

# Gregory Rohrer

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

322  
papers

11,254  
citations

57  
h-index

92  
g-index

331  
ext. papers

12,418  
ext. citations

5  
avg. IF

6.71  
L-index

#	Paper	IF	Citations
322	Grain boundary energies in yttria-stabilized zirconia. <i>Journal of the American Ceramic Society</i> , <b>2022</b> , 105, 2925-2931	3.8	0
321	Evolution of microstructure and mechanical properties in 2205 duplex stainless steels during additive manufacturing and heat treatment. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2022</b> , 835, 142695	5.3	1
320	Anisotropic grain boundary area and energy distributions in tungsten. <i>Scripta Materialia</i> , <b>2022</b> , 209, 114384	3.4	3
319	Comparison of simulated and measured grain volume changes during grain growth. <i>Physical Review Materials</i> , <b>2022</b> , 6,	3.2	1
318	Microstructure evolution of 316L stainless steel during solid-state additive friction stir deposition. <i>Philosophical Magazine</i> , <b>2022</b> , 102, 618-633	1.6	3
317	The influence of parent austenite characteristics on the intervariant boundary network in a lath martensitic steel. <i>Journal of Materials Science</i> , <b>2022</b> , 57, 8904-8923	4.3	0
316	High-Throughput Study of Trivalent Doped SrTiO <sub>3</sub> for Photocatalytic Overall Water Splitting. <i>ECS Meeting Abstracts</i> , <b>2021</b> , MA2021-02, 1307-1307	0	
315	Grain boundary velocity and curvature are not correlated in Ni polycrystals. <i>Science</i> , <b>2021</b> , 374, 189-193	33.3	13
314	Statistical behaviour of interfaces subjected to curvature flow and torque effects applied to microstructural evolutions. <i>Acta Materialia</i> , <b>2021</b> , 222, 117459	8.4	1
313	Epitaxial Phase Stability of SrMnO <sub>3</sub> Films on Polycrystalline Perovskite Substrates. <i>Crystal Growth and Design</i> , <b>2021</b> , 21, 4547-4555	3.5	
312	Influence of orientation and ferroelectric domains on the photochemical reactivity of La <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> . <i>Journal of the European Ceramic Society</i> , <b>2021</b> , 41, 319-325	6	1
311	Grain boundary character distribution in an additively manufactured austenitic stainless steel. <i>Scripta Materialia</i> , <b>2021</b> , 192, 115-119	5.6	14
310	The role of thermomechanical processing routes on the grain boundary network of martensite in Ti <sub>6</sub> Al <sub>4</sub> V. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 822, 141665	5.3	1
309	Grain boundary energy function for Iron. <i>Materialia</i> , <b>2021</b> , 19, 101186	3.2	3
308	The grain boundary stiffness and its impact on equilibrium shapes and boundary migration: Analysis of the $\Sigma$ 7, 9, and 11 boundaries in Ni. <i>Acta Materialia</i> , <b>2021</b> , 218, 117220	8.4	5
307	Effect of manganese on the grain boundary network of lath martensite in precipitation hardenable stainless steels. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 886, 161333	5.7	1
306	Influence of step structure on preferred orientation relationships of Ag deposited on Ni(111). <i>Acta Materialia</i> , <b>2020</b> , 200, 287-296	8.4	1

305	High-throughput measurement of the influence of pH on hydrogen production from BaTiO <sub>3</sub> /TiO <sub>2</sub> core/shell photocatalysts. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 269, 118750	21.8	15
304	New insights into the interface characteristics of a duplex stainless steel subjected to accelerated ferrite-to-austenite transformation. <i>Journal of Materials Science</i> , <b>2020</b> , 55, 5322-5339	4.3	6
303	Influence of pH and Surface Orientation on the Photochemical Reactivity of SrTiO. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 23617-23626	9.5	5
302	Grain Boundary Complexion Transitions. <i>Annual Review of Materials Research</i> , <b>2020</b> , 50, 465-492	12.8	39
301	Combinatorial substrate epitaxy investigation of polytypic growth of AEMnO <sub>3</sub> (A=Ca, Sr). <i>Journal of the American Ceramic Society</i> , <b>2020</b> , 103, 2225-2234	3.8	2
300	Five-parameter grain boundary characterisation of randomly textured AZ31 Mg alloy. <i>Philosophical Magazine</i> , <b>2020</b> , 100, 456-466	1.6	4
299	Habit planes of twins in a deformed Mg alloy determined from three-dimensional microstructure analysis. <i>Materials Characterization</i> , <b>2020</b> , 159, 110014	3.9	5
298	The role of phase transformation mechanism on the grain boundary network in a commercially pure titanium. <i>Materials Characterization</i> , <b>2020</b> , 169, 110640	3.9	4
297	On the grain boundary network characteristics in a martensitic Ti-6Al-4V alloy. <i>Journal of Materials Science</i> , <b>2020</b> , 55, 15299-15321	4.3	8
296	Influence of surface orientation on the photochemical reactivity of CaTiO <sub>3</sub> . <i>Journal of the American Ceramic Society</i> , <b>2020</b> , 103, 4498-4506	3.8	1
295	Three-dimensional observations of grain volume changes during annealing of polycrystalline Ni. <i>Acta Materialia</i> , <b>2019</b> , 167, 40-50	8.4	20
294	Metastable monoclinic [110] layered perovskite DyTiO thin films for ferroelectric applications.. <i>RSC Advances</i> , <b>2019</b> , 9, 19895-19904	3.7	4
293	Grain boundary inter-connections of $\Sigma$ boundaries in a high purity iron with a uniform microstructure. <i>Scripta Materialia</i> , <b>2019</b> , 170, 62-66	5.6	7
292	Grain boundary curvatures in polycrystalline SrTiO <sub>3</sub> : Dependence on grain size, topology, and crystallography. <i>Journal of the American Ceramic Society</i> , <b>2019</b> , 102, 7003-7014	3.8	7
291	The Facet Structure and Photochemical Reactivity of Arbitrarily Oriented Strontium Titanate Surfaces. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1900731	4.6	4
290	Importance of outliers: A three-dimensional study of coarsening in $\beta$ phase iron. <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	8
289	Determining grain boundary energies from triple junction geometries without discretizing the five-parameter space. <i>Acta Materialia</i> , <b>2019</b> , 166, 126-134	8.4	6
288	Growth and orientation relationships of Ni and Cu films annealed on slightly miscut (11 $\bar{0}$ 2) r-sapphire substrates. <i>Journal of Crystal Growth</i> , <b>2019</b> , 508, 24-33	1.6	2

287	Atomistic simulations of grain boundary energies in austenitic steel. <i>Journal of Materials Science</i> , <b>2019</b> , 54, 5570-5583	4.3	11
286	Anti-thermal grain growth in SrTiO <sub>3</sub> : Coupled reduction of the grain boundary energy and grain growth rate constant. <i>Acta Materialia</i> , <b>2018</b> , 149, 11-18	8.4	18
285	Three-dimensional geometrical and topological characteristics of grains in conventional and grain boundary engineered 316L stainless steel. <i>Micron</i> , <b>2018</b> , 109, 58-70	2.3	2
284	Five-parameter crystallographic characteristics of the interfaces formed during ferrite to austenite transformation in a duplex stainless steel. <i>Philosophical Magazine</i> , <b>2018</b> , 98, 1284-1306	1.6	11
283	Effect of ferrite-to-austenite phase transformation path on the interface crystallographic character distributions in a duplex stainless steel. <i>Acta Materialia</i> , <b>2018</b> , 145, 196-209	8.4	55
282	The effect of pH on the photochemical reactivity of BaTiO <sub>3</sub> . <i>Surface Science</i> , <b>2018</b> , 675, 83-90	1.8	7
281	Grain boundary inter-connections in polycrystalline aluminum with random orientation. <i>Materials Characterization</i> , <b>2018</b> , 144, 411-423	3.9	10
280	Quantitative differences in the $\gamma$ grain boundary excess at boundaries delimiting large and small grains in $\gamma$ doped Al <sub>2</sub> O <sub>3</sub> . <i>Journal of the European Ceramic Society</i> , <b>2018</b> , 38, 1829-1835	6	6
279	Influence of the Magnitude of Ferroelectric Domain Polarization on the Photochemical Reactivity of BaTiO. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 41450-41457	9.5	12
278	Piezotronic modulations in electro- and photochemical catalysis. <i>MRS Bulletin</i> , <b>2018</b> , 43, 946-951	3.2	35
277	Using Three-Dimensional Electron Backscatter Diffraction Data to Measure Grain Boundary Properties in Metals and Ceramics. <i>Microscopy and Microanalysis</i> , <b>2018</b> , 24, 810-811	0.5	
276	Three-dimensional study of twin boundaries in conventional and grain boundary-engineered 316L stainless steels. <i>Journal of Materials Research</i> , <b>2018</b> , 33, 1742-1754	2.5	3
275	Five-parameter intervariant boundary characterization of martensite in commercially pure titanium. <i>Acta Materialia</i> , <b>2018</b> , 154, 147-160	8.4	49
274	The Role of Thermomechanical Routes on the Distribution of Grain Boundary and Interface Plane Orientations in Transformed Microstructures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2017</b> , 48, 2781-2790	2.3	12
273	On the crystallographic characteristics of nanobainitic steel. <i>Acta Materialia</i> , <b>2017</b> , 127, 426-437	8.4	32
272	Nano-Photoelectrochemical Cell Arrays with Spatially Isolated Oxidation and Reduction Channels. <i>ACS Nano</i> , <b>2017</b> , 11, 2150-2159	16.7	16
271	Static Softening in a Ni-30Fe Austenitic Model Alloy After Hot Deformation: Microstructure and Texture Evolution. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2017</b> , 48, 855-867	2.3	5
270	Buried Charge at the TiO/SrTiO (111) Interface and Its Effect on Photochemical Reactivity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 7843-7851	9.5	9

269	Controlling the termination and photochemical reactivity of the SrTiO(110) surface. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 7910-7918	3.6	12
268	Pulsed laser deposition of Sr <sub>2</sub> FeMoO <sub>6</sub> thin films grown on spark plasma sintered Sr <sub>2</sub> MgWO <sub>6</sub> substrates. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 235301	3	9
267	Spatial selectivity of photodeposition reactions on polar surfaces of centrosymmetric ferroelastic BiWO <sub>3</sub> . <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 8261-8266	13	11
266	The role of ceramic and glass science research in meeting societal challenges: Report from an NSF-sponsored workshop. <i>Journal of the American Ceramic Society</i> , <b>2017</b> , 100, 1777-1803	3.8	17
265	The grain boundary character distribution of highly twinned nanocrystalline thin film aluminum compared to bulk microcrystalline aluminum. <i>Journal of Materials Science</i> , <b>2017</b> , 52, 9819-9833	4.3	12
264	Determination of the five parameter grain boundary character distribution of nanocrystalline alpha-zirconium thin films using transmission electron microscopy. <i>Acta Materialia</i> , <b>2017</b> , 130, 164-176	8.4	15
263	Grain boundary character distribution in electroplated nanotwinned copper. <i>Journal of Materials Science</i> , <b>2017</b> , 52, 4070-4085	4.3	13
262	Enhanced ionic conductivity in electroceramics by nanoscale enrichment of grain boundaries with high solute concentration. <i>Nanoscale</i> , <b>2017</b> , 9, 17293-17302	7.7	30
261	Three-dimensional characteristics of the grain boundary networks of conventional and grain boundary engineered 316L stainless steel. <i>Materials Characterization</i> , <b>2017</b> , 133, 60-69	3.9	8
260	Segregation-induced ordered superstructures at general grain boundaries in a nickel-bismuth alloy. <i>Science</i> , <b>2017</b> , 358, 97-101	33.3	96
259	The Deformed State <b>2017</b> , 13-79		2
258	Mobility and Migration of Boundaries <b>2017</b> , 145-197		4
257	Recovery After Deformation <b>2017</b> , 199-244		3
256	Recrystallization of Single-Phase Alloys <b>2017</b> , 245-304		5
255	Recrystallization of Ordered Materials <b>2017</b> , 305-320		
254	Grain Growth Following Recrystallization <b>2017</b> , 375-429		6
253	Recrystallization Textures <b>2017</b> , 431-468		20
252	Recrystallization of Two-Phase Alloys <b>2017</b> , 321-359		2

251	The Growth and Stability of Cellular Microstructures <b>2017</b> , 361-373		
250	Hot Deformation and Dynamic Restoration <b>2017</b> , 469-508		5
249	Control of Recrystallization <b>2017</b> , 527-567		6
248	Spatially selective photochemical activity on surfaces of ferroelastics with local polarization. <i>Semiconductor Science and Technology</i> , <b>2017</b> , 32, 103001	1.8	5
247	The five-parameter grain boundary curvature distribution in an austenitic and ferritic steel. <i>Acta Materialia</i> , <b>2017</b> , 123, 136-145	8.4	33
246	The temperature dependence of the relative grain-boundary energy of yttria-doped alumina. <i>Journal of the American Ceramic Society</i> , <b>2017</b> , 100, 783-791	3.8	16
245	The inter-connections of $\Sigma$ boundaries in pure iron. <i>Scripta Materialia</i> , <b>2017</b> , 128, 18-22	5.6	12
244	Atomistic simulations of grain boundary energies in tungsten. <i>Materials Letters</i> , <b>2017</b> , 186, 116-118	3.3	8
243	Correlated Electron Microscopy across Length Scales to Elucidate Structural, Electrical and Chemical Properties of Oxide Grain Boundaries. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 334-335	0.5	
242	The Structure and Energy of Grain Boundaries <b>2017</b> , 109-143		3
241	Continuous Recrystallization During and After Large Strain Deformation <b>2017</b> , 509-526		3
240	Competitive Growth of Scrutinyite ( $\text{PbO}_2$ ) and Rutile Polymorphs of $\text{SnO}_2$ on All Orientations of Columbite $\text{CoNb}_2\text{O}_6$ Substrates. <i>Crystal Growth and Design</i> , <b>2017</b> , 17, 3929-3939	3.5	19
239	Controlling the Relative Areas of Photocathodic and Photoanodic Terraces on the $\text{SrTiO}_3(111)$ Surface. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 5155-5162	9.6	26
238	Grain boundary plane distributions in a cold rolled and annealed high purity iron. <i>Materials Characterization</i> , <b>2016</b> , 122, 6-13	3.9	3
237	The Orientation Dependence of the Photochemical Activity of $\text{Fe}_2\text{O}_3$ . <i>Journal of the American Ceramic Society</i> , <b>2016</b> , 99, 2428-2435	3.8	9
236	Computational Model of Domain-Specific Reactivity on Coated Ferroelectric Photocatalysts. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 12673-12684	3.8	15
235	Expanding time-temperature-transformation (TTT) diagrams to interfaces: A new approach for grain boundary engineering. <i>Acta Materialia</i> , <b>2016</b> , 106, 78-86	8.4	58
234	The role of grain boundary energy in grain boundary complexion transitions. <i>Current Opinion in Solid State and Materials Science</i> , <b>2016</b> , 20, 231-239	12	41

233	High visible-light photochemical activity of titania decorated on single-wall carbon nanotube aerogels. <i>RSC Advances</i> , <b>2016</b> , 6, 22285-22294	3.7	30
232	Ferroelastic domains improve photochemical reactivity: a comparative study of monoclinic and tetragonal (Bi <sub>1-0.5x</sub> Na <sub>0.5x</sub> )(V <sub>1-x</sub> Mox)O <sub>4</sub> ceramics. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 2951-2959	13	15
231	Evolution of the Annealing Twin Density during $\beta$ -Supersolvus Grain Growth in the Nickel-Based Superalloy Inconel $\gamma$ 18. <i>Metals</i> , <b>2016</b> , 6, 5	2.3	18
230	The five parameter grain boundary character distribution of $\beta$ Ti determined from three-dimensional orientation data. <i>Acta Materialia</i> , <b>2016</b> , 111, 22-30	8.4	48
229	Complexion time-temperature-transformation (TTT) diagrams: Opportunities and challenges. <i>Current Opinion in Solid State and Materials Science</i> , <b>2016</b> , 20, 316-323	12	20
228	Distributions of Grain Boundary Normals in the Laboratory Reference Frame. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2016</b> , 47, 2591-2595	2.3	1
227	Multidomain simulations of coated ferroelectrics exhibiting spatially selective photocatalytic activity with high internal quantum efficiencies. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 16085-16093	13	17
226	Grain-boundary character distribution and correlations with electrical and optoelectronic properties of CuInSe <sub>2</sub> thin films. <i>Acta Materialia</i> , <b>2016</b> , 118, 244-252	8.4	20
225	Heat affected zone microstructures and their influence on toughness in two microalloyed HSLA steels. <i>Acta Materialia</i> , <b>2015</b> , 97, 380-391	8.4	55
224	Orientation relationships of copper crystals on sapphire (1 0 1 0) m-plane and (1 0 1 2) r-plane substrates. <i>Journal of Crystal Growth</i> , <b>2015</b> , 418, 57-63	1.6	6
223	Importance of interfacial step alignment in hetero-epitaxy and orientation relationships: the case of Ag equilibrated on Ni substrates. Part 2 experiments. <i>Journal of Materials Science</i> , <b>2015</b> , 50, 5276-5285	4.3	9
222	The most frequent interfaces in olivine aggregates: the GBCD and its importance for grain boundary related processes. <i>Contributions To Mineralogy and Petrology</i> , <b>2015</b> , 170, 1	3.5	18
221	Observation of annealing twin nucleation at triple lines in nickel during grain growth. <i>Acta Materialia</i> , <b>2015</b> , 99, 63-68	8.4	58
220	The orientation dependence of the photochemical reactivity of BiVO <sub>4</sub> . <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 2370-2377	13	23
219	The equilibrium crystal shape of strontium titanate and its relationship to the grain boundary plane distribution. <i>Acta Materialia</i> , <b>2015</b> , 82, 32-40	8.4	46
218	Understanding materials microstructure and behavior at the mesoscale. <i>MRS Bulletin</i> , <b>2015</b> , 40, 951-960	3.2	18
217	Preferential orientation relationships in Ca <sub>2</sub> MnO <sub>4</sub> Ruddlesden-Popper thin films. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 045306	2.5	5
216	Abnormal grain growth in the Potts model incorporating grain boundary complexion transitions that increase the mobility of individual boundaries. <i>Acta Materialia</i> , <b>2015</b> , 96, 390-398	8.4	36

215	Thermo-mechanical factors influencing annealing twin development in nickel during recrystallization. <i>Journal of Materials Science</i> , <b>2015</b> , 50, 5191-5203	4.3	34
214	Grain size dependence of the twin length fraction in nanocrystalline Cu thin films via transmission electron microscopy based orientation mapping. <i>Journal of Materials Research</i> , <b>2015</b> , 30, 528-537	2.5	9
213	Consistent representations of and conversions between 3D rotations. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2015</b> , 23, 083501	2	41
212	Grain boundary energies in body-centered cubic metals. <i>Acta Materialia</i> , <b>2015</b> , 88, 346-354	8.4	141
211	The five-parameter grain boundary character and energy distributions of a fully austenitic high-manganese steel using three dimensional data. <i>Acta Materialia</i> , <b>2014</b> , 70, 281-289	8.4	48
210	Three-dimensional digital approximations of grain boundary networks in polycrystals. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2014</b> , 22, 025017	2	7
209	Influence of Y and La Additions on Grain Growth and the Grain-Boundary Character Distribution of Alumina. <i>Journal of the American Ceramic Society</i> , <b>2014</b> , 97, 622-630	3.8	22
208	The distribution of intervariant crystallographic planes in a lath martensite using five macroscopic parameters. <i>Acta Materialia</i> , <b>2014</b> , 63, 86-98	8.4	64
207	Annealing twin development during recrystallization and grain growth in pure nickel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 597, 295-303	5.3	127
206	Ferroelectric-Enhanced Photocatalysis with TiO <sub>2</sub> /BiFeO <sub>3</sub> <b>2014</b> , 15-24		
205	Crystallography of Interfaces and Grain Size Distributions in Sr-Doped LaMnO <sub>3</sub> . <i>Journal of the American Ceramic Society</i> , <b>2014</b> , 97, 2623-2630	3.8	6
204	Influence of grain boundary energy on the nucleation of complexion transitions. <i>Scripta Materialia</i> , <b>2014</b> , 88, 1-4	5.6	27
203	The five parameter grain boundary character distribution of polycrystalline silicon. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 4938-4945	4.3	56
202	Polar Domains at the Surface of Centrosymmetric BiVO <sub>4</sub> . <i>Chemistry of Materials</i> , <b>2014</b> , 26, 2774-2776	9.6	32
201	Modeling the interface area aspect ratio of carbide grains in WC/Co composites. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2014</b> , 44, 7-11	4.1	13
200	Effect of plastic deformation on the $\Sigma$ grain boundary plane distribution in WC/Co cemented carbides. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2014</b> , 47, 38-43	4.1	9
199	Focused ion beam and scanning electron microscopy for 3D materials characterization. <i>MRS Bulletin</i> , <b>2014</b> , 39, 361-365	3.2	29
198	Microstructural Characterization of Hard Ceramics <b>2014</b> , 265-284		2



197	Growth of Ca <sub>2</sub> MnO <sub>4</sub> Ruddlesden-Popper structured thin films using combinatorial substrate epitaxy. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 245303	2.5	12
196	Grain Boundary Plane Distributions in a Hot Rolled 5A06 Aluminum Alloy. <i>Advanced Engineering Materials</i> , <b>2014</b> , 16, 1105-1110	3.5	4
195	Variant selection and intervariant crystallographic planes distribution in martensite in a Ti <sub>6</sub> Al <sub>4</sub> V alloy. <i>Acta Materialia</i> , <b>2014</b> , 80, 478-489	8.4	120
194	Photocatalysts with internal electric fields. <i>Nanoscale</i> , <b>2014</b> , 6, 24-42	7.7	542
193	Grain boundary complexions. <i>Acta Materialia</i> , <b>2014</b> , 62, 1-48	8.4	497
192	Grain boundary character distribution of nanocrystalline Cu thin films using stereological analysis of transmission electron microscope orientation maps. <i>Microscopy and Microanalysis</i> , <b>2013</b> , 19, 111-9	0.5	36
191	The Distribution of Grain Boundary Planes in Interstitial Free Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2013</b> , 44, 115-124	2.3	47
190	Heterostructured (Ba,Sr)TiO <sub>3</sub> /TiO <sub>2</sub> core/shell photocatalysts: Influence of processing and structure on hydrogen production. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 6948-6959	6.7	40
189	The five-parameter grain boundary character distribution of nanocrystalline tungsten. <i>Scripta Materialia</i> , <b>2013</b> , 69, 413-416	5.6	25
188	Combinatorial substrate epitaxy: a new approach to growth of complex metastable compounds. <i>CrystEngComm</i> , <b>2013</b> , 15, 5434	3.3	20
187	Copper crystals on the (11 $\bar{2}$ ) <sub>0</sub> sapphire plane: orientation relationships, triple line ridges and interface shape equilibrium. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 3013-3026	4.3	17
186	The influence of residual thermal stresses on the mechanical properties of multilayer Al <sub>2</sub> O <sub>3</sub> /TiC <sub>x</sub> N <sub>1-x</sub> coatings on WC/Co cutting tools. <i>Surface and Coatings Technology</i> , <b>2013</b> , 215, 119-126	4.4	19
185	Eutaxial growth of hematite Fe <sub>2</sub> O <sub>3</sub> films on perovskite SrTiO <sub>3</sub> polycrystalline substrates. <i>Thin Solid Films</i> , <b>2013</b> , 548, 220-224	2.2	12
184	The relative grain boundary area and energy distributions in a ferritic steel determined from three-dimensional electron backscatter diffraction maps. <i>Acta Materialia</i> , <b>2013</b> , 61, 1404-1412	8.4	87
183	Visible-light photochemical activity of heterostructured core-shell materials composed of selected ternary titanates and ferrites coated by TiO <sub>2</sub> . <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 5064-71	9.5	47
182	Microstructure design of lead-free piezoelectric ceramics. <i>Journal of the European Ceramic Society</i> , <b>2013</b> , 33, 313-326	6	18
181	Effect of densification mechanism on the $\Sigma$ grain boundary plane distribution in WC <sub>10</sub> composites. <i>Materials Letters</i> , <b>2013</b> , 92, 86-89	3.3	13
180	Formation of Annealing Twins during Recrystallization and Grain Growth in 304L Austenitic Stainless Steel. <i>Materials Science Forum</i> , <b>2013</b> , 753, 113-116	0.4	45

179	Evolution of Microstructure in Pure Nickel during Processing for Grain Boundary Engineering. <i>Materials Science Forum</i> , <b>2013</b> , 753, 97-100	0.4	3
178	The Relationship between Grain Boundary Energy, Grain Boundary Complexion Transitions, and Grain Size in Ca-Doped Yttria. <i>Materials Science Forum</i> , <b>2013</b> , 753, 87-92	0.4	11
177	Comparison of grain size distributions in a Ni-based superalloy in three and two dimensions using the Saltykov method. <i>Scripta Materialia</i> , <b>2012</b> , 66, 554-557	5.6	24
176	Effect of downscaling nano-copper interconnects on the microstructure revealed by high resolution TEM-orientation-mapping. <i>Nanotechnology</i> , <b>2012</b> , 23, 135702	3.4	34
175	Challenges in Ceramic Science: A Report from the Workshop on Emerging Research Areas in Ceramic Science. <i>Journal of the American Ceramic Society</i> , <b>2012</b> , 95, 3699-3712	3.8	51
174	Combinatorial substrate epitaxy: A high-throughput method for determining phase and orientation relationships and its application to BiFeO <sub>3</sub> /TiO <sub>2</sub> heterostructures. <i>Acta Materialia</i> , <b>2012</b> , 60, 6486-6493	8.4	36
173	Enhanced photochemical activity of BiFeO <sub>3</sub> films supported on SrTiO <sub>3</sub> substrates under visible light illumination. <i>Chemical Communications</i> , <b>2012</b> , 48, 2012-4	5.8	32
172	Changes in the Grain Boundary Character and Energy Distributions Resulting from a Complexion Transition in Ca-Doped Yttria. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2012</b> , 43, 3532-3538	2.3	26
171	Visible light photochemical activity of heterostructured PbTiO <sub>3</sub> /TiO <sub>2</sub> core-shell particles. <i>Catalysis Science and Technology</i> , <b>2012</b> , 2, 1945	5.5	81
170	Tail Departure of Log-Normal Grain Size Distributions in Synthetic Three-Dimensional Microstructures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2012</b> , 43, 2810-2822	2.3	29
169	Heterostructured Ceramic Powders for Photocatalytic Hydrogen Production: Nanostructured TiO <sub>2</sub> Shells Surrounding Microcrystalline (Ba,Sr)TiO <sub>3</sub> Cores. <i>Journal of the American Ceramic Society</i> , <b>2012</b> , 95, 1414-1420	3.8	69
168	Synthesizing Annealing Twins in Three-Dimensional Voxel-Based Microstructures. <i>Materials Science Forum</i> , <b>2012</b> , 715-716, 549-549	0.4	
167	Role of Inclination Dependent Anisotropy on Boundary Populations during Two-Dimensional Grain Growth. <i>Materials Science Forum</i> , <b>2012</b> , 715-716, 697-702	0.4	
166	Measuring relative grain-boundary energies in block-copolymer microstructures. <i>Physical Review Letters</i> , <b>2012</b> , 108, 107801	7.4	14
165	GRAIN BOUNDARY PLANE DISTRIBUTIONS IN 304 STEEL ANNEALED AT HIGH TEMPERATURE AFTER A PARALLEL PROCESSING OF MULTIPLE FORGING AND DIRECT ROLLING. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , <b>2012</b> , 48, 895		3
164	Spatially selective visible light photocatalytic activity of TiO <sub>2</sub> /BiFeO <sub>3</sub> heterostructures. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 4168		113
163	Validating computed grain boundary energies in fcc metals using the grain boundary character distribution. <i>Acta Materialia</i> , <b>2011</b> , 59, 5250-5256	8.4	53
162	Crystallographic Characteristics of Grain Boundaries in Dense Yttria-Stabilized Zirconia. <i>International Journal of Applied Ceramic Technology</i> , <b>2011</b> , 8, 1218-1228	2	26

161	Measuring and Interpreting the Structure of Grain-Boundary Networks. <i>Journal of the American Ceramic Society</i> , <b>2011</b> , 94, 633-646	3.8	74
160	The Orientation Distributions of Lines, Surfaces, and Interfaces around Three-Phase Boundaries in Solid Oxide Fuel Cell Cathodes. <i>Journal of the American Ceramic Society</i> , <b>2011</b> , 94, 4045-4051	3.8	19
159	Orientation relationships of copper crystals on c-plane sapphire. <i>Acta Materialia</i> , <b>2011</b> , 59, 5320-5331	8.4	41
158	Grain boundary energy anisotropy: a review. <i>Journal of Materials Science</i> , <b>2011</b> , 46, 5881-5895	4.3	275
157	Five-Parameter Grain Boundary Analysis by 3D EBSD of an Ultra Fine Grained CuZr Alloy Processed by Equal Channel Angular Pressing. <i>Advanced Engineering Materials</i> , <b>2011</b> , 13, 237-244	3.5	31
156	Effect of crystal and domain orientation on the visible-light photochemical reduction of Ag on BiFeO <sub>3</sub> . <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 1562-7	9.5	56
155	Towards an integrated materials characterization toolbox. <i>Journal of Materials Research</i> , <b>2011</b> , 26, 1341-1383	3.8	75
154	The Relative Energies of Normally and Abnormally Growing Grain Boundaries in Alumina Displaying Different Complexions. <i>Journal of the American Ceramic Society</i> , <b>2010</b> , 93, 1796	3.8	51
153	Orientation and Phase Relationships between Titania Films and Polycrystalline BaTiO <sub>3</sub> Substrates as Determined by Electron Backscatter Diffraction Mapping. <i>Journal of the American Ceramic Society</i> , <b>2010</b> , 93, 2530-2533	3.8	25
152	Enhanced Photochemical Reactivity at the Ferroelectric Phase Transition in Ba <sub>1-x</sub> Sr <sub>x</sub> TiO <sub>3</sub> . <i>Journal of the American Ceramic Society</i> , <b>2010</b> , 93, 4129-4134	3.8	23
151	Stress hot spots in viscoplastic deformation of polycrystals. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2010</b> , 18, 074005	2	60
150	Grain boundary plane distributions in aluminas evolving by normal and abnormal grain growth and displaying different complexions. <i>International Journal of Materials Research</i> , <b>2010</b> , 101, 50-56	0.5	23
149	Composition Dependence of the Photochemical reduction of Ag by Ba <sub>1-x</sub> Sr <sub>x</sub> TiO <sub>3</sub> . <i>Chemistry of Materials</i> , <b>2010</b> , 22, 3527-3534	9.6	60
148	Photochemical Reactivity of Titania Films on BaTiO <sub>3</sub> Substrates: Origin of Spatial Selectivity. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 5823-5830	9.6	87
147	Deriving grain boundary character distributions and relative grain boundary energies from three-dimensional EBSD data. <i>Materials Science and Technology</i> , <b>2010</b> , 26, 661-669	1.5	78
146	Photochemical Reactivity of Titania Films on BaTiO <sub>3</sub> Substrates: Influence of Titania Phase and Orientation. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 5831-5837	9.6	56
145	Misorientation texture development during grain growth. Part II: Theory. <i>Acta Materialia</i> , <b>2010</b> , 58, 14-19	8.4	31
144	Introduction to Grains, Phases, and Interfaces—In Interpretation of Microstructure, <i>Trans. AIME</i> , 1948, vol. 175, pp. 1581, by C.S. Smith. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2010</b> , 41, 1063-1100	2.3	35

143	Introduction to Grains, Phases, and Interfaces—An Interpretation of Microstructure, Trans. AIME, 1948, vol. 175, pp. 155-171, by C.S. Smith. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2010</b> , 41, 457-494	2.5	11
142	Textures and grain boundary character distributions in a cold rolled and annealed Pb–Sn based alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 3695-3706	5.3	23
141	Topological characteristics of plane sections of polycrystals. <i>Acta Materialia</i> , <b>2010</b> , 58, 3805-3814	8.4	19
140	Comparing calculated and measured grain boundary energies in nickel. <i>Acta Materialia</i> , <b>2010</b> , 58, 5063-5069	8.4	88
139	Influence of interface energies on solute partitioning mechanisms in doped aluminas. <i>Acta Materialia</i> , <b>2010</b> , 58, 5097-5108	8.4	32
138	Microtexture and hardness of CVD deposited $\text{Al}_2\text{O}_3$ and $\text{TiC}_x\text{N}_1$ coatings. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2009</b> , 27, 458-464	4.1	12
137	Reconstruction and simplification of high-quality multiple-region models from planar sections. <i>Engineering With Computers</i> , <b>2009</b> , 25, 221-235	4.5	6
136	Characterization of the Grain-Boundary Character and Energy Distributions of Yttria Using Automated Serial Sectioning and EBSD in the FIB. <i>Journal of the American Ceramic Society</i> , <b>2009</b> , 92, 1580-1585	3.8	78
135	Effect of Segregating Impurities on the Grain-Boundary Character Distribution of Magnesium Oxide. <i>Journal of the American Ceramic Society</i> , <b>2009</b> , 92, 3044-3051	3.8	20
134	Mechanism for the development of anisotropic grain boundary character distributions during normal grain growth. <i>Acta Materialia</i> , <b>2009</b> , 57, 1-7	8.4	73
133	Relative grain boundary area and energy distributions in nickel. <i>Acta Materialia</i> , <b>2009</b> , 57, 4304-4311	8.4	129
132	Misorientation texture development during grain growth. Part I: Simulation and experiment. <i>Acta Materialia</i> , <b>2009</b> , 57, 6102-6112	8.4	64
131	Measurement of the Five-Parameter Grain Boundary Distribution from Planar Sections <b>2009</b> , 215-229		7
130	Five-parameter grain boundary analysis of a titanium alloy before and after low-temperature annealing. <i>Scripta Materialia</i> , <b>2008</b> , 58, 183-186	5.6	63
129	A Model for the Origin of Anisotropic Grain Boundary Character Distributions in Polycrystalline Materials. <i>Ceramic Transactions</i> , <b>2008</b> , 343-353	0.1	2
128	The Influence of the Dipolar Field Effect on the Photochemical Reactivity of $\text{Sr}_2\text{Nb}_2\text{O}_7$ and $\text{BaTiO}_3$ Microcrystals. <i>Topics in Catalysis</i> , <b>2008</b> , 49, 18-23	2.3	44
127	Five-parameter grain boundary distribution of commercially grain boundary engineered nickel and copper. <i>Acta Materialia</i> , <b>2008</b> , 56, 2363-2373	8.4	120
126	Interface Character Distributions in $\text{WC}/\text{Co}$ Composites. <i>Journal of the American Ceramic Society</i> , <b>2008</b> , 91, 996-1001	3.8	66

125	Crystallographic texture in pulsed laser deposited hydroxyapatite bioceramic coatings. <i>Acta Materialia</i> , <b>2007</b> , 55, 131-139	8.4	40
124	Experimental Evidence for the Development of Bimodal Grain Size Distributions by the Nucleation-Limited Coarsening Mechanism. <i>Journal of the American Ceramic Society</i> , <b>2007</b> , 90, 211-216	3.8	19
123	Modeling the Influence of Orientation Texture on the Strength of WC <sub>12</sub> O Composites. <i>Journal of the American Ceramic Society</i> , <b>2007</b> , 90, 199-204	3.8	22
122	The origin of photochemical anisotropy in SrTiO <sub>3</sub> . <i>Topics in Catalysis</i> , <b>2007</b> , 44, 529-533	2.3	67
121	Grain Boundary Plane Distributions in Modified 316 LN Steel Exposed at Elevated and Cryogenic Temperatures. <i>Journal of Materials Science</i> , <b>2007</b> , 42, 9543-9547	4.3	14
120	The distribution of grain boundary planes in polycrystals. <i>Jom</i> , <b>2007</b> , 59, 38-42	2.1	38
119	Three-Dimensional Microstructure Reconstruction Using FIB-OIM. <i>Materials Science Forum</i> , <b>2007</b> , 558-559, 915-920	0.4	19
118	Orientation Distribution of $\beta$ Grain Boundary Planes in Ni before and after Grain Boundary Engineering. <i>Materials Science Forum</i> , <b>2007</b> , 558-559, 641-647	0.4	5
117	Three-Dimensional Characterization of Microstructure by Electron Back-Scatter Diffraction. <i>Annual Review of Materials Research</i> , <b>2007</b> , 37, 627-658	12.8	121
116	Modeling the relationship between microstructural features and the strength of WC <sub>12</sub> O composites. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2006</b> , 24, 89-100	4.1	45
115	Grain boundary energy and grain growth in Al films: Comparison of experiments and simulations. <i>Scripta Materialia</i> , <b>2006</b> , 54, 1059-1063	5.6	51
114	Grain boundary planes: New dimensions in the grain boundary character distribution. <i>Scripta Materialia</i> , <b>2006</b> , 54, 1005-1009	5.6	57
113	Sparse data structure and algorithm for the phase field method. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2006</b> , 14, 1189-1195	2	78
112	Influence of Dipolar Fields on the Photochemical Reactivity of Thin Titania Films on BaTiO <sub>3</sub> Substrates. <i>Journal of the American Ceramic Society</i> , <b>2006</b> , 89, 060623005134019-???	3.8	6
111	Changes in the five-parameter grain boundary character distribution in $\beta$ Brass brought about by iterative thermomechanical processing. <i>Acta Materialia</i> , <b>2006</b> , 54, 4489-4502	8.4	95
110	INFLUENCE OF INTERFACE ANISOTROPY ON GRAIN GROWTH AND COARSENING. <i>Annual Review of Materials Research</i> , <b>2005</b> , 35, 99-126	12.8	69
109	Equilibrium crystal shape of Bi-saturated Cu crystals at 1223K. <i>Acta Materialia</i> , <b>2005</b> , 53, 4057-4064	8.4	26
108	Conversion of Diaspore to Corundum: A New $\beta$ Alumina Transformation Sequence. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 80, 2677-2680	3.8	28

107	Shape Evolution of SrTiO <sub>3</sub> Crystals During Coarsening in a Titania-Rich Liquid. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 88, 993-996	3.8	14
106	Five-parameter grain boundary distribution in grain boundary engineered brass. <i>Scripta Materialia</i> , <b>2005</b> , 52, 633-637	5.6	71
105	Effect of anisotropic grain boundary properties on grain boundary plane distributions during grain growth. <i>Scripta Materialia</i> , <b>2005</b> , 53, 351-355	5.6	58
104	Distribution of misorientations and grain boundary planes in grain boundary engineered brass. <i>Materials Science and Technology</i> , <b>2005</b> , 21, 1287-1292	1.5	5
103	Grain Boundary Energy and Grain Growth in Highly-Textured Al Films and Foils: Experiment and Simulation. <i>Materials Science Forum</i> , <b>2005</b> , 495-497, 1255-1260	0.4	2
102	Changes in the distribution of interfaces in PMN-35 mol% PT as a function of time. <i>International Journal of Materials Research</i> , <b>2005</b> , 96, 207-210		4
101	The influence of singular surfaces and morphological changes on coarsening. <i>International Journal of Materials Research</i> , <b>2005</b> , 96, 191-196		1
100	Effect of Anisotropic Interfacial Energy on Grain Boundary Distributions during Grain Growth. <i>Materials Science Forum</i> , <b>2004</b> , 467-470, 733-738	0.4	2
99	Distribution of Grain Boundary Planes at Coincident Site Lattice Misorientations. <i>Materials Research Society Symposia Proceedings</i> , <b>2004</b> , 819, N7.2.1		7
98	Segregation of Calcium to Magnesium Oxide Grain Boundaries. <i>Materials Science Forum</i> , <b>2004</b> , 467-470, 789-794	0.4	2
97	Five-Parameter Grain Boundary Character Distribution in Fe-1%Si. <i>Materials Science Forum</i> , <b>2004</b> , 467-470, 727-732	0.4	11
96	Mesoscale Simulation of the Evolution of the Grain Boundary Character Distribution. <i>Materials Science Forum</i> , <b>2004</b> , 467-470, 1063-1068	0.4	22
95	Measuring the Influence of Grain-Boundary Misorientation on Thermal Groove Geometry in Ceramic Polycrystals. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 82, 1529-1536	3.8	82
94	Experimental Method for Determining Surface Energy Anisotropy and Its Application to Magnesia. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 83, 1226-1232	3.8	26
93	Influence of Diaspore Seeding and Chloride Concentration on the Transformation of Diasporic Precursors to Corundum. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 84, 1896-1902	3.8	16
92	Nucleation Energy Barriers for Volume-Conserving Shape Changes of Crystals with Nonequilibrium Morphologies. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 84, 2099-2104	3.8	51
91	Coarsening of Faceted Crystals. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 85, 675-682	3.8	49
90	Determining Crystal Habits from Observations of Planar Sections. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 85, 2799-2804	3.8	30

89	Distribution and Energies of Grain Boundaries in Magnesia as a Function of Five Degrees of Freedom. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 85, 3081-3083	3.8	60
88	Distribution of Grain Boundaries in SrTiO <sub>3</sub> as a Function of Five Macroscopic Parameters. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 87, 670-676	3.8	85
87	Habits of Grains in Dense Polycrystalline Solids. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 87, 724-736	3.8	63
86	Anisotropic phenomena at interfaces in bismuth-saturated copper. <i>Scripta Materialia</i> , <b>2004</b> , 50, 565-569	5.6	10
85	Geometric and Crystallographic Characterization of WC Surfaces and Grain Boundaries in WC-Co Composites. <i>Journal of Materials Science</i> , <b>2004</b> , 12, 19-27		56
84	Measuring the five-parameter grain-boundary distribution from observations of planar sections. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2004</b> , 35, 1981-1989	2.3	153
83	Distribution of grain boundaries in aluminum as a function of five macroscopic parameters. <i>Acta Materialia</i> , <b>2004</b> , 52, 3649-3655	8.4	167
82	The distribution of internal interfaces in polycrystals. <i>International Journal of Materials Research</i> , <b>2004</b> , 95, 197-214		178
81	Crystallographic Distribution of Internal Interfaces in Spinel Polycrystals. <i>Materials Science Forum</i> , <b>2004</b> , 467-470, 783-788	0.4	10
80	Grain boundary segregation in oxide ceramics. <i>Journal of the European Ceramic Society</i> , <b>2003</b> , 23, 2841-2848	3.8	49
79	Structure Sensitivity of Photochemical Oxidation and Reduction Reactions on SrTiO <sub>3</sub> Surfaces. <i>Journal of the American Ceramic Society</i> , <b>2003</b> , 86, 1182-1189	3.8	59
78	Surface Energy Anisotropy of SrTiO <sub>3</sub> at 1400°C in Air. <i>Journal of the American Ceramic Society</i> , <b>2003</b> , 86, 1933-1939	3.8	92
77	Distribution of grain boundaries in magnesia as a function of five macroscopic parameters. <i>Acta Materialia</i> , <b>2003</b> , 51, 3663-3674	8.4	200
76	The relative free energies of grain boundaries in magnesia as a function of five macroscopic parameters. <i>Acta Materialia</i> , <b>2003</b> , 51, 3675-3686	8.4	132
75	Inhibition of Sintering and Surface Area Loss in Phosphorus-Doped Corundum Derived from Diaspore. <i>Journal of the American Ceramic Society</i> , <b>2002</b> , 85, 2325-2330	3.8	10
74	Crystallographic Distribution of Low Angle Grain Boundary Planes in Magnesium Oxide. <i>Materials Science Forum</i> , <b>2002</b> , 408-412, 1705-1710	0.4	2
73	Photochemical Reactivity of Sr <sub>2</sub> Nb <sub>2</sub> O <sub>7</sub> and Sr <sub>2</sub> Ta <sub>2</sub> O <sub>7</sub> as a Function of Surface Orientation. <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 755, 1		
72	Orientation Dependence of Photochemical Reduction Reactions on SrTiO <sub>3</sub> Surfaces. <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 751, 1		3

71	Orientation Dependence of the Photochemical Reactivity of BaTi <sub>4</sub> O <sub>9</sub> . <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 755, 1		
70	Surface engineering along the close-packed direction of SrTiO <sub>3</sub> . <i>Journal of Crystal Growth</i> , <b>2001</b> , 225, 178-182	1.6	25
69	Evaluating Anisotropic Surface Energies Using the Capillarity Vector Reconstruction Method. <i>Journal of Materials Science</i> , <b>2001</b> , 9, 35-42		15
68	Residual-Stress Predictions in Polycrystalline Alumina. <i>Journal of the American Ceramic Society</i> , <b>2001</b> , 84, 2947-2954	3.8	102
67	Spatial Separation of Photochemical Oxidation and Reduction Reactions on the Surface of Ferroelectric BaTiO <sub>3</sub> . <i>Journal of Physical Chemistry B</i> , <b>2001</b> , 105, 8275-8277	3.4	204
66	Spatially Selective Photochemical Reduction of Silver on the Surface of Ferroelectric Barium Titanate. <i>Chemistry of Materials</i> , <b>2001</b> , 13, 241-242	9.6	168
65	The Influence of Surface Termination and Domain Structure on the Photochemical Reactivity of SrTiO <sub>3</sub> and BaTiO <sub>3</sub> . <i>Microscopy and Microanalysis</i> , <b>2001</b> , 7, 1062-1063	0.5	
64	Structure and Bonding in Crystalline Materials <b>2001</b> ,		104
63	Photochemical Reduction and Oxidation Reactions on Barium Titanate Surfaces. <i>Materials Research Society Symposia Proceedings</i> , <b>2000</b> , 654, 741		5
62	Origin of domain structure in hexagonal silicon carbide boules grown by the physical vapor transport method. <i>Journal of Crystal Growth</i> , <b>2000</b> , 220, 308-315	1.6	40
61	Nucleation Barrier for Volume-Conserving Shape Changes of Faceted Crystals. <i>Journal of the American Ceramic Society</i> , <b>2000</b> , 83, 214-16	3.8	135
60	Misorientation Dependence of the Grain Boundary Energy in Magnesia. <i>Journal of Materials Science</i> , <b>2000</b> , 8, 131-140		38
59	Formation of thermal decomposition cavities in physical vapor transport of silicon carbide. <i>Journal of Electronic Materials</i> , <b>2000</b> , 29, 347-352	1.9	18
58	Identification of prismatic slip bands in 4H SiC boules grown by physical vapor transport. <i>Journal of Electronic Materials</i> , <b>2000</b> , 29, L5-L8	1.9	23
57	Origin of Threading Dislocation Arrays in SiC Boules Grown by PVT. <i>Materials Science Forum</i> , <b>2000</b> , 338-342, 477-480	0.4	13
56	Nucleation of Dislocations during Physical Vapor Transport Growth of Silicon Carbide. <i>Materials Science Forum</i> , <b>2000</b> , 338-342, 63-66	0.4	2
55	Plastic Deformation and Residual Stresses in SiC Boules Grown by PVT. <i>Materials Science Forum</i> , <b>2000</b> , 338-342, 67-70	0.4	23
54	Thermal Decomposition Cavities in Physical Vapor Transport Grown SiC. <i>Materials Science Forum</i> , <b>2000</b> , 338-342, 55-58	0.4	2



53	Extraction of Grain Boundary Energies from Triple Junction Geometry. <i>Microscopy and Microanalysis</i> , <b>1999</b> , 5, 230-231	0.5	2
52	Brightness degradation in electroluminescent ZnS:Cu. <i>Solid State Ionics</i> , <b>1999</b> , 123, 19-24	3.3	22
51	The Structure Sensitivity of HxMoO3 Precipitation on MoO3(010) during Reactions with Methanol. <i>Journal of Catalysis</i> , <b>1999</b> , 184, 49-58	7.3	10
50	Extracting Grain Boundary and Surface Energy from Measurement of Triple Junction Geometry. <i>Journal of Materials Science</i> , <b>1999</b> , 7, 321-337		48
49	The Protonation of MoO3 during the Partial Oxidation of Alcohols. <i>Journal of Catalysis</i> , <b>1998</b> , 173, 219-228	7.3	42
48	The Morphological Evolution of the MoO3(010) Surface during Reactions in Methanol/Air Mixtures. <i>Journal of Catalysis</i> , <b>1998</b> , 180, 270-278	7.3	24
47	Anisotropic Photochemical Reactivity of Bulk TiO2 Crystals. <i>Journal of Physical Chemistry B</i> , <b>1998</b> , 102, 7323-7327	3.4	166
46	Orientation Dependence of Photochemical Reactions on TiO2 Surfaces. <i>Journal of Physical Chemistry B</i> , <b>1998</b> , 102, 3216-3226	3.4	185
45	Structural Characterization of SiC Crystals Grown by Physical Vapor Transport. <i>Materials Science Forum</i> , <b>1998</b> , 264-268, 433-436	0.4	
44	Surface Defects in GaN and AlxGa1-xN Epilayers Deposited on Sapphire by Organometallic Vapor Phase Epitaxy. <i>Materials Science Forum</i> , <b>1998</b> , 264-268, 1251-1254	0.4	
43	The Formation of Super-Dislocation/Micropipe Complexes in 6H-SiC. <i>Materials Science Forum</i> , <b>1998</b> , 264-268, 371-374	0.4	3
42	The Structural Evolution of Seed Surfaces During the Initial Stages of Physical Vapor Transport SiC Growth. <i>Materials Science Forum</i> , <b>1998</b> , 264-268, 37-40	0.4	6
41	The Structural Evolution of Lely Seeds During the Initial Stages of SiC Sublimation Growth. <i>Materials Research Society Symposia Proceedings</i> , <b>1997</b> , 483, 295		6
40	The Partial Oxidation of Methanol by MoO3(010) Surfaces with Controlled Defect Distributions. <i>Materials Research Society Symposia Proceedings</i> , <b>1997</b> , 497, 53		
39	Growth morphologies of heteroepitaxial rutile films on sapphire substrates. <i>Journal of Crystal Growth</i> , <b>1997</b> , 174, 424-433	1.6	17
38	An atomic force microscopy study of super-dislocation/micropipe complexes on the 6H-SiC(0 0 0 1) growth surface. <i>Journal of Crystal Growth</i> , <b>1997</b> , 181, 351-362	1.6	39
37	A scanning probe microscopy study of the (001) surfaces of V2O5 and V6O13. <i>Surface Science</i> , <b>1996</b> , 367, 87-95	1.8	54
36	The Relationship Between Micropipes and Screw Dislocations in PVT Grown 6H-SiC. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 423, 539		8

35	An Atomic Force Microscopy Study of the Morphological Evolution of the MoO <sub>3</sub> (010) Surface during Reduction Reactions. <i>Journal of Catalysis</i> , <b>1996</b> , 163, 12-17	7.3	38
34	Scanning Probe Microscopy of Cleaved Molybdates: $\sqrt{3}\times\sqrt{3}$ MoO <sub>3</sub> (010), Mo <sub>18</sub> O <sub>52</sub> (100), Mo <sub>8</sub> O <sub>23</sub> (010), and $\sqrt{3}\times\sqrt{3}$ Mo <sub>4</sub> O <sub>11</sub> (100). <i>Journal of Solid State Chemistry</i> , <b>1996</b> , 124, 104-115	3.3	66
33	Heteroepitaxial growth of TiO <sub>2</sub> films by ion-beam sputter deposition. <i>Journal of Crystal Growth</i> , <b>1996</b> , 166, 779-785	1.6	45
32	Open-core screw dislocations in GaN epilayers observed by scanning force microscopy and high-resolution transmission electron microscopy. <i>Applied Physics Letters</i> , <b>1995</b> , 67, 2284-2286	3.4	196
31	The observation of oxygen disorder on the V <sub>2</sub> O <sub>5</sub> (001) surface using scanning tunneling microscopy. <i>Surface Science</i> , <b>1995</b> , 322, 293-300	1.8	38
30	A Microscopic Evaluation of the Surface Structure of OMVPE Deposited $\sqrt{3}\times\sqrt{3}$ GaN Epilayers. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 395, 381		8
29	Scanning Tunneling Microscopy and Crystal Chemical Models of the Na <sub>0.82</sub> WO <sub>3</sub> (001) Surface. <i>Journal of Solid State Chemistry</i> , <b>1994</b> , 109, 359-371	3.3	13
28	Experimental and simulated tunneling spectra of the polar ZnO surfaces. <i>Surface Science</i> , <b>1994</b> , 318, 379-394	1.8	27
27	Monte Carlo simulations of Mg(Al)O solid solutions based on crystal chemical rules. <i>Chemistry of Materials</i> , <b>1994</b> , 6, 501-507	9.6	9
26	The Synthesis of an Interstratified Layered Oxide from Exfoliated Precursors. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 371, 187		1
25	Experimental and Simulated Scanning Tunneling Microscopy of the Cleaved Rb <sub>1/3</sub> WO <sub>3</sub> (0001) Surface. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 332, 501		
24	Imaging the Atomic-Scale Structure of Molybdenum and Vanadium Oxides by Scanning Tunneling Microscopy. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 332, 507		
23	The Atomic-Scale Characterization of Defects on Cleaved Vanadium and Molybdenum Oxide Surfaces Using STM. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 357, 79		
22	Imaging surface/crystallographic shear plane intersections on the Mo <sub>18</sub> O <sub>52</sub> (100) surface using scanning tunneling microscopy. <i>Surface Science</i> , <b>1993</b> , 292, 261-266	1.8	19
21	Termination layer variations on the cleaved (0001) surface determined by scanning tunneling microscopy. <i>Surface Science</i> , <b>1993</b> , 291, 395-401	1.8	15
20	A scanning tunneling microscopy and spectroscopy study of the TiO <sub>2</sub> $\sqrt{3}\times\sqrt{3}$ (110) surface. <i>Surface Science</i> , <b>1992</b> , 278, 146-156	1.8	84
19	Direct measurement of local properties of interfaces with scanning tunneling microscopy. <i>Acta Metallurgica Et Materialia</i> , <b>1992</b> , 40, S161-S171		4
18	The geometric and electronic structure of the surface. <i>Surface Science Letters</i> , <b>1991</b> , 247, L195-L200		5

17	Tunneling spectroscopic analysis of optically active wide band-gap semiconductors. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1991</b> , 9, 551		18
16	Probing the surface chemistry of polycrystalline ZnO with scanning tunneling microscopy and tunneling spectroscopy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1991</b> , 9, 783		12
15	The geometric and electronic structure of the ZnO(0001) surface. <i>Surface Science</i> , <b>1991</b> , 247, L195-L200	1.8	17
14	Hydration of selected divalent $\beta$ -aluminas. <i>Chemistry of Materials</i> , <b>1991</b> , 3, 325-332	9.6	4
13	A Scanning Tunneling Microscopy Study of the Reduced TiO <sub>2</sub> (110) Surface. <i>Materials Research Society Symposia Proceedings</i> , <b>1990</b> , 209, 611		2
12	Detection of Optically Excited States in Wide-Band-Gap Semiconductors with Tunneling Spectroscopy. <i>Journal of the American Ceramic Society</i> , <b>1990</b> , 73, 3257-3263	3.8	3
11	Electrical Properties of Individual Zinc Oxide Grain Boundaries Determined by Spatially Resolved Tunneling Spectroscopy. <i>Journal of the American Ceramic Society</i> , <b>1990</b> , 73, 3026-3032	3.8	16
10	Electrical conductivity in Pb(II)- and Na(I)-Pb(II)- $\beta$ -alumina. <i>Journal of Solid State Chemistry</i> , <b>1990</b> , 85, 299-314	3.3	11
9	Structure of the Reduced TiO <sub>2</sub> (110) Surface Determined by Scanning Tunneling Microscopy. <i>Science</i> , <b>1990</b> , 250, 1239-41	33.3	117
8	Structure and properties of tin(II)- $\beta$ -alumina. <i>Chemistry of Materials</i> , <b>1990</b> , 2, 395-403	9.6	4
7	Defect formation in silver(I), lead(II), tin(II) and bismuth(III) $\beta$ -aluminas. <i>Chemistry of Materials</i> , <b>1989</b> , 1, 438-444	9.6	3
6	The effect of thermal history on the ionic conductivity of Pb(II)- $\beta$ -alumina. <i>Solid State Ionics</i> , <b>1988</b> , 28-30, 354-357	3.3	4
5	The reactivity of selected divalent $\beta$ -aluminas with water. <i>Materials Research Bulletin</i> , <b>1988</b> , 23, 1747-1755	5.1	5
4	Synthesis of di- and trivalent $\beta$ -aluminas by ion exchange. <i>Journal of Solid State Chemistry</i> , <b>1986</b> , 65, 231-240	3.3	41
3	Evolution of the Grain Boundary Character Distribution in Strontium Titanate during Grain Growth. <i>Ceramic Transactions</i> , 335-342	0.1	0
2	On the grain boundary network characteristics in a dual phase steel. <i>Journal of Materials Science</i> , 1	4.3	
1	Three-Dimensional FIB-OIM of Ceramic Materials. <i>Ceramic Transactions</i> , 117-124	0.1	1