

# Yuichi Ikuhara

## List of Publications by Year in descending order

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966  
papers

30,148  
citations

7069

78  
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11899

134  
g-index

988  
all docs

988  
docs citations

988  
times ranked

25211  
citing authors

#	ARTICLE	IF	CITATIONS
1	Giant thermoelectric Seebeck coefficient of a two-dimensional electron gas in SrTiO <sub>3</sub> . Nature Materials, 2007, 6, 129-134.	13.3	910
2	Multifunctional Alloys Obtained via a Dislocation-Free Plastic Deformation Mechanism. Science, 2003, 300, 464-467.	6.0	779
3	Direct atomic-scale confirmation of three-phase storage mechanism in Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> anodes for room-temperature sodium-ion batteries. Nature Communications, 2013, 4, 1870.	5.8	628
4	Rutile-TiO <sub>2</sub> Nanocoating for a High-Rate Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> Anode of a Lithium-Ion Battery. Journal of the American Chemical Society, 2012, 134, 7874-7879.	6.6	602
5	Electrically Induced Ferromagnetism at Room Temperature in Cobalt-Doped Titanium Dioxide. Science, 2011, 332, 1065-1067.	6.0	439
6	Grain Boundary Strengthening in Alumina by Rare Earth Impurities. Science, 2006, 311, 212-215.	6.0	391
7	Overall water splitting by Ta <sub>3</sub> N <sub>5</sub> nanorod single crystals grown on the edges of KTaO <sub>3</sub> particles. Nature Catalysis, 2018, 1, 756-763.	16.1	390
8	A Complex Perovskite-Type Oxynitride: The First Photocatalyst for Water Splitting Operable at up to 600 nm. Angewandte Chemie - International Edition, 2015, 54, 2955-2959.	7.2	379
9	Dynamics of annular bright field imaging in scanning transmission electron microscopy. Ultramicroscopy, 2010, 110, 903-923.	0.8	373
10	Robust atomic resolution imaging of light elements using scanning transmission electron microscopy. Applied Physics Letters, 2009, 95, .	1.5	334
11	Differential phase-contrast microscopy at atomic resolution. Nature Physics, 2012, 8, 611-615.	6.5	333
12	Atomic Structure and Kinetics of NASICON Na <sub>x</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> Cathode for Sodium-Ion Batteries. Advanced Functional Materials, 2014, 24, 4265-4272.	7.8	323
13	Variation of long-period stacking order structures in rapidly solidified Mg <sub>97</sub> Zn <sub>1</sub> Y <sub>2</sub> alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 393, 269-274.	2.6	313
14	First-principles calculations of intrinsic defects in Al <sub>2</sub> O <sub>3</sub> . Physical Review B, 2003, 68, .	1.1	270
15	Lithium Storage in Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> Spinel: The Full Static Picture from Electron Microscopy. Advanced Materials, 2012, 24, 3233-3238.	11.1	269
16	Direct Atomic-Resolution Observation of Two Phases in the Li <sub>1.2</sub> Mn <sub>0.567</sub> Ni <sub>0.166</sub> Co <sub>0.067</sub> O <sub>2</sub> Cathode Material for Lithium-Ion Batteries. Angewandte Chemie - International Edition, 2013, 52, 5969-5973.	7.2	242
17	One-dimensional van der Waals heterostructures. Science, 2020, 367, 537-542.	6.0	238
18	Direct Observation of Lithium Staging in Partially Delithiated LiFePO <sub>4</sub> at Atomic Resolution. Journal of the American Chemical Society, 2011, 133, 4661-4663.	6.6	219

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19	Atom-resolved imaging of ordered defect superstructures at individual grain boundaries. <i>Nature</i> , 2011, 479, 380-383.	13.7	219
20	First-principles study on structures and energetics of intrinsic vacancies in SrTiO <sub>3</sub> . <i>Physical Review B</i> , 2003, 68, .	1.1	194
21	Single-Crystalline Films of the Homologous Series InGaO <sub>3</sub> (ZnO) <sub>m</sub> Grown by Reactive Solid-Phase Epitaxy. <i>Advanced Functional Materials</i> , 2003, 13, 139-144.	7.8	179
22	Atomic Structure of a CeO <sub>2</sub> Grain Boundary: The Role of Oxygen Vacancies. <i>Nano Letters</i> , 2010, 10, 4668-4672.	4.5	173
23	Atomic-Scale Visualization of Antisite Defects in $\text{LiFePO}_4$ . <i>Physical Review Letters</i> , 2008, 100, 125502.	2.9	165
24	Temperature-Sensitive Structure Evolution of Lithium-Manganese-Rich Layered Oxides for Lithium-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2018, 140, 15279-15289.	6.6	163
25	Characterization of Co-Doped Silica for Improved Hydrothermal Stability and Application to Hydrogen Separation Membranes at High Temperatures. <i>Journal of the American Ceramic Society</i> , 2008, 91, 2975-2981.	1.9	162
26	Solute segregation at grain boundaries in superplastic SiO <sub>2</sub> -doped TZP. <i>Acta Materialia</i> , 1997, 45, 5275-5284.	3.8	160
27	Cubic-Formation and Grain-Growth Mechanisms in Tetragonal Zirconia Polycrystal. <i>Journal of the American Ceramic Society</i> , 2003, 86, 1401-1408.	1.9	149
28	First-Principles Calculations of Lithium-Ion Migration at a Coherent Grain Boundary in a Cathode Material, LiCoO <sub>2</sub> . <i>Advanced Materials</i> , 2013, 25, 618-622.	11.1	149
29	Ferromagnetic dislocations in antiferromagnetic NiO. <i>Nature Nanotechnology</i> , 2013, 8, 266-270.	15.6	145
30	Electric field imaging of single atoms. <i>Nature Communications</i> , 2017, 8, 15631.	5.8	144
31	Direct observation of individual dislocation interaction processes with grain boundaries. <i>Science Advances</i> , 2016, 2, e1501926.	4.7	143
32	Microstructural Changes in LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> Positive Electrode Material during the First Cycle. <i>Journal of the Electrochemical Society</i> , 2011, 158, A357-A362.	1.3	140
33	Selective Detection of Formaldehyde Gas Using a Cd-Doped TiO <sub>2</sub> -SnO <sub>2</sub> Sensor. <i>Sensors</i> , 2009, 9, 9029-9038.	2.1	137
34	Conducting nanowires in insulating ceramics. <i>Nature Materials</i> , 2003, 2, 453-456.	13.3	135
35	Large magnetoelectric coupling in magnetically short-range ordered Bi <sub>5</sub> Ti <sub>3</sub> FeO <sub>15</sub> film. <i>Scientific Reports</i> , 2014, 4, 5255.	1.6	135
36	Enhancing Photocatalytic Activity of LaTiO <sub>2</sub> N by Removal of Surface Reconstruction Layer. <i>Nano Letters</i> , 2014, 14, 1038-1041.	4.5	129

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37	New Insight into the Atomic Structure of Electrochemically Delithiated O <sub>3</sub> -Li <sub>1-x</sub> CoO <sub>2</sub> (0 ≤ x ≤ 0.5) Nanoparticles. <i>Nano Letters</i> , 2012, 12, 56192-6197.		128
38	Oxygen Vacancy Ordering at Surfaces of Lithium Manganese(III,IV) Oxide Spinel Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3053-3057.	7.2	127
39	Grain boundary electronic structure related to the high-temperature creep resistance in polycrystalline Al <sub>2</sub> O <sub>3</sub> . <i>Acta Materialia</i> , 2002, 50, 2955-2966.	3.8	123
40	High-temperature Creep Resistance in Rare-earth-doped, Fine-grained Al <sub>2</sub> O <sub>3</sub> . <i>Journal of Materials Research</i> , 1998, 13, 2597-2601.	1.2	122
41	Grain-boundary structure and microstructure development mechanism in 8mol% yttria-stabilized zirconia polycrystals. <i>Acta Materialia</i> , 2008, 56, 1315-1325.	3.8	122
42	Direct Imaging of Reconstructed Atoms on TiO <sub>2</sub> (110) Surfaces. <i>Science</i> , 2008, 322, 570-573.	6.0	120
43	Nonstoichiometric Dislocation Cores in $\gamma$ -Alumina. <i>Science</i> , 2007, 316, 82-85.	6.0	119
44	Imaging of built-in electric field at a p-n junction by scanning transmission electron microscopy. <i>Scientific Reports</i> , 2015, 5, 10040.	1.6	119
45	New area detector for atomic-resolution scanning transmission electron microscopy. <i>Journal of Electron Microscopy</i> , 2010, 59, 473-479.	0.9	118
46	Direct Imaging of Pt Single Atoms Adsorbed on TiO <sub>2</sub> (110) Surfaces. <i>Nano Letters</i> , 2014, 14, 134-138.	4.5	115
47	Crystalline Grain Interior Configuration Affects Lithium Migration Kinetics in Li-Rich Layered Oxide. <i>Nano Letters</i> , 2016, 16, 2907-2915.	4.5	115
48	Regulating Infrared Photoresponses in Reduced Graphene Oxide Phototransistors by Defect and Atomic Structure Control. <i>ACS Nano</i> , 2013, 7, 6310-6320.	7.3	112
49	Atomic-scale structure and properties of highly stable antiphase boundary defects in Fe <sub>3</sub> O <sub>4</sub> . <i>Nature Communications</i> , 2014, 5, 5740.	5.8	112
50	Role of Pr Segregation in Acceptor-State Formation at ZnO Grain Boundaries. <i>Physical Review Letters</i> , 2006, 97, 106802.	2.9	109
51	Atomic-scale imaging of individual dopant atoms in a buried interface. <i>Nature Materials</i> , 2009, 8, 654-658.	13.3	109
52	Direct Imaging of Hydrogen within a Crystalline Environment. <i>Applied Physics Express</i> , 2010, 3, 116603.	1.1	108
53	High-temperature grain boundary sliding behavior and grain boundary energy in cubic zirconia bicrystals. <i>Acta Materialia</i> , 2004, 52, 2349-2357.	3.8	107
54	A New Layered Iron Arsenide Superconductor: (Ca,Pr)FeAs <sub>2</sub> . <i>Journal of the American Chemical Society</i> , 2014, 136, 846-849.	6.6	105

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55	Possible ferroelectricity in perovskite oxynitride SrTaO <sub>2</sub> N epitaxial thin films. <i>Scientific Reports</i> , 2014, 4, .	1.6	105
56	Atomically ordered solute segregation behaviour in an oxide grain boundary. <i>Nature Communications</i> , 2016, 7, 11079.	5.8	105
57	Possible absence of critical thickness and size effect in ultrathin perovskite ferroelectric films. <i>Nature Communications</i> , 2017, 8, 15549.	5.8	104
58	Yttrium doping effect on oxygen grain boundary diffusion in $\hat{\pm}$ -Al <sub>2</sub> O <sub>3</sub> . <i>Acta Materialia</i> , 2007, 55, 6627-6633.	3.8	101
59	Microstructural Observation of LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> after Charge and Discharge by Scanning Transmission Electron Microscopy. <i>Journal of the Electrochemical Society</i> , 2012, 159, A1070-A1073.	1.3	101
60	Atomic structure, electronic structure, and defect energetics in grain boundaries of SrTiO <sub>3</sub> . <i>Physical Review B</i> , 2008, 78, .	1.9	98
61	Lithium Atom and A-Site Vacancy Distributions in Lanthanum Lithium Titanate. <i>Chemistry of Materials</i> , 2013, 25, 1607-1614.	3.2	97
62	Structure, energy and solute segregation behaviour of [110] symmetric tilt grain boundaries in yttria-stabilized cubic zirconia. <i>Philosophical Magazine</i> , 2004, 84, 2381-2415.	0.7	96
63	Atomic Structures and Electrical Properties of ZnO Grain Boundaries. <i>Journal of the American Ceramic Society</i> , 2007, 90, 337-357.	1.9	96
64	Direct imaging of atomistic grain boundary migration. <i>Nature Materials</i> , 2021, 20, 951-955.	13.3	94
65	Direct observation of $\hat{\pm}$ 7 domain boundary core structure in magnetic skyrmion lattice. <i>Science Advances</i> , 2016, 2, e1501280.	4.7	93
66	Atomic-Scale Measurement of Flexoelectric Polarization at Dislocations. <i>Physical Review Letters</i> , 2018, 120, 267601.	2.9	93
67	Heat treatment and anomalous peak effect in J <sub>c</sub> -H curve at 77 K for NdBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\hat{\pm}</math></sub> single-crystal superconductor. <i>Physica C: Superconductivity and Its Applications</i> , 1996, 259, 295-303.	0.6	92
68	Gigantic Electrostrain in Duplex Structured Alkaline Niobates. <i>Chemistry of Materials</i> , 2012, 24, 3363-3369.	3.2	92
69	Self-Limiting Chemical Vapor Deposition Growth of Monolayer Graphene from Ethanol. <i>Journal of Physical Chemistry C</i> , 2013, 117, 10755-10763.	1.5	92
70	High resolution transmission electron microscopy study in VC-doped WC-Co compound. <i>Science and Technology of Advanced Materials</i> , 2000, 1, 97-104.	2.8	91
71	Atomistic mechanisms of nonstoichiometry-induced twin boundary structural transformation in titanium dioxide. <i>Nature Communications</i> , 2015, 6, 7120.	5.8	90
72	High resolution microscopy study in Cr <sub>3</sub> C <sub>2</sub> -doped WC-Co. <i>Journal of Materials Science</i> , 2001, 36, 3885-3890.	1.7	86

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73	Enhanced Seebeck coefficient of quantum-confined electrons in SrTiO <sub>3</sub> /SrTi <sub>0.8</sub> Nb <sub>0.2</sub> O <sub>3</sub> superlattices. Applied Physics Letters, 2007, 91, .	1.5	85
74	Polymorphism of dislocation core structures at the atomic scale. Nature Communications, 2014, 5, 3239.	5.8	85
75	Atomic-Scale Structure and Local Chemistry of CoFeB/MgO Magnetic Tunnel Junctions. Nano Letters, 2016, 16, 1530-1536.	4.5	85
76	Unusually Large Enhancement of Thermopower in an Electric Field Induced Two-Dimensional Electron Gas. Advanced Materials, 2012, 24, 740-744.	11.1	83
77	Dislocation-enhanced ionic conductivity of yttria-stabilized zirconia. Applied Physics Letters, 2003, 82, 877-879.	1.5	81
78	Oxygen Adsorption on Anatase TiO <sub>2</sub> (101) and (001) Surfaces from First Principles. Materials Transactions, 2010, 51, 171-175.	0.4	80
79	Homologous series of iron pnictide oxide superconductors (Fe <sub>2</sub> As <sub>2</sub> )[Ca <sub>n+1</sub> (Sc,Ti) <sub>n</sub> O <sub>y</sub> ] <sup>n=3,4,5</sup> with extremely thick blocking layers. Applied Physics Letters, 2010, 97, .	1.5	78
80	STEM characterization for lithium-ion battery cathode materials. Current Opinion in Solid State and Materials Science, 2012, 16, 31-38.	5.6	78
81	A New Sealed Lithium-Peroxide Battery with a Co-Doped Li <sub>2</sub> O Cathode in a Superconcentrated Lithium Bis(fluorosulfonyl)amide Electrolyte. Scientific Reports, 2014, 4, 5684.	1.6	78
82	Atomic-Scale Valence State Distribution inside Ultrafine CeO <sub>2</sub> Nanocubes and Its Size Dependence. Small, 2018, 14, e1802915.	5.2	77
83	Interface Structures of Gold Nanoparticles on TiO <sub>2</sub> (110). Physical Review Letters, 2009, 102, 136105.	2.9	76
84	Field-induced water electrolysis switches an oxide semiconductor from an insulator to a metal. Nature Communications, 2010, 1, 118.	5.8	76
85	Domain boundaries and their influence on Li migration in solid-state electrolyte (La,Li)TiO <sub>3</sub> . Journal of Power Sources, 2015, 276, 203-207.	4.0	75
86	Real-Time Direct Observations of Polarization Reversal in a Piezoelectric Crystal: Pb(Mg <sub>1-x</sub> Co <sub>x</sub> ) <sub>2</sub> Te <sub>1-x</sub> Se <sub>x</sub> . Physical Review Letters, 2017, 118, 187601.	2.9	74
87	Stimuli-responsive hydroxyapatite liquid crystal with macroscopically controllable ordering and magneto-optical functions. Nature Communications, 2018, 9, 568.	5.8	74
88	Direct electric field imaging of graphene defects. Nature Communications, 2018, 9, 3878.	5.8	74
89	Orientation-Dependent Arrangement of Antisite Defects in Lithium Iron(II) Phosphate Crystals. Angewandte Chemie - International Edition, 2009, 48, 543-546.	7.2	73
90	Enhanced Piezoelectric Response due to Polarization Rotation in Cobalt-Substituted BiFeO <sub>3</sub> Epitaxial Thin Films. Advanced Materials, 2016, 28, 8639-8644.	11.1	72

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91	Direct Visualization of Local Electromagnetic Field Structures by Scanning Transmission Electron Microscopy. <i>Accounts of Chemical Research</i> , 2017, 50, 1502-1512.	7.6	72
92	Atomic Structures and Energies of $\sqrt{7}$ Symmetrical Tilt Grain Boundaries in Alumina Bicrystals. <i>Journal of the American Ceramic Society</i> , 2003, 86, 574-80.	1.9	71
93	Atomic-scale structural identification and evolution of Co-W-C ternary SWCNT catalytic nanoparticles: High-resolution STEM imaging on SiO <sub>2</sub> . <i>Science Advances</i> , 2019, 5, eaat9459.	4.7	71
94	Effect of alumina-doping on grain boundary segregation-induced phase transformation in yttria-stabilized tetragonal zirconia polycrystal. <i>Journal of Materials Research</i> , 2006, 21, 2278-2289.	1.2	70
95	Dimensionality-driven insulator-metal transition in A-site excess non-stoichiometric perovskites. <i>Nature Communications</i> , 2010, 1, 106.	5.8	70
96	High resolution transmission electron microscopy studies of metal/ceramics interfaces. , 1998, 40, 206-241.		69
97	The influence of trace impurities on the mechanical characteristics of a superplastic 2mol% yttria stabilized zirconia. <i>Acta Materialia</i> , 1998, 46, 5557-5568.	3.8	69
98	Assessment of Strain-Generated Oxygen Vacancies Using SrTiO <sub>3</sub> Bicrystals. <i>Nano Letters</i> , 2015, 15, 4129-4134.	4.5	69
99	Band engineering of perovskite-type transition metal oxynitrides for photocatalytic overall water splitting. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4544-4552.	5.2	69
100	Film/Substrate Orientation Relationship in the AlN/6H-SiC Epitaxial System. <i>Physical Review Letters</i> , 1996, 77, 1797-1800.	2.9	68
101	Domain boundary structures in lanthanum lithium titanates. <i>Journal of Materials Chemistry A</i> , 2014, 2, 843-852.	5.2	66
102	Misfit accommodation mechanism at the heterointerface between diamond and cubic boron nitride. <i>Nature Communications</i> , 2015, 6, 6327.	5.8	66
103	First-principles calculation of defect energetics in cubic-BaTiO <sub>3</sub> and a comparison with SrTiO <sub>3</sub> . <i>Acta Materialia</i> , 2007, 55, 6535-6540.	3.8	65
104	Fabrication of all-solid-state battery using epitaxial LiCoO <sub>2</sub> thin films. <i>Journal of Power Sources</i> , 2014, 267, 881-887.	4.0	65
105	Improvement of high-temperature creep resistance in fine-grained Al <sub>2</sub> O <sub>3</sub> by Zr <sup>4+</sup> segregation in grain boundaries. <i>Philosophical Magazine Letters</i> , 1997, 76, 9-14.	0.5	63
106	Ohmic contacts on silicon carbide: The first monolayer and its electronic effect. <i>Physical Review B</i> , 2009, 80, .	1.1	63
107	Atomic-Scale Structure Evolution in a Quasi-Equilibrated Electrochemical Process of Electrode Materials for Rechargeable Batteries. <i>Advanced Materials</i> , 2015, 27, 2134-2149.	11.1	63
108	A Complex Perovskite-Type Oxynitride: The First Photocatalyst for Water Splitting Operable at up to 600-nm. <i>Angewandte Chemie</i> , 2015, 127, 2998-3002.	1.6	63

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109	Ultrafast Encapsulation of Metal Nanoclusters into MFI Zeolite in the Course of Its Crystallization: Catalytic Application for Propane Dehydrogenation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19669-19674.	7.2	63
110	The effect of additives on sintering behavior and strength retention in silicon nitride with RE-disilicate. <i>Journal of the European Ceramic Society</i> , 2002, 22, 527-534.	2.8	62
111	On the quantitiveness of EDS STEM. <i>Ultramicroscopy</i> , 2015, 151, 150-159.	0.8	62
112	Microstructures and grain boundaries of (Ti,Al)N films. <i>Surface and Coatings Technology</i> , 1998, 107, 41-47.	2.2	61
113	Atomic structure of [0001]-tilt grain boundaries in ZnO: a high-resolution TEM study of fiber-textured thin films. <i>Physical Review B</i> , 2004, 70, .	1.1	61
114	Real-time direct observation of Li in LiCoO <sub>2</sub> cathode material. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	61
115	Distinct Configurations of Antisite Defects in Ordered Metal Phosphates: Comparison between LiMnPO <sub>4</sub> and LiFePO <sub>4</sub> . <i>Physical Review Letters</i> , 2012, 108, 195501.	2.9	61
116	Atomic structures and oxygen dynamics of CeO <sub>2</sub> grain boundaries. <i>Scientific Reports</i> , 2016, 6, 20288.	1.6	61
117	Atomic mechanism of polarization-controlled surface reconstruction in ferroelectric thin films. <i>Nature Communications</i> , 2016, 7, 11318.	5.8	61
118	Synthesis of subnanometer-diameter vertically aligned single-walled carbon nanotubes with copper-anchored cobalt catalysts. <i>Nanoscale</i> , 2016, 8, 1608-1617.	2.8	61
119	Oxygen loss and surface degradation during electrochemical cycling of lithium-ion battery cathode material LiMn <sub>2</sub> O <sub>4</sub> . <i>Journal of Materials Chemistry A</i> , 2019, 7, 8845-8854.	5.2	61
120	Isothermal Sintering Effects on Phase Separation and Grain Growth in Yttria-Stabilized Tetragonal Zirconia Polycrystal. <i>Journal of the American Ceramic Society</i> , 2009, 92, 467-475.	1.9	60
121	A new homologous series of iron pnictide oxide superconductors (Fe <sub>2</sub> As <sub>2</sub> )(Ca <sub>n</sub> + 2(Al, Ti) <sub>n</sub> O <sub>y</sub> ) (n = 2, 3). <i>ETQq1</i> 1.0, 784314, rgBT / O <sub>1.8</sub> 59	1.8	59
122	Segregation of Vanadium at the WC/Co Interface in VC-doped WC-Co. <i>Journal of Materials Research</i> , 1998, 13, 2450-2452.	1.2	58
123	Growth mechanism for single-crystalline thin film of InGaO <sub>3</sub> (ZnO) <sub>5</sub> by reactive solid-phase epitaxy. <i>Journal of Applied Physics</i> , 2004, 95, 5532-5539.	1.1	58
124	Defect energetics in SrTiO <sub>3</sub> symmetric tilt grain boundaries. <i>Physical Review B</i> , 2011, 83, .	1.1	58
125	Chirality specific and spatially uniform synthesis of single-walled carbon nanotubes from a sputtered Co-W bimetallic catalyst. <i>Nanoscale</i> , 2016, 8, 14523-14529.	2.8	58
126	Structure of Al <sub>2</sub> O <sub>3</sub> interfaces grown by molecular beam epitaxy. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1994, 70, 75-97.	0.8	57



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127	Orientation Relationship in Large Mismatched Bicrystals and Coincidence of Reciprocal Lattice Points (CRLP). <i>Materials Science Forum</i> , 1996, 207-209, 121-124.	0.3	57
128	Transparent polycrystalline cubic silicon nitride. <i>Scientific Reports</i> , 2017, 7, 44755.	1.6	57
129	Direct Observation of Oxygen Vacancy Distribution across Ytria-Stabilized Zirconia Grain Boundaries. <i>ACS Nano</i> , 2017, 11, 11376-11382.	7.3	57
130	Grain Growth of Silica-Added Zirconia Annealed in the Cubic/Tetragonal Two-Phase Region. <i>Journal of the American Ceramic Society</i> , 1998, 81, 2087-2092.	1.9	56
131	Synthesis of (La,Sr)MnO <sub>3</sub> -YSZ Composite Particles by Spray Pyrolysis. <i>Journal of the American Ceramic Society</i> , 1997, 80, 261-263.	1.9	55
132	Direct observation of basal dislocation in sapphire by HRTEM. <i>Acta Materialia</i> , 2002, 50, 101-108.	3.8	55
133	Bonding nature of metal/oxide incoherent interfaces by first-principles calculations. <i>Physical Review B</i> , 2006, 74, .	1.1	55
134	High-Temperature Hydrogen Adsorption Properties of Precursor-Derived Nickel Nanoparticle-Dispersed Amorphous Silica. <i>Journal of the American Ceramic Society</i> , 2007, 90, 546-552.	1.9	55
135	Characterization of nanostructured multiphase Ti-Al-B-N thin films with extremely small grain size. <i>Surface and Coatings Technology</i> , 2001, 148, 206-215.	2.2	54
136	Mechanism for Heteroepitaxial Growth of Transparent P-Type Semiconductor: LaCuOS by Reactive Solid-Phase Epitaxy. <i>Crystal Growth and Design</i> , 2004, 4, 301-307.	1.4	54
137	Field-modulated thermopower in SrTiO <sub>3</sub> -based field-effect transistors with amorphous 12CaO·7Al <sub>2</sub> O <sub>3</sub> glass gate insulator. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	54
138	Dependence of Structural Defects in Li <sub>2</sub> MnO <sub>3</sub> on Synthesis Temperature. <i>Chemistry of Materials</i> , 2016, 28, 4143-4150.	3.2	54
139	Influence of Dislocations in Transition Metal Oxides on Selected Physical and Chemical Properties. <i>Crystals</i> , 2018, 8, 241.	1.0	54
140	First-principles study of defect energetics in titanium-doped alumina. <i>Physical Review B</i> , 2003, 68, .	1.1	53
141	Nanowire design by dislocation technology. <i>Progress in Materials Science</i> , 2009, 54, 770-791.	16.0	53
142	SiC/Ti <sub>3</sub> SiC <sub>2</sub> interface: Atomic structure, energetics, and bonding. <i>Physical Review B</i> , 2009, 79, .	1.1	53
143	Highly ordered staging structural interface between LiFePO <sub>4</sub> and FePO <sub>4</sub> . <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 5363.	1.3	53
144	Periodic fluctuation of Ba/Nd ratio in single crystals of high-T <sub>c</sub> NdBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> superconductor. <i>Journal of Materials Research</i> , 1997, 12, 293-295.	1.2	52

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