281	Extraction of Grain Boundary Energies from Triple Junction Geometry. Microscopy and Microanalysis, 1999, 5, 230-231.	0.2	3
282	Orientation Dependence of Photochemical Reduction Reactions on SrTiO₃ Surfaces. Materials Research Society Symposia Proceedings, 2002, 751, 1.	0.1	3
283	Effect of Anisotropic Interfacial Energy on Grain Boundary Distributions during Grain Growth. Materials Science Forum, 2004, 467-470, 733-738.	0.3	3
284	Grain boundary plane distributions in a cold rolled and annealed high purity iron. Materials Characterization, 2016, 122, 6-13.	1.9	3
285	Three-dimensional study of twin boundaries in conventional and grain boundary-engineered 316L stainless steels. Journal of Materials Research, 2018, 33, 1742-1754.	1.2	3
286	Growth and orientation relationships of Ni and Cu films annealed on slightly miscut <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si4.gif" overflow="scroll"><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:mn>1</mml:mn><mml:mspace width="5.0pt") Tj ETQq0 0 0 rgBT /Overlock 10 T 750 137 3Td (/><mn	1.7	3
287	On the grain boundary network characteristics in a dual phase steel. Journal of Materials Science, 2021, 56, 19674-19686.	1.7	3
288	Three-Dimensional FIB-OIM of Ceramic Materials. Ceramic Transactions, 0, , 117-124.	0.1	3

#	Article	IF	Citations
289	GRAIN BOUNDARY PLANE DISTRIBUTIONS IN 304 STEEL ANNEALED AT HIGH TEMPERATURE AFTER A PARALLEL PROCESSING OF MULTIPLE FORGING AND DIRECT ROLLING. Jinshu Xuebao/Acta Metallurgica Sinica, 2012, 48, 895.	0.3	3
290	Comparison of simulated and measured grain volume changes during grain growth. Physical Review Materials, 2022, 6, .	0.9	3
291	A Scanning Tunneling Microscopy Study of the Reduced Tio2(110)Surface. Materials Research Society Symposia Proceedings, 1990, 209, 611.	0.1	2
292	Nucleation of Dislocations during Physical Vapor Transport Growth of Silicon Carbide. Materials Science Forum, 2000, 338-342, 63-66.	0.3	2
293	Thermal Decomposition Cavities in Physical Vapor Transport Grown SiC. Materials Science Forum, 2000, 338-342, 55-58.	0.3	2
294	Crystallographic Distribution of Low Angle Grain Boundary Planes in Magnesium Oxide. Materials Science Forum, 2002, 408-412, 1705-1710.	0.3	2
295	Segregation of Calcium to Magnesium Oxide Grain Boundaries. Materials Science Forum, 2004, 467-470, 789-794.	0.3	2
296	Microstructural Characterization of Hard Ceramics. , 2014, , 265-284.		2
297	Recrystallization of Ordered Materials. , 2017, , 305-320.		2
298	Influence of surface orientation on the photochemical reactivity of CaTiO 3. Journal of the American Ceramic Society, 2020, 103, 4498-4506.	1.9	2
299	Influence of orientation and ferroelectric domains on the photochemical reactivity of La2Ti2O7. Journal of the European Ceramic Society, 2021, 41, 319-325.	2.8	2
300	Epitaxial Phase Stability of SrMnO_{3â€“x} Films on Polycrystalline Perovskite Substrates. Crystal Growth and Design, 2021, 21, 4547-4555.	1.4	2
301	The Synthesis of an Interstratified Layered Oxide from Exfoliated Precursors. Materials Research Society Symposia Proceedings, 1994, 371, 187.	0.1	1
302	Distributions of Grain Boundary Normals in the Laboratory Reference Frame. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 2591-2595.	1.1	1
303	Computer Modeling and Simulation ofÂAnnealing. , 2017, , 569-604.		1
304	Deformation Textures. , 2017, , 81-107.		1
305	Influence of step structure on preferred orientation relationships of Ag deposited on Ni(111). Acta Materialia, 2020, 200, 287-296.	3.8	1
306	The influence of singular surfaces and morphological changes on coarsening. International Journal of Materials Research, 2005, 96, 191-196.	0.8	1

#	Article	IF	Citations
307	Evolution of the Grain Boundary Character Distribution in Strontium Titanate during Grain Growth. Ceramic Transactions, 0, , 335-342.	0.1	1
308	The geometric and electronic structure of the surface. Surface Science Letters, 1991, 247, L195-L200.	0.1	0
309	Imaging surface/crystallographic shear plane intersections on the Mo18O52(100) surface using scanning tunneling microscopy. Surface Science Letters, 1993, 292, A611.	0.1	0
310	Experimental and Simulated Scanning Tunneling Microscopy of the Cleaved Rb1/3WO3 (0001) Surface. Materials Research Society Symposia Proceedings, 1994, 332, 501.	0.1	0
311	Imaging The Atomic-Scale Structure of Molybdenum and Vanadium Oxides by Scanning Tunneling Microscopy. Materials Research Society Symposia Proceedings, 1994, 332, 507.	0.1	0
312	The Atomic-Scale Characterization of Defects on Cleaved Vanadium and Molybdenum Oxide Surfaces Using Stm. Materials Research Society Symposia Proceedings, 1994, 357, 79.	0.1	0
313	The Partial Oxidation of Methanol by MoO3(010) Surfaces with Controlled Defect Distributions. Materials Research Society Symposia Proceedings, 1997, 497, 53.	0.1	0
314	Structural Characterization of SiC Crystals Grown by Physical Vapor Transport. Materials Science Forum, 1998, 264-268, 433-436.	0.3	0
315	Surface Defects in GaN and Al_xGa_{1-x}N Epilayers Deposited on Sapphire by Organometallic Vapor Phase Epitaxy. Materials Science Forum, 1998, 264-268, 1251-1254.	0.3	0
316	The Influence of Surface Termination and Domain Structure on the Photochemical Reactivity of SrTiO3 and BaTiO3. Microscopy and Microanalysis, 2001, 7, 1062-1063.	0.2	0
317	Photochemical Reactivity of Sr2Nb2O7 and Sr2Ta2O7 as a Function of Surface Orientation. Materials Research Society Symposia Proceedings, 2002, 755, 1.	0.1	0
318	Orientation Dependence of the Photochemical Reactivity of BaTi4O9. Materials Research Society Symposia Proceedings, 2002, 755, 1.	0.1	0
319	Synthesizing Annealing Twins in Three-Dimensional Voxel-Based Microstructures. Materials Science Forum, 2012, 715-716, 549-549.	0.3	0
320	Role of Inclination Dependent Anisotropy on Boundary Populations during Two-Dimensional Grain Growth. Materials Science Forum, 2012, 715-716, 697-702.	0.3	0
321	Correlated Electron Microscopy across Length Scales to Elucidate Structural, Electrical and Chemical Properties of Oxide Grain Boundaries. Microscopy and Microanalysis, 2017, 23, 334-335.	0.2	0
322	The Growth and Stability of Cellular Microstructures. , 2017, , 361-373.		0
323	Using Three-Dimensional Electron Backscatter Diffraction Data to Measure Grain Boundary Properties in Metals and Ceramics. Microscopy and Microanalysis, 2018, 24, 810-811.	0.2	0
324	High-Throughput Study of Trivalent Doped SrTiO3 for Photocatalytic Overall Water Splitting. ECS Meeting Abstracts, 2021, MA2021-02, 1307-1307.	0.0	0