

Yuichi Ikuhara

List of Publications by Citations

Source: <https://exaly.com/author-pdf/9041593/yuichi-ikuhara-publications-by-citations.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

955
papers

24,533
citations

71
h-index

121
g-index

987
ext. papers

27,163
ext. citations

5.3
avg, IF

6.97
L-index

#	Paper	IF	Citations
955	Giant thermoelectric Seebeck coefficient of a two-dimensional electron gas in SrTiO ₃ . <i>Nature Materials</i> , 2007 , 6, 129-34	27	794
954	Multifunctional Alloys Obtained via a Dislocation-Free Plastic Deformation Mechanism. <i>Science</i> , 2003 , 300, 464-7	33.3	690
953	Direct atomic-scale confirmation of three-phase storage mechanism in LiTiO ₂ anodes for room-temperature sodium-ion batteries. <i>Nature Communications</i> , 2013 , 4, 1870	17.4	577
952	Rutile-TiO ₂ nanocoating for a high-rate Li ₄ Ti ₅ O ₁₂ anode of a lithium-ion battery. <i>Journal of the American Chemical Society</i> , 2012 , 134, 7874-9	16.4	551
951	Electrically induced ferromagnetism at room temperature in cobalt-doped titanium dioxide. <i>Science</i> , 2011 , 332, 1065-7	33.3	388
950	Dynamics of annular bright field imaging in scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2010 , 110, 903-23	3.1	331
949	Grain boundary strengthening in alumina by rare earth impurities. <i>Science</i> , 2006 , 311, 212-5	33.3	327
948	A complex perovskite-type oxynitride: the first photocatalyst for water splitting operable at up to 600 nm. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 2955-9	16.4	311
947	Robust atomic resolution imaging of light elements using scanning transmission electron microscopy. <i>Applied Physics Letters</i> , 2009 , 95, 191913	3.4	304
946	Variation of long-period stacking order structures in rapidly solidified Mg ₉₇ Zn ₁ Y ₂ alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 393, 269-274	5.3	273
945	Overall water splitting by Ta ₃ N ₅ nanorod single crystals grown on the edges of KTaO ₃ particles. <i>Nature Catalysis</i> , 2018 , 1, 756-763	36.5	259
944	Lithium storage in Li ₄ Ti ₅ O ₁₂ spinel: the full static picture from electron microscopy. <i>Advanced Materials</i> , 2012 , 24, 3233-8	24	255
943	Differential phase-contrast microscopy at atomic resolution. <i>Nature Physics</i> , 2012 , 8, 611-615	16.2	247
942	Atomic Structure and Kinetics of NASICON Na _x V ₂ (PO ₄) ₃ Cathode for Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2014 , 24, 4265-4272	15.6	245
941	First-principles calculations of intrinsic defects in Al ₂ O ₃ . <i>Physical Review B</i> , 2003 , 68,	3.3	244
940	Direct observation of lithium staging in partially delithiated LiFePO ₄ at atomic resolution. <i>Journal of the American Chemical Society</i> , 2011 , 133, 4661-3	16.4	200
939	Direct atomic-resolution observation of two phases in the Li _{1.2} Mn _{0.567} Ni _{0.166} Co _{0.067} O ₂ cathode material for lithium-ion batteries. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 5969-73	16.4	196

938	Atom-resolved imaging of ordered defect superstructures at individual grain boundaries. <i>Nature</i> , 2011 , 479, 380-3	50.4	194
937	First-principles study on structures and energetics of intrinsic vacancies in SrTiO ₃ . <i>Physical Review B</i> , 2003 , 68,	3.3	178
936	Single-Crystalline Films of the Homologous Series InGaO ₃ (ZnO) _m Grown by Reactive Solid-Phase Epitaxy. <i>Advanced Functional Materials</i> , 2003 , 13, 139-144	15.6	171
935	Atomic-scale visualization of antisite defects in LiFePO ₄ . <i>Physical Review Letters</i> , 2008 , 100, 125502	7.4	157
934	Atomic structure of a CeO ₂ grain boundary: the role of oxygen vacancies. <i>Nano Letters</i> , 2010 , 10, 4668-72	11.5	143
933	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	3.8	143
932	Solute segregation at grain boundaries in superplastic SiO ₂ -doped TZP. <i>Acta Materialia</i> , 1997 , 45, 5275-5284	5.4	138
931	Microstructural Changes in LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ Positive Electrode Material during the First Cycle. <i>Journal of the Electrochemical Society</i> , 2011 , 158, A357	3.9	127
930	Cubic-Formation and Grain-Growth Mechanisms in Tetragonal Zirconia Polycrystal. <i>Journal of the American Ceramic Society</i> , 2003 , 86, 1401-1408	3.8	125
929	Selective Detection of Formaldehyde Gas Using a Cd-Doped TiO ₂ -SnO ₂ Sensor. <i>Sensors</i> , 2009 , 9, 9029-38	3.8	121
928	Large magnetoelectric coupling in magnetically short-range ordered Bi ₂ TiBeO ₇ film. <i>Scientific Reports</i> , 2014 , 4, 5255	4.9	120
927	One-dimensional van der Waals heterostructures. <i>Science</i> , 2020 , 367, 537-542	33.3	119
926	First-principles calculations of lithium-ion migration at a coherent grain boundary in a cathode material, LiCoO ₂ . <i>Advanced Materials</i> , 2013 , 25, 618-22	24	118
925	Oxygen-vacancy ordering at surfaces of lithium manganese(III,IV) oxide spinel nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 3053-7	16.4	111
924	Conducting nanowires in insulating ceramics. <i>Nature Materials</i> , 2003 , 2, 453-6	27	110
923	High-temperature Creep Resistance in Rare-earth-doped, Fine-grained Al ₂ O ₃ . <i>Journal of Materials Research</i> , 1998 , 13, 2597-2601	2.5	110
922	Enhancing photocatalytic activity of LaTiO ₂ N by removal of surface reconstruction layer. <i>Nano Letters</i> , 2014 , 14, 1038-41	11.5	109
921	Grain boundary electronic structure related to the high-temperature creep resistance in polycrystalline Al ₂ O ₃ . <i>Acta Materialia</i> , 2002 , 50, 2955-2966	8.4	109

920	New insight into the atomic structure of electrochemically delithiated O ₃ -Li _(1-x) CoO ₂ (0 < x < 0.5) nanoparticles. <i>Nano Letters</i> , 2012 , 12, 6192-7	11.5	108
919	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	16.4	108
918	Electric field imaging of single atoms. <i>Nature Communications</i> , 2017 , 8, 15631	17.4	107
917	Direct imaging of reconstructed atoms on TiO ₂ (110) surfaces. <i>Science</i> , 2008 , 322, 570-3	33.3	105
916	Ferromagnetic dislocations in antiferromagnetic NiO. <i>Nature Nanotechnology</i> , 2013 , 8, 266-70	28.7	104
915	Direct Imaging of Hydrogen within a Crystalline Environment. <i>Applied Physics Express</i> , 2010 , 3, 116603	2.4	103
914	Nonstoichiometric dislocation cores in alpha-alumina. <i>Science</i> , 2007 , 316, 82-5	33.3	101
913	Grain-boundary structure and microstructure development mechanism in 28mol% yttria-stabilized zirconia polycrystals. <i>Acta Materialia</i> , 2008 , 56, 1315-1325	8.4	100
912	Atomic-scale imaging of individual dopant atoms in a buried interface. <i>Nature Materials</i> , 2009 , 8, 654-8	27	96
911	High-temperature grain boundary sliding behavior and grain boundary energy in cubic zirconia bicrystals. <i>Acta Materialia</i> , 2004 , 52, 2349-2357	8.4	96
910	A new layered iron arsenide superconductor: (Ca,Pr)FeAs ₂ . <i>Journal of the American Chemical Society</i> , 2014 , 136, 846-9	16.4	92
909	New area detector for atomic-resolution scanning transmission electron microscopy. <i>Journal of Electron Microscopy</i> , 2010 , 59, 473-9		92
908	Role of Pr segregation in acceptor-state formation at ZnO grain boundaries. <i>Physical Review Letters</i> , 2006 , 97, 106802	7.4	92
907	Direct imaging of Pt single atoms adsorbed on TiO ₂ (110) surfaces. <i>Nano Letters</i> , 2014 , 14, 134-8	11.5	91
906	Atomic structure, electronic structure, and defect energetics in [001](310) grain boundaries of SrTiO ₃ and BaTiO ₃ . <i>Physical Review B</i> , 2008 , 78,	3.3	90
905	Imaging of built-in electric field at a p-n junction by scanning transmission electron microscopy. <i>Scientific Reports</i> , 2015 , 5, 10040	4.9	89
904	Regulating infrared photoresponses in reduced graphene oxide phototransistors by defect and atomic structure control. <i>ACS Nano</i> , 2013 , 7, 6310-20	16.7	89
903	Possible ferroelectricity in perovskite oxynitride SrTaO ₂ N epitaxial thin films. <i>Scientific Reports</i> , 2015 , 4,	4.9	86

902	Atomic-scale structure and properties of highly stable antiphase boundary defects in FeO. <i>Nature Communications</i> , 2014 , 5, 5740	17.4	86
901	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	1.6	86
900	Direct observation of individual dislocation interaction processes with grain boundaries. <i>Science Advances</i> , 2016 , 2, e1501926	14.3	85
899	Gigantic Electrostrain in Duplex Structured Alkaline Niobates. <i>Chemistry of Materials</i> , 2012 , 24, 3363-3369	9.6	83
898	Microstructural Observation of LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ after Charge and Discharge by Scanning Transmission Electron Microscopy. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A1070-A1073	3.9	83
897	Yttrium doping effect on oxygen grain boundary diffusion in γ -Al ₂ O ₃ . <i>Acta Materialia</i> , 2007 , 55, 6627-6638	4	83
896	Crystalline Grain Interior Configuration Affects Lithium Migration Kinetics in Li-Rich Layered Oxide. <i>Nano Letters</i> , 2016 , 16, 2907-15	11.5	83
895	Atomic Structures and Electrical Properties of ZnO Grain Boundaries. <i>Journal of the American Ceramic Society</i> , 2007 , 90, 337-357	3.8	82
894	Heat treatment and anomalous peak effect in J _c -H curve at 77 K for NdBa ₂ Cu ₃ O _{7-δ} single-crystal superconductor. <i>Physica C: Superconductivity and Its Applications</i> , 1996 , 259, 295-303	1.3	82
893	High resolution transmission electron microscopy study in VC-doped WC-Co compound. <i>Science and Technology of Advanced Materials</i> , 2000 , 1, 97-104	7.1	81
892	Direct observation of π domain boundary core structure in magnetic skyrmion lattice. <i>Science Advances</i> , 2016 , 2, e1501280	14.3	80
891	Self-Limiting Chemical Vapor Deposition Growth of Monolayer Graphene from Ethanol. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 10755-10763	3.8	79
890	Polymorphism of dislocation core structures at the atomic scale. <i>Nature Communications</i> , 2014 , 5, 3239	17.4	78
889	Atomistic mechanisms of nonstoichiometry-induced twin boundary structural transformation in titanium dioxide. <i>Nature Communications</i> , 2015 , 6, 7120	17.4	77
888	Lithium Atom and A-Site Vacancy Distributions in Lanthanum Lithium Titanate. <i>Chemistry of Materials</i> , 2013 , 25, 1607-1614	9.6	77
887	Enhanced Seebeck coefficient of quantum-confined electrons in SrTiO ₃ /SrTi _{0.8} Nb _{0.2} O ₃ superlattices. <i>Applied Physics Letters</i> , 2007 , 91, 192105	3.4	75
886	Possible absence of critical thickness and size effect in ultrathin perovskite ferroelectric films. <i>Nature Communications</i> , 2017 , 8, 15549	17.4	74
885	High resolution microscopy study in Cr ₃ C ₂ -doped WC-Co. <i>Journal of Materials Science</i> , 2001 , 36, 3885-3890	9	73

884	Unusually large enhancement of thermopower in an electric field induced two-dimensional electron gas. <i>Advanced Materials</i> , 2012 , 24, 740-4	24	71
883	STEM characterization for lithium-ion battery cathode materials. <i>Current Opinion in Solid State and Materials Science</i> , 2012 , 16, 31-38	12	71
882	Homologous series of iron pnictide oxide superconductors (Fe ₂ As ₂)[Ca _{n+1} (Sc,Ti) _n O _y] (n=3,4,5) with extremely thick blocking layers. <i>Applied Physics Letters</i> , 2010 , 97, 072506	3.4	71
881	Atomically ordered solute segregation behaviour in an oxide grain boundary. <i>Nature Communications</i> , 2016 , 7, 11079	17.4	70
880	Orientation-dependent arrangement of antisite defects in lithium iron(II) phosphate crystals. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 543-6	16.4	70
879	Oxygen Adsorption on Anatase TiO ₂ (101) and (001) Surfaces from First Principles. <i>Materials Transactions</i> , 2010 , 51, 171-175	1.3	70
878	Atomic-Scale Structure and Local Chemistry of CoFeB-MgO Magnetic Tunnel Junctions. <i>Nano Letters</i> , 2016 , 16, 1530-6	11.5	69
877	Interface structures of gold nanoparticles on TiO ₂ (110). <i>Physical Review Letters</i> , 2009 , 102, 136105	7.4	68
876	Field-induced water electrolysis switches an oxide semiconductor from an insulator to a metal. <i>Nature Communications</i> , 2010 , 1, 118	17.4	65
875	The influence of trace impurities on the mechanical characteristics of a superplastic 2mol% yttria stabilized zirconia. <i>Acta Materialia</i> , 1998 , 46, 5557-5568	8.4	65
874	High resolution transmission electron microscopy studies of metal/ceramics interfaces. <i>Microscopy Research and Technique</i> , 1998 , 40, 206-41	2.8	64
873	Dimensionality-driven insulator-metal transition in A-site excess non-stoichiometric perovskites. <i>Nature Communications</i> , 2010 , 1, 106	17.4	63
872	Real-time direct observations of polarization reversal in a piezoelectric crystal: Pb(Mg _{1/3} Nb _{2/3})O ₃ -PbTiO ₃ studied via in situ electrical biasing transmission electron microscopy. <i>Physical Review Letters</i> , 2011 , 107, 187601	7.4	63
871	Dislocation-enhanced ionic conductivity of yttria-stabilized zirconia. <i>Applied Physics Letters</i> , 2003 , 82, 877-879	3.4	63
870	Film/Substrate Orientation Relationship in the AlN/6H-SiC Epitaxial System. <i>Physical Review Letters</i> , 1996 , 77, 1797-1800	7.4	63
869	A new sealed lithium-peroxide battery with a co-doped Li ₂ O cathode in a superconcentrated lithium bis(fluorosulfonyl)amide electrolyte. <i>Scientific Reports</i> , 2014 , 4, 5684	4.9	61
868	Atomic Structures and Energies of Σ Symmetrical Tilt Grain Boundaries in Alumina Bicrystals. <i>Journal of the American Ceramic Society</i> , 2003 , 86, 574-80	3.8	58
867	Real-time direct observation of Li in LiCoO ₂ cathode material. <i>Applied Physics Letters</i> , 2011 , 98, 051913	3.4	57

866	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	2.5	57
865	Atomic-scale structure evolution in a quasi-equilibrated electrochemical process of electrode materials for rechargeable batteries. <i>Advanced Materials</i> , 2015 , 27, 2134-49	24	56
864	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	3.6	56
863	Distinct configurations of antisite defects in ordered metal phosphates: comparison between LiMnPO ₄ and LiFePO ₄ . <i>Physical Review Letters</i> , 2012 , 108, 195501	7.4	56
862	A new homologous series of iron pnictide oxide superconductors (Fe ₂ As ₂)(Ca _n + 2(Al, Ti) _n O _y) (n= 2, 3, 4). <i>Superconductor Science and Technology</i> , 2010 , 23, 115005	3.1	56
861	Microstructures and grain boundaries of (Ti,Al)N films. <i>Surface and Coatings Technology</i> , 1998 , 107, 41-47.	4.4	56
860	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,	3.3	56
859	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	6	56
858	Atomic-Scale Measurement of Flexoelectric Polarization at SrTiO ₃ Dislocations. <i>Physical Review Letters</i> , 2018 , 120, 267601	7.4	55
857	Defect energetics in SrTiO ₃ symmetric tilt grain boundaries. <i>Physical Review B</i> , 2011 , 83,	3.3	55
856	First-principles calculation of defect energetics in cubic-BaTiO ₃ and a comparison with SrTiO ₃ . <i>Acta Materialia</i> , 2007 , 55, 6535-6540	8.4	55
855	Misfit accommodation mechanism at the heterointerface between diamond and cubic boron nitride. <i>Nature Communications</i> , 2015 , 6, 6327	17.4	54
854	Ohmic contacts on silicon carbide: The first monolayer and its electronic effect. <i>Physical Review B</i> , 2009 , 80,	3.3	54
853	Improvement of high-temperature creep resistance in fine-grained Al ₂ O ₃ by Zr ⁴⁺ segregation in grain boundaries. <i>Philosophical Magazine Letters</i> , 1997 , 76, 9-14	1	54
852	Growth mechanism for single-crystalline thin film of InGaO ₃ (ZnO) ₅ by reactive solid-phase epitaxy. <i>Journal of Applied Physics</i> , 2004 , 95, 5532-5539	2.5	54
851	Orientation Relationship in Large Mismatched Bicrystals and Coincidence of Reciprocal Lattice Points (CRLP). <i>Materials Science Forum</i> , 1996 , 207-209, 121-124	0.4	54
850	Stimuli-responsive hydroxyapatite liquid crystal with macroscopically controllable ordering and magneto-optical functions. <i>Nature Communications</i> , 2018 , 9, 568	17.4	53
849	Fabrication of all-solid-state battery using epitaxial LiCoO ₂ thin films. <i>Journal of Power Sources</i> , 2014 , 267, 881-887	8.9	53

848	Domain boundaries and their influence on Li migration in solid-state electrolyte (La,Li)TiO ₃ . <i>Journal of Power Sources</i> , 2015 , 276, 203-207	8.9	53
847	Band engineering of perovskite-type transition metal oxynitrides for photocatalytic overall water splitting. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 4544-4552	13	52
846	Highly ordered staging structural interface between LiFePO ₄ and FePO ₄ . <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 5363-7	3.6	52
845	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	3.8	52
844	On the quantitiveness of EDS STEM. <i>Ultramicroscopy</i> , 2015 , 151, 150-159	3.1	51
843	Structure of $\sqrt{3}\times\sqrt{3}$ Al ₂ O ₃ interfaces grown by molecular beam epitaxy. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1994 , 70, 75-97		51
842	Assessment of Strain-Generated Oxygen Vacancies Using SrTiO ₃ /BaTiO ₃ Bicrystals. <i>Nano Letters</i> , 2015 , 15, 4129-4135	34.5	50
841	Enhanced Piezoelectric Response due to Polarization Rotation in Cobalt-Substituted BiFeO ₃ Epitaxial Thin Films. <i>Advanced Materials</i> , 2016 , 28, 8639-8644	24	50
840	Mechanism for Heteroepitaxial Growth of Transparent P-Type Semiconductor: LaCuO ₂ by Reactive Solid-Phase Epitaxy. <i>Crystal Growth and Design</i> , 2004 , 4, 301-307	3.5	50
839	Direct observation of basal dislocation in sapphire by HRTEM. <i>Acta Materialia</i> , 2002 , 50, 101-108	8.4	50
838	Grain Growth of Silica-Added Zirconia Annealed in the Cubic/Tetragonal Two-Phase Region. <i>Journal of the American Ceramic Society</i> , 2005 , 81, 2087-2092	3.8	50
837	Synthesis of subnanometer-diameter vertically aligned single-walled carbon nanotubes with copper-anchored cobalt catalysts. <i>Nanoscale</i> , 2016 , 8, 1608-17	7.7	49
836	Direct Visualization of Local Electromagnetic Field Structures by Scanning Transmission Electron Microscopy. <i>Accounts of Chemical Research</i> , 2017 , 50, 1502-1512	24.3	49
835	SiC/Ti ₃ SiC ₂ interface: Atomic structure, energetics, and bonding. <i>Physical Review B</i> , 2009 , 79,	3.3	49
834	First-principles study of defect energetics in titanium-doped alumina. <i>Physical Review B</i> , 2003 , 68,	3.3	49
833	Atomic mechanism of polarization-controlled surface reconstruction in ferroelectric thin films. <i>Nature Communications</i> , 2016 , 7, 11318	17.4	48
832	Field-modulated thermopower in SrTiO ₃ -based field-effect transistors with amorphous 12CaO·7Al ₂ O ₃ glass gate insulator. <i>Applied Physics Letters</i> , 2009 , 95, 113505	3.4	48
831	Atomic-Scale Valence State Distribution inside Ultrafine CeO Nanocubes and Its Size Dependence. <i>Small</i> , 2018 , 14, e1802915	11	48

830	Atomic and electronic structures of Cu/a-Al ₂ O ₃ interfaces prepared by pulsed-laser deposition. <i>Science and Technology of Advanced Materials</i> , 2003 , 4, 575-584	7.1	47
829	Characterization of nanostructured multiphase TiAlBN thin films with extremely small grain size. <i>Surface and Coatings Technology</i> , 2001 , 148, 206-215	4.4	47
828	Segregation of Vanadium at the WC/Co Interface in VC-doped WC-Co. <i>Journal of Materials Research</i> , 1998 , 13, 2450-2452	2.5	47
827	Domain boundary structures in lanthanum lithium titanates. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 843-852	13	46
826	Periodic fluctuation of Ba/Nd ratio in single crystals of high-Jc NdBa ₂ Cu ₃ O ₇ superconductor. <i>Journal of Materials Research</i> , 1997 , 12, 293-295	2.5	46
825	Dislocation Structures of Low-Angle and Near- β Grain Boundaries in Alumina Bicrystals. <i>Journal of the American Ceramic Society</i> , 2003 , 86, 595-602	3.8	46
824	Multi Functional Titanium Alloy IIGUM METALII. <i>Materials Science Forum</i> , 2003 , 426-432, 681-688	0.4	46
823	Chirality specific and spatially uniform synthesis of single-walled carbon nanotubes from a sputtered Co-W bimetallic catalyst. <i>Nanoscale</i> , 2016 , 8, 14523-9	7.7	46
822	Atomic structures and oxygen dynamics of CeO ₂ grain boundaries. <i>Scientific Reports</i> , 2016 , 6, 20288	4.9	46
821	Direct electric field imaging of graphene defects. <i>Nature Communications</i> , 2018 , 9, 3878	17.4	46
820	Size-Dependent Staging and Phase Transition in LiFePO ₄ /FePO ₄ . <i>Advanced Functional Materials</i> , 2014 , 24, 312-318	15.6	45
819	Atomic-scale structure and electronic property of the LaAlO ₃ /TiO ₂ interface. <i>Journal of Applied Physics</i> , 2010 , 108, 113701	2.5	45
818	Bonding nature of metal/oxide incoherent interfaces by first-principles calculations. <i>Physical Review B</i> , 2006 , 74,	3.3	45
817	Direct measurements of grain boundary sliding in yttrium-doped alumina bicrystals. <i>Applied Physics Letters</i> , 2003 , 82, 1179-1181	3.4	45
816	Site-selectivity of 3d metal cation dopants and dielectric response in calcium copper titanate. <i>Applied Physics Letters</i> , 2006 , 88, 091917	3.4	44
815	Growth mechanism of Y123 film by MOD-TFA process. <i>Physica C: Superconductivity and Its Applications</i> , 2002 , 378-381, 1033-1038	1.3	44
814	Amorphization of graphite induced by mechanical milling and subsequent crystallization of the amorphous carbon upon heat treating. <i>Journal of Materials Research</i> , 1996 , 11, 733-738	2.5	44
813	Synthesis of (La,Sr)MnO ₃ /SZ Composite Particles by Spray Pyrolysis. <i>Journal of the American Ceramic Society</i> , 1997 , 80, 261-263	3.8	43

812	Sr vacancy segregation by heat treatment at SrTiO ₃ grain boundary. <i>Applied Physics Letters</i> , 2005 , 87, 241920	3.4	43
811	Synthesis of Hierarchically Porous Hydrogen Silsesquioxane Monoliths and Embedding of Metal Nanoparticles by On-Site Reduction. <i>Advanced Functional Materials</i> , 2013 , 23, 2714-2722	15.6	42
810	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	3.8	41
809	Nanowire design by dislocation technology. <i>Progress in Materials Science</i> , 2009 , 54, 770-791	42.2	41
808	Oxygen Pipe Diffusion in Sapphire Basal Dislocation. <i>Journal of the Ceramic Society of Japan</i> , 2006 , 114, 1013-1017		41
807	Effect of Cation Doping on the Superplastic Flow in Yttria-Stabilized Tetragonal Zirconia Polycrystals. <i>Journal of the American Ceramic Society</i> , 2004 , 84, 1817-1821	3.8	40
806	Atomic and Electronic Structures of Ni/YSZ(111) Interface. <i>Materials Transactions</i> , 2004 , 45, 2137-2143	1.3	40
805	Multivariate statistical characterization of charged and uncharged domain walls in multiferroic hexagonal YMnO ₃ single crystal visualized by a spherical aberration-corrected STEM. <i>Nano Letters</i> , 2013 , 13, 4594-601	11.5	39
804	Direct oxygen imaging within a ceramic interface, with some observations upon the dark contrast at the grain boundary. <i>Ultramicroscopy</i> , 2011 , 111, 285-9	3.1	39
803	Ferrimagnetism and spontaneous ordering of transition metals in double perovskite La ₂ CrFeO ₆ films. <i>Physical Review B</i> , 2011 , 84,	3.3	39
802	Atomic structure and solute segregation of a $\sqrt{3}$, [110]/{111} grain boundary in an yttria-stabilized cubic zirconia bicrystal. <i>Philosophical Magazine Letters</i> , 2002 , 82, 393-400	1	39
801	Critical currents of YBa ₂ Cu ₃ O _y thick films prepared by liquid phase epitaxial growth. <i>Applied Physics Letters</i> , 1994 , 65, 1714-1716	3.4	39
800	Detailed structural examinations of covalently immobilized gold nanoparticles onto hydrogen-terminated silicon surfaces. <i>Chemistry - A European Journal</i> , 2005 , 12, 314-23	4.8	38
799	Crystallization mechanism of Nd _{1+x} Ba _{2-x} Cu ₃ O _{7-δ} and YBa ₂ Cu ₃ O _{7-δ} films deposited by metalorganic deposition method using trifluoroacetates. <i>Journal of Materials Research</i> , 2002 , 17, 1266-1275	12.5	38
798	Direct Observation of Oxygen Vacancy Distribution across Yttria-Stabilized Zirconia Grain Boundaries. <i>ACS Nano</i> , 2017 , 11, 11376-11382	16.7	37
797	Atomic-scale structural identification and evolution of Co-W-C ternary SWCNT catalytic nanoparticles: High-resolution STEM imaging on SiO ₂ . <i>Science Advances</i> , 2019 , 5, eaat9459	14.3	37
796	Picometer-scale atom position analysis in annular bright-field STEM imaging. <i>Ultramicroscopy</i> , 2018 , 184, 177-187	3.1	37
795	Prospects for lithium imaging using annular bright field scanning transmission electron microscopy: a theoretical study. <i>Ultramicroscopy</i> , 2011 , 111, 1144-54	3.1	37

794	Grain boundary dependency of nonlinear current-voltage characteristics in Pr and Co Doped ZnO Bicrystals. <i>Journal of Applied Physics</i> , 2004 , 95, 1258-1264	2.5	37
793	High-temperature creep resistance in lanthanoid ion-doped polycrystalline Al ₂ O ₃ . <i>Philosophical Magazine Letters</i> , 1999 , 79, 249-256	1	37
792	Transparent polycrystalline cubic silicon nitride. <i>Scientific Reports</i> , 2017 , 7, 44755	4.9	36
791	Bulk metallic glassy surface native oxide: Its atomic structure, growth rate and electrical properties. <i>Acta Materialia</i> , 2015 , 97, 282-290	8.4	36
790	Origins of hole doping and relevant optoelectronic properties of wide gap p-type semiconductor, LaCuOSe. <i>Journal of the American Chemical Society</i> , 2010 , 132, 15060-7	16.4	36
789	Chemical bonding, interface strength, and oxygen K electron-energy-loss near-edge structure of the Cu/Al ₂ O ₃ interface. <i>Physical Review B</i> , 2006 , 74,	3.3	36
788	Melting of Pb Charge Glass and Simultaneous Pb-Cr Charge Transfer in PbCrO ₃ as the Origin of Volume Collapse. <i>Journal of the American Chemical Society</i> , 2015 , 137, 12719-28	16.4	35
787	Dependence of Structural Defects in Li ₂ MnO ₃ on Synthesis Temperature. <i>Chemistry of Materials</i> , 2016 , 28, 4143-4150	9.6	35
786	The Band Structure of Polycrystalline Al ₂ O ₃ and Its Influence on Transport Phenomena. <i>Journal of the American Ceramic Society</i> , 2016 , 99, 733-747	3.8	35
785	Double thermoelectric power factor of a 2D electron system. <i>Nature Communications</i> , 2018 , 9, 2224	17.4	35
784	Single-source-precursor synthesis and electromagnetic properties of novel RGO/BiCN ceramic nanocomposites. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 7950-7960	7.1	35
783	Grain Boundary Segregation-Induced Phase Transformation in Ytria-Stabilized Tetragonal Zirconia Polycrystal. <i>Journal of the Ceramic Society of Japan</i> , 2006 , 114, 230-237		35
782	Initial growth stage of nanoscaled TiN films: Formation of continuous amorphous layers and thickness-dependent crystal nucleation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2003 , 21, 1717-1723	2.9	35
781	Microstructural Characterization of Superplastic SiO ₂ -doped TZP with a Small Amount of Oxide Addition. <i>Journal of the American Ceramic Society</i> , 2005 , 81, 2927-2932	3.8	35
780	High Electron Mobility of Nb-Doped SrTiO ₃ Films Stemming from Rod-Type Sr Vacancy Clusters. <i>ACS Nano</i> , 2015 , 9, 10769-77	16.7	34
779	Atomic structure of luminescent centers in high-efficiency Ce-doped w-AlN single crystal. <i>Scientific Reports</i> , 2014 , 4, 3778	4.9	34
778	Formation of Potential Barrier Related to Grain-Boundary Character in Semiconducting Barium Titanate. <i>Journal of the American Ceramic Society</i> , 2004 , 83, 2684-2688	3.8	34
777	Self-lubrication mechanism of chlorine implanted TiN coatings. <i>Wear</i> , 2003 , 254, 668-679	3.5	34

- 776 Mechanical force involved multiple fields switching of both local ferroelectric and magnetic domain in a Bi₅Ti₃FeO₁₅ thin film. *NPG Asia Materials*, **2017**, 9, e349-e349 10.3 33
- 775 Oxygen loss and surface degradation during electrochemical cycling of lithium-ion battery cathode material LiMn₂O₄. *Journal of Materials Chemistry A*, **2019**, 7, 8845-8854 13 33
- 774 Two-dimensional electron gas at the Ti-diffused BiFeO₃/SrTiO₃ interface. *Applied Physics Letters*, **2015**, 107, 031601 3.4 33
- 773 Atomic-scale structure relaxation, chemistry and charge distribution of dislocation cores in SrTiO₃. *Ultramicroscopy*, **2018**, 184, 217-224 3.1 33
- 772 Cubic Cesium Hydrogen Silicododecatungstate with Anisotropic Morphology and Polyoxometalate Vacancies Exhibiting Selective Water Sorption and Cation-Exchange Properties. *Chemistry of Materials*, **2013**, 25, 905-911 9.6 33
- 771 Functional complex point-defect structure in a huge-size-mismatch system. *Physical Review Letters*, **2013**, 110, 065504 7.4 33
- 770 Growth of Ruddlesden-Popper type faults in Sr-excess SrTiO₃ homoepitaxial thin films by pulsed laser deposition. *Applied Physics Letters*, **2011**, 99, 173109 3.4 33
- 769 Superplastic Behavior of Fine-Grained Silicon Nitride Material under Compression. *Journal of the American Ceramic Society*, **2004**, 83, 841-847 3.8 33
- 768 Growth model and the effect of CuO nanocrystallites on the properties of chemically derived epitaxial thin films of YBa₂Cu₃O_{7-x}. *Journal of Applied Physics*, **2002**, 92, 3318-3325 2.5 33
- 767 Direct observation of hexagonal boron nitride at the grain boundary of cubic boron nitride by high resolution electron microscopy. *Applied Physics Letters*, **1995**, 66, 2490-2492 3.4 33
- 766 Attainment of 40.5 pm spatial resolution using 300 kV scanning transmission electron microscope equipped with fifth-order aberration corrector. *Microscopy (Oxford, England)*, **2018**, 67, 46-50 1.3 33
- 765 Realization of Large Electric Polarization and Strong Magnetoelectric Coupling in BiMnCrO₃. *Advanced Materials*, **2017**, 29, 1703435 24 32
- 764 Atomistic origin of an ordered superstructure induced superconductivity in layered chalcogenides. *Nature Communications*, **2015**, 6, 6091 17.4 32
- 763 Enhanced light element imaging in atomic resolution scanning transmission electron microscopy. *Ultramicroscopy*, **2014**, 136, 31-41 3.1 32
- 762 Grain boundary mobility and grain growth behavior in polycrystals with faceted wet and dry boundaries. *Acta Materialia*, **2009**, 57, 2128-2135 8.4 32
- 761 Identification of native defects around grain boundary in Pr-doped ZnO bicrystal using electron energy loss spectroscopy and first-principles calculations. *Applied Physics Letters*, **2004**, 84, 5311-5313 3.4 32
- 760 First-Principles Characterization of Atomic Structure of Al₂O₃(0001)/Cu Nano-Hetero Interface. *Materials Transactions*, **2004**, 45, 1973-1977 1.3 32
- 759 Impurity effects on grain boundary strength in structural ceramics. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2001**, 319-321, 24-30 5.3 32

758	Atomic-Scale Observations of (010) LiFePO ₄ Surfaces Before and After Chemical Delithiation. <i>Nano Letters</i> , 2016 , 16, 5409-14	11.5	32
757	Resolving 45-pm-separated Si-Si atomic columns with an aberration-corrected STEM. <i>Microscopy (Oxford, England)</i> , 2015 , 64, 213-7	1.3	31
756	Influence of Dislocations in Transition Metal Oxides on Selected Physical and Chemical Properties. <i>Crystals</i> , 2018 , 8, 241	2.3	31
755	Control of normally on/off characteristics in hydrogenated diamond metal-insulator-semiconductor field-effect transistors. <i>Journal of Applied Physics</i> , 2015 , 118, 115704	2.5	31
754	Atomic-Scale Visualization of Polarization Pinning and Relaxation at Coherent BiFeO ₃ /LaAlO ₃ Interfaces. <i>Advanced Functional Materials</i> , 2014 , 24, 793-799	15.6	31
753	Transmission Electron Microscopy Analysis of a Threading Dislocation with $\frac{c}{2}a$ Burgers Vector in 4H-SiC. <i>Applied Physics Express</i> , 2012 , 5, 081301	2.4	31
752	Phase-transformation and grain-growth kinetics in yttria-stabilized tetragonal zirconia polycrystal doped with a small amount of alumina. <i>Journal of the European Ceramic Society</i> , 2010 , 30, 1679-1690	6	31
751	Current-Voltage Characteristics across (0001) Twist Boundaries in Zinc Oxide Bicrystals. <i>Journal of the American Ceramic Society</i> , 2002 , 85, 2142-2144	3.8	31
750	Grain Boundary and Interface Structures in Ceramics.. <i>Journal of the Ceramic Society of Japan</i> , 2001 , 109, S110-S120		31
749	Crystallography and structural evolution of cubic boron nitride films during bias sputter deposition. <i>Acta Materialia</i> , 2000 , 48, 3745-3759	8.4	31
748	Grain boundary structure in TiO ₂ -excess barium titanate. <i>Journal of Materials Research</i> , 1998 , 13, 3449-3452	3.5	31
747	Transmission electron microscopic study of c -BN films deposited on a Si substrate. <i>Applied Physics Letters</i> , 1995 , 66, 1478-1480	3.4	31
746	Diamond coating on WC-Co and WC for cutting tools. <i>Surface and Coatings Technology</i> , 1994 , 68-69, 369-373	3.7	31
745	Cation ordering in A-site-deficient Li-ion conducting perovskites La(1-x)/3LixNbO ₃ . <i>Journal of Materials Chemistry A</i> , 2015 , 3, 3351-3359	13	30
744	Nanocrystalline, ultra-degradation-resistant zirconia: its grain boundary nanostructure and nanochemistry. <i>Scientific Reports</i> , 2014 , 4, 4758	4.9	30
743	Formation of (W,V)Cx layers at the WC/Co interfaces in the VC-doped WC-Co cemented carbide. <i>International Journal of Refractory Metals and Hard Materials</i> , 2012 , 30, 185-187	4.1	30
742	Direct Atomic-Resolution Observation of Two Phases in the Li _{1.2} Mn _{0.567} Ni _{0.166} Co _{0.067} O ₂ Cathode Material for Lithium-Ion Batteries. <i>Angewandte Chemie</i> , 2013 , 125, 6085-6089	3.6	30
741	Strontium vacancy clustering in Ti-excess SrTiO ₃ thin film. <i>Applied Physics Letters</i> , 2011 , 99, 033110	3.4	30

740	Critical thickness for giant thermoelectric Seebeck coefficient of 2DEG confined in SrTiO ₃ /SrTi _{0.8} Nb _{0.2} O ₃ superlattices. <i>Thin Solid Films</i> , 2008 , 516, 5916-5920	2.2	30
739	First-principles study of grain boundary sliding in Al ₂ O ₃ . <i>Physical Review B</i> , 2007 , 75,	3.3	30
738	First-principles study on incidence direction, individual site character, and atomic projection dependences of ELNES for perovskite compounds. <i>Ultramicroscopy</i> , 2006 , 106, 92-104	3.1	30
737	Oxygen diffusion blocking of single grain boundary in yttria-doped zirconia bicrystals. <i>Journal of Materials Science</i> , 2005 , 40, 3185-3190	4.3	30
736	High critical current density scheme of YBa ₂ Cu ₃ O _{7-x} films by the metalorganic deposition using trifluoroacetates. <i>Superconductor Science and Technology</i> , 2002 , 15, 913-916	3.1	30
735	Reduction on reactive pore surfaces as a versatile approach to synthesize monolith-supported metal alloy nanoparticles and their catalytic applications. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 12535 ¹³		29
734	Direct Determination of Dopant Site Selectivity in Ordered Perovskite CaCu ₃ Ti ₄ O ₁₂ Polycrystals by Aberration-Corrected STEM. <i>Advanced Materials</i> , 2009 , 21, 885-889	24	29
733	The instability and resulting phase transition of cubic zirconia. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 312, 90-98	5.3	29
732	Critical Assessments of Tensile Ductility in Superplastic TZP and TiO ₂ -doped TZP. <i>Materials Transactions, JIM</i> , 1998 , 39, 1108-1114		29
731	Single atom visibility in STEM optical depth sectioning. <i>Applied Physics Letters</i> , 2016 , 109, 163102	3.4	29
730	Review: microstructure-development mechanism during sintering in polycrystalline zirconia. <i>International Materials Reviews</i> , 2018 , 63, 375-406	16.1	29
729	Nucleation and thermal stability of an icosahedral nanophase during the early crystallization stage in Zr-Co-Cu-Al metallic glasses. <i>Acta Materialia</i> , 2017 , 132, 298-306	8.4	28
728	Atomic resolution electron microscopy in a magnetic field free environment. <i>Nature Communications</i> , 2019 , 10, 2308	17.4	28
727	Characterization of Silicon Carbide Powders Synthesized by the Carbothermal Reduction of Silicon Carbide Precursors. <i>Journal of the American Ceramic Society</i> , 1998 , 81, 3173-3176	3.8	28
726	Lattice Strain and Dislocations in Polished Surfaces on Sapphire. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 2277-2285	3.8	28
725	Atomic and electronic structure of [0001]/(($\bar{1}$) ₂ 30) $\sqrt{3}$ symmetric tilt grain boundary in ZnO bicrystal with linear current-voltage characteristic. <i>Journal of Materials Science</i> , 2005 , 40, 3059-3066 ^{4.3}		28
724	Thermopower modulation clarification of the intrinsic effective mass in transparent oxide semiconductor BaSnO ₃ . <i>Physical Review Materials</i> , 2017 , 1,	3.2	28
723	Grain boundary character dependence of oxygen grain boundary diffusion in Al ₂ O ₃ bicrystals. <i>Scripta Materialia</i> , 2011 , 65, 544-547	5.6	27

722	Growth and Microstructure of Epitaxial Ti ₃ SiC ₂ Contact Layers on SiC. <i>Materials Transactions</i> , 2009 , 50, 1071-1075	1.3	27
721	Structures of dissociated <1100> dislocations and {1100} stacking faults of alumina (Al ₂ O ₃). <i>Acta Materialia</i> , 2010 , 58, 208-215	8.4	27
720	Interface structure of face-centered-cubic-Ti thin film grown on 6H-SiC substrate. <i>Journal of Materials Research</i> , 2000 , 15, 2121-2124	2.5	27
719	Grain boundary electrical barriers in positive temperature coefficient thermistors. <i>Journal of Applied Physics</i> , 1999 , 86, 2909-2913	2.5	27
718	Atomic structure and electronic properties of MgO grain boundaries in tunnelling magnetoresistive devices. <i>Scientific Reports</i> , 2017 , 7, 45594	4.9	26
717	Quantitative electric field mapping in thin specimens using a segmented detector: Revisiting the transfer function for differential phase contrast. <i>Ultramicroscopy</i> , 2017 , 182, 258-263	3.1	26
716	Solid Solution Domains at Phase Transition Front of Li _x Ni _{0.5} Mn _{1.5} O ₄ . <i>Advanced Energy Materials</i> , 2015 , 5, 1500638	21.8	26
715	Atomic structure and strain field of threading dislocations in CeO ₂ thin films on yttria-stabilized ZrO ₂ . <i>Applied Physics Letters</i> , 2011 , 98, 153104	3.4	26
714	Effect of alloying elements on the interfacial bonding strength and electric conductivity of carbon nano-fiber reinforced Cu matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 449-451, 778-781	5.3	26
713	Large enhancement of the thermoelectric Seebeck coefficient for amorphous oxide semiconductor superlattices with extremely thin conductive layers. <i>Physica Status Solidi - Rapid Research Letters</i> , 2008 , 2, 105-107	2.5	26
712	Grain-boundary faceting at a = 3, [110]/{112} grain boundary in a cubic zirconia bicrystal. <i>Philosophical Magazine</i> , 2003 , 83, 2221-2246	1.6	26
711	HRTEM and EELS characterization of atomic and electronic structures in Cu/Al ₂ O ₃ interfaces. <i>Applied Surface Science</i> , 2005 , 241, 87-90	6.7	26
710	Direct Observations of Debonding of Reinforcing Grains in Silicon Nitride Ceramics Sintered with Yttria Plus Alumina Additives. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 1222-1226	3.8	26
709	Arrangement of multiple structural units in a [0001] 49° tilt grain boundary in ZnO. <i>Physical Review B</i> , 2005 , 72,	3.3	26
708	Structure of [110] tilt grain boundaries in zirconia bicrystals. <i>Journal of Electron Microscopy</i> , 2001 , 50, 429-33		26
707	Large thickness dependence of the carrier mobility in a transparent oxide semiconductor, La-doped BaSnO ₃ . <i>Applied Physics Letters</i> , 2018 , 112, 232102	3.4	25
706	Atomic-scale identification of individual lanthanide dopants in optical glass fiber. <i>ACS Nano</i> , 2013 , 7, 5058-63	16.7	25
705	Evolution of nanodomains under DC electrical bias in Pb(Mg _{1/3} Nb _{2/3})O ₃ -PbTiO ₃ : An In-situ transmission electron microscopy study. <i>Applied Physics Letters</i> , 2012 , 100, 172902	3.4	25

704	Dislocation-Free InGaAs on Si(111) Using Micro-Channel Selective-Area Metalorganic Vapor Phase Epitaxy. <i>Applied Physics Express</i> , 2009 , 2, 011101	2.4	25
703	Atomic and Electronic Structure of V/MgO Interface. <i>Journal of Materials Science</i> , 1997 , 5, 5-16		25
702	TEM observations of Gd ₂ Zr ₂ O ₇ films formed by the ion-beam-assisted deposition method on an Ni-based alloy. <i>Physica C: Superconductivity and Its Applications</i> , 2003 , 392-396, 790-795	1.3	25
701	Control of dislocation configuration in sapphire. <i>Acta Materialia</i> , 2005 , 53, 455-462	8.4	25
700	A transmission electron microscopy study of amorphization of graphite by mechanical milling. <i>Carbon</i> , 1995 , 33, 1177-1180	10.4	25
699	A Single-Atom-Thick TiO ₂ Nanomesh on an Insulating Oxide. <i>ACS Nano</i> , 2015 , 9, 8766-72	16.7	24
698	Simple and engineered process yielding carbon nanotube arrays with 1.2 × 10 ¹³ cm ⁻² wall density on conductive underlayer at 400 °C. <i>Carbon</i> , 2015 , 81, 773-781	10.4	24
697	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	16.4	24
696	Direct Determination of Atomic Structure and Magnetic Coupling of Magnetite Twin Boundaries. <i>ACS Nano</i> , 2018 , 12, 2662-2668	16.7	24
695	Probing the Internal Atomic Charge Density Distributions in Real Space. <i>ACS Nano</i> , 2018 , 12, 8875-8881	16.7	24
694	Antiphase inversion domains in lithium cobaltite thin films deposited on single-crystal sapphire substrates. <i>Acta Materialia</i> , 2013 , 61, 7671-7678	8.4	24
693	Structural Distortion and Compositional Gradients Adjacent to Epitaxial LiMn ₂ O ₄ Thin Film Interfaces. <i>Advanced Materials Interfaces</i> , 2014 , 1, 1400143	4.6	24
692	Dynamic observations of dislocation behavior in SrTiO ₃ by in situ nanoindentation in a transmission electron microscope. <i>Applied Physics Letters</i> , 2012 , 100, 181906	3.4	24
691	First Principles Study on Intrinsic Vacancies in Cubic and Orthorhombic CaTiO ₃ . <i>Materials Transactions</i> , 2009 , 50, 977-983	1.3	24
690	First-Principles Calculation of Solution Energy of Alkaline-Earth Metal Elements to BaTiO ₃ . <i>Japanese Journal of Applied Physics</i> , 2007 , 46, 7136-7140	1.4	24
689	Microstructural Analysis of Liquid-Phase-Sintered Silicon Carbide. <i>Journal of the American Ceramic Society</i> , 2004 , 85, 430-436	3.8	24
688	Superplastic flow stress and electronic structure in yttria-stabilized tetragonal zirconia polycrystals doped with GeO ₂ and TiO ₂ . <i>Acta Materialia</i> , 2004 , 52, 5563-5569	8.4	24
687	Effects of Dislocations on the Oxygen Ionic Conduction in Yttria Stabilized Zirconia. <i>Materials Transactions</i> , 2004 , 45, 2042-2047	1.3	24

686	Synthesis of Pt-Entrapped Titanate Nanotubes. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, L690-L692	1.4	24
685	Damage morphology along ion traces in Au-irradiated Bi ₂ Sr ₂ CaCu ₂ O _x . <i>Physical Review B</i> , 1998 , 57, 13907-13914	3.3	24
684	Orientational relationship between cubic boron nitride and hexagonal boron nitride in a thin film synthesized by ion plating. <i>Applied Physics Letters</i> , 1995 , 67, 3551-3553	3.4	24
683	Theoretical framework of statistical noise in scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2018 , 193, 118-125	3.1	24
682	Phase transitions in LiCoO ₂ thin films prepared by pulsed laser deposition. <i>Materials Chemistry and Physics</i> , 2012 , 133, 1101-1107	4.4	23
681	Formation of cubic-AlN layer on MgO(100) substrate. <i>Journal of Crystal Growth</i> , 1998 , 189-190, 452-456	1.6	23
680	Investigation of the surface structure of zeolite A. <i>Physical Chemistry Chemical Physics</i> , 2005 , 7, 3416-8	3.6	23
679	Direct imaging of atomistic grain boundary migration. <i>Nature Materials</i> , 2021 , 20, 951-955	27	23
678	A Novel Class of Multiferroic Material, Bi ₄ Ti ₃ O ₁₂ hBiFeO ₃ with Localized Magnetic Ordering Evaluated from Their Single Crystals. <i>Advanced Electronic Materials</i> , 2017 , 3, 1600254	6.4	22
677	High electrical conducting deep-ultraviolet-transparent oxide semiconductor La-doped SrSnO ₃ exceeding ~3000 S cm ⁻¹ . <i>Applied Physics Letters</i> , 2020 , 116, 022103	3.4	22
676	Stable Magnetic Skyrmion States at Room Temperature Confined to Corrals of Artificial Surface Pits Fabricated by a Focused Electron Beam. <i>Nano Letters</i> , 2018 , 18, 754-762	11.5	22
675	Phase Boundary Structure of Li _x FePO ₄ Cathode Material Revealed by Atomic-Resolution Scanning Transmission Electron Microscopy. <i>Chemistry of Materials</i> , 2014 , 26, 6178-6184	9.6	22
674	A new rechargeable sodium battery utilizing reversible topotactic oxygen extraction/insertion of CaFeO(z) (2.5/zB) in an organic electrolyte. <i>Journal of the American Chemical Society</i> , 2014 , 136, 488-94	16.4	22
673	Epitaxial Growth of LiMn ₂ O ₄ Thin Films by Chemical Solution Deposition for Multilayer Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19540-19547	3.8	22
672	Fluorine in shark teeth: its direct atomic-resolution imaging and strengthening function. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 1543-7	16.4	22
671	Three-dimensional morphology of (W,V)C _x in VC-doped WC _{1-x} hard metals. <i>Scripta Materialia</i> , 2013 , 69, 473-476	5.6	22
670	Room-Temperature-Protonation-Driven On-Demand MetalInsulator Conversion of a Transition Metal Oxide. <i>Advanced Electronic Materials</i> , 2015 , 1, 1500063	6.4	22
669	Development of a monochromator for aberration-corrected scanning transmission electron microscopy. <i>Microscopy (Oxford, England)</i> , 2015 , 64, 151-8	1.3	22

668	ZnO dense nanowire array on a film structure in a single crystal domain texture for optical and photoelectrochemical applications. <i>Nanotechnology</i> , 2012 , 23, 495602	3.4	22
667	Controlling Interface Intermixing and Properties of SrTiO ₃ -Based Superlattices. <i>Advanced Functional Materials</i> , 2011 , 21, 2258-2263	15.6	22
666	Experimental characterization of the electronic structure of anatase TiO ₂ : Thermopower modulation. <i>Applied Physics Letters</i> , 2010 , 97, 172112	3.4	22
665	Importance of grain boundary chemistry on the high-temperature plastic flow in oxide ceramics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1997 , 234-236, 226-229	5.3	22
664	Multiple dissociation of grain boundary dislocations in alumina ceramics. <i>Philosophical Magazine</i> , 2006 , 86, 4657-4666	1.6	22
663	Self-Lubrication of Chlorine-Implanted Titanium Nitride Coating. <i>Journal of the American Ceramic Society</i> , 2004 , 85, 21-24	3.8	22
662	Valence state of Ti in conductive nanowires in sapphire. <i>Physical Review B</i> , 2004 , 70,	3.3	22
661	Grain boundary bonding state and fracture energy in small amount of oxide-doped fine-grained Al ₂ O ₃ . <i>Journal of Materials Science</i> , 1999 , 34, 1991-1997	4.3	22
660	Transmission electron microscopy in situ observation of crack propagation in sintered alumina. <i>Philosophical Magazine Letters</i> , 1992 , 66, 323-327	1	22
659	Structural Understanding of Superior Battery Properties of Partially Ni-Doped Li ₂ MnO ₃ as Cathode Material. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 2063-7	6.4	22
658	Large magnetoresistance in magnetically coupled SrRuO ₃ /CoFeO ₃ self-assembled nanostructures. <i>Advanced Materials</i> , 2013 , 25, 4753-9	24	21
657	A new method to detect and correct sample tilt in scanning transmission electron microscopy bright-field imaging. <i>Ultramicroscopy</i> , 2017 , 173, 76-83	3.1	21
656	Structure of screw dislocations in a (0 0 0 1)/[0 0 0 1] low-angle twist grain boundary of alumina (Al ₂ O ₃). <i>Acta Materialia</i> , 2012 , 60, 1293-1299	8.4	21
655	Quantitative analyses of oxidation states for cubic SrMnO ₃ and orthorhombic SrMnO _{2.5} with electron energy loss spectroscopy. <i>Journal of Applied Physics</i> , 2010 , 108, 124903	2.5	21
654	Diffusion Model of Gallium in Single-Crystal ZnO Proposed from Analysis of Concentration-Dependent Profiles Based on the Fermi-Level Effect. <i>Japanese Journal of Applied Physics</i> , 2007 , 46, 4099-4101	1.4	21
653	Optically produced cross patterning based on local dislocations inside MgO single crystals. <i>Applied Physics Letters</i> , 2007 , 90, 163110	3.4	21
652	Direct observation of intergranular cracks in sintered silicon nitride. <i>Philosophical Magazine</i> , 2004 , 84, 2767-2775	1.6	21
651	Atomic level changes during capacity fade in highly oriented thin films of cathode material LiCoPO ₄ . <i>Journal of Materials Chemistry A</i> , 2017 , 5, 9329-9338	13	20

650	Microscopic mechanism of biphasic interface relaxation in lithium iron phosphate after delithiation. <i>Nature Communications</i> , 2018 , 9, 2863	17.4	20
649	Synthesis and high-temperature evolution of single-phase amorphous Si ₃ N ₄ ceramics. <i>Journal of the European Ceramic Society</i> , 2015 , 35, 2007-2015	6	20
648	Atomic structure of a Σ [110]/(111) grain boundary in CeO ₂ . <i>Applied Physics Letters</i> , 2012 , 100, 073109	3.4	20
647	Cation off-stoichiometric SrMnO ₃ thin film grown by pulsed laser deposition. <i>Journal of Materials Science</i> , 2011 , 46, 4354-4360	4.3	20
646	Interface atomic-scale structure and its impact on quantum electron transport. <i>Advanced Materials</i> , 2009 , 21, 4966-4969	24	20
645	Partial dislocation configurations in a low-angle boundary in α -Al ₂ O ₃ . <i>Acta Materialia</i> , 2008 , 56, 2015-2028	3.4	20
644	Dislocation structures of low-angle boundaries in Nb-doped SrTiO ₃ bicrystals. <i>Journal of Materials Science</i> , 2006 , 41, 2621-2625	4.3	20
643	Mechanism of nucleation and growth of cubic boron nitride thin films. <i>Science and Technology of Advanced Materials</i> , 2000 , 1, 219-225	7.1	20
642	Structure and chemistry of grain boundaries in SiO ₂ -doped TZP. <i>Science and Technology of Advanced Materials</i> , 2001 , 2, 411-424	7.1	20
641	Direct visualization of lithium via annular bright field scanning transmission electron microscopy: a review. <i>Microscopy (Oxford, England)</i> , 2017 , 66, 3-14	1.3	20
640	Atomic-Scale Tracking of a Phase Transition from Spinel to Rocksalt in Lithium Manganese Oxide. <i>Chemistry of Materials</i> , 2017 , 29, 1006-1013	9.6	19
639	One-step synthesis of TiO ₂ nanorod arrays on Ti foil for supercapacitor application. <i>Nanotechnology</i> , 2014 , 25, 435406	3.4	19
638	Effect of local coordination of Mn on Mn-L _{2,3} edge electron energy loss spectrum. <i>Journal of Applied Physics</i> , 2013 , 114, 054906	2.5	19
637	Monoclinic nanodomains in morphotropic phase boundary Pb(Mg _{1/3} Nb _{2/3})O ₃ /BaTiO ₃ . <i>Applied Physics Letters</i> , 2014 , 104, 082905	3.4	19
636	Grain boundary atomic structures and light-element visualization in ceramics: combination of Cs-corrected scanning transmission electron microscopy and first-principles calculations. <i>Microscopy (Oxford, England)</i> , 2011 , 60 Suppl 1, S173-88	1.3	19
635	Atomic-scale segregation behavior of Pr at a ZnO [0001] Σ 9 tilt grain boundary. <i>Physical Review B</i> , 2009 , 80,	3.3	19
634	First Principles Calculations of Vacancy Formation Energies in Σ 13 Pyramidal Twin Grain Boundary of α -Al ₂ O ₃ . <i>Materials Transactions</i> , 2009 , 50, 1019-1022	1.3	19
633	Anisotropic carrier transport properties in layered cobaltate epitaxial films grown by reactive solid-phase epitaxy. <i>Applied Physics Letters</i> , 2009 , 94, 152105	3.4	19

- 632 Correlation between Anomalous Peak Effect in Magnetic Hysteresis Loop and Nanoscale Structure for NdBa₂Cu₃O_{7- δ} Single-Crystal Superconductor. *Japanese Journal of Applied Physics*, **1996**, 35, 3882-3886 1.4 19
- 631 Comparative studies of crystallization of a bulk Zr_{1-x}Al_xTi_{1-x}Cu_{1-x}Ni amorphous alloy. *Intermetallics*, **2004**, 12, 1183-1189 3.5 19
- 630 Direct Observation of the Double Schottky Barrier in Niobium-Doped Barium Titanate by the Charge-Collection Current Method. *Journal of the American Ceramic Society*, **2005**, 81, 1961-1963 3.8 19
- 629 Nanometric inversion domains in conventional molecular-beam-epitaxy GaN thin films observed by atomic-resolution high-voltage electron microscopy. *Applied Physics Letters*, **2001**, 79, 3941-3943 3.4 19
- 628 Stacking-fault formation in [001] small-angle symmetric tilt grain boundaries in cubic zirconia bicrystals. *Philosophical Magazine Letters*, **2002**, 82, 175-181 1 19
- 627 Field-induced pinning centers of YBa₂Cu₃O_{7- δ} superconducting thick film prepared by liquid phase epitaxy. *Physica C: Superconductivity and Its Applications*, **1996**, 256, 64-72 1.3 19
- 626 Initial growth mechanism of a/b-axis oriented YBa₂Cu₃O_{7- δ} film prepared by liquid phase epitaxy. *Applied Physics Letters*, **1996**, 68, 2002-2004 3.4 19
- 625 Jointed magnetic skyrmion lattices at a small-angle grain boundary directly visualized by advanced electron microscopy. *Scientific Reports*, **2016**, 6, 35880 4.9 19
- 624 Direct observation of atomic-scale fracture path within ceramic grain boundary core. *Nature Communications*, **2019**, 10, 2112 17.4 18
- 623 Liquid-Crystalline Hydroxyapatite/Polymer Nanorod Hybrids: Potential Bioplatfrom for Photodynamic Therapy and Cellular Scaffolds. *ACS Applied Materials & Interfaces*, **2019**, 11, 17759-17765 9.5 18
- 622 Titanium enrichment and strontium depletion near edge dislocation in strontium titanate [001]/(110) low-angle tilt grain boundary. *Journal of Materials Science*, **2014**, 49, 3962-3969 4.3 18
- 621 A dislocation core in titanium dioxide and its electronic structure. *RSC Advances*, **2015**, 5, 18506-18510 3.7 18
- 620 Towards one key to one lock: catalyst modified indium oxide nanoparticle thin film sensor array for selective gas detection. *Journal of Materials Chemistry*, **2012**, 22, 7308 18
- 619 Simultaneous visualization of oxygen vacancies and the accompanying cation shifts in a perovskite oxide by combining annular imaging techniques. *Applied Physics Letters*, **2012**, 100, 193112 3.4 18
- 618 Fabrication of electrically conductive nanowires using high-density dislocations in AlN thin films. *Journal of Applied Physics*, **2009**, 106, 124307 2.5 18
- 617 Direct imaging of doped fluorine in LaFeAsO_{1-x}F_x superconductor by atomic scale spectroscopy. *Applied Physics Letters*, **2009**, 95, 193107 3.4 18
- 616 Direct Imaging of Lithium Ions Using Aberration-Corrected Annular-Bright-Field Scanning Transmission Electron Microscopy and Associated Contrast Mechanisms. *Materials Express*, **2011**, 1, 43-50 1.3 18
- 615 In situ observation of crack propagation in magnesium oxide ceramics. *Nanotechnology*, **2004**, 15, S376-S381 3.1 18

614	Theoretical study of defect structures in pure and titanium-doped alumina. <i>Solid State Ionics</i> , 2004 , 172, 155-158	3.3	18
613	Current-Voltage Characteristics of Cobalt-Doped Inversion Boundaries in Zinc Oxide Bicrystals. <i>Journal of the American Ceramic Society</i> , 2003 , 86, 1616-1618	3.8	18
612	High-resolution transmission electron microscopy and computational analyses of atomic structures of [0001] symmetric tilt grain boundaries of Al ₂ O ₃ with equivalent grain-boundary planes. <i>Philosophical Magazine</i> , 2003 , 83, 4071-4082	1.6	18
611	First-Principles Calculations of Co Impurities and Native Defects in ZnO. <i>Materials Transactions</i> , 2002 , 43, 1439-1443	1.3	18
610	Interface between CVD diamond and iridium films. <i>Surface Science</i> , 2000 , 467, L845-L849	1.8	18
609	Atomic Structure and Chemical Bonding State of Sapphire Bicrystal. <i>Materials Science Forum</i> , 1998 , 294-296, 273-276	0.4	18
608	Structure of V/MgO and MgO/V interfaces. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1995 , 72, 179-198		18
607	Atomic structures of a liquid-phase bonded metal/nitride heterointerface. <i>Scientific Reports</i> , 2016 , 6, 22936	4.9	17
606	A new hierarchically porous Pd@HSQ monolithic catalyst for Mizoroki-Heck cross-coupling reactions. <i>New Journal of Chemistry</i> , 2014 , 38, 1144-1149	3.6	17
605	Site dependence and peak assignment of YBa ₂ Cu ₃ O _{7-x} O K-edge electron energy loss near-edge fine structure. <i>Physical Review B</i> , 2008 , 77,	3.3	17
604	Change in cation nonstoichiometry at interfaces during crystal growth in polycrystalline BaTiO ₃ . <i>Applied Physics Letters</i> , 2006 , 88, 011909	3.4	17
603	Formation of titanium-solute clusters in alumina: A first-principles study. <i>Applied Physics Letters</i> , 2004 , 84, 4795-4797	3.4	17
602	X-ray absorption fine-structure study on the fine structure of lutetium segregated at grain boundaries in fine-grained polycrystalline alumina. <i>Philosophical Magazine</i> , 2004 , 84, 865-876	1.6	17
601	Synthesis, electrochemical, and microstructural study of precursor-derived LiMn ₂ O ₄ powders. <i>Journal of Materials Research</i> , 1999 , 14, 3102-3110	2.5	17
600	Electron energy loss spectroscopy study of cerium stabilised zirconia: an application of valence determination in rare earth systems. <i>Micron</i> , 1999 , 30, 141-145	2.3	17
599	Dislocation and oxygen-release driven delithiation in LiMnO. <i>Nature Communications</i> , 2020 , 11, 4452	17.4	17
598	Structure and energetics of nanotwins in cubic boron nitrides. <i>Applied Physics Letters</i> , 2016 , 109, 081901	3.4	17
597	Determination of the structure and properties of an edge dislocation in rutile TiO ₂ . <i>Acta Materialia</i> , 2019 , 163, 199-207	8.4	17

596	Direct Observation of Impurity Segregation at Dislocation Cores in an Ionic Crystal. <i>Nano Letters</i> , 2017 , 17, 2908-2912	11.5	16
595	Thermal stability, morphology and electronic band gap of Zn(NCN). <i>Solid State Sciences</i> , 2013 , 23, 50-57	3.4	16
594	Synthesis and Microstructural Analysis of Homogeneously Dispersed Nickel Nanoparticles in Amorphous Silica. <i>Journal of the American Ceramic Society</i> , 2012 , 95, 524-529	3.8	16
593	Microstructures and grain boundaries of cubic boron nitrides. <i>Diamond and Related Materials</i> , 2013 , 32, 27-31	3.5	16
592	First-principles calculation of oxygen K-electron energy loss near edge structure of HfO(2). <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 104212	1.8	16
591	Growth mechanism and internal structure of vertically aligned single-walled carbon nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , 2008 , 8, 6093-8	1.3	16
590	Electric-Field Modulation of Thermopower for the KTaO ₃ Field-Effect Transistors. <i>Applied Physics Express</i> , 2009 , 2, 121103	2.4	16
589	PET fiber fabrics modified with bioactive titanium oxide for bone substitutes. <i>Journal of Materials Science: Materials in Medicine</i> , 2008 , 19, 695-702	4.5	16
588	Electron transport behaviors across single grain boundaries in n-type BaTiO ₃ , SrTiO ₃ and ZnO. <i>Journal of Materials Science</i> , 2005 , 40, 881-887	4.3	16
587	Phase separation of Nd _{1+x} Ba _{2-x} Cu ₃ O _{6+δ} during annealing processing. <i>Physica C: Superconductivity and Its Applications</i> , 2001 , 357-360, 354-358	1.3	16
586	Interface Characterization of AlN/TiN/MgO(001) Prepared by Molecular Beam Epitaxy. <i>Journal of Materials Research</i> , 1999 , 14, 1597-1603	2.5	16
585	Influence of ion velocity on damage efficiency in the single ion-target irradiation system: AuBi ₂ Sr ₂ CaCu ₂ O _x . <i>Physical Review B</i> , 1999 , 59, 3862-3869	3.3	16
584	Growth mechanism of thick c-axis oriented YBa ₂ Cu ₃ O _{7-δ} films prepared by liquid phase epitaxy. <i>Journal of Crystal Growth</i> , 1996 , 158, 61-67	1.6	16
583	HRTEM Characterization of Atomic Structures in Cu/.ALPHA.-Al ₂ O ₃ (0001) Interface. <i>Zairyo/Journal of the Society of Materials Science, Japan</i> , 2003 , 52, 555-559	0.1	16
582	Lattice expansion and local lattice distortion in Nb- and La-doped SrTiO ₃ single crystals investigated by x-ray diffraction and first-principles calculations. <i>Physical Review B</i> , 2018 , 98,	3.3	16
581	Thermoelectric phase diagram of the SrTiO ₃ BrNbO ₃ solid solution system. <i>Journal of Applied Physics</i> , 2017 , 121, 185102	2.5	15
580	Direct Measurement of Electronic Band Structures at Oxide Grain Boundaries. <i>Nano Letters</i> , 2020 , 20, 2530-2536	11.5	15
579	Sintering characteristics and thermoelectric properties of Mn–Al co-doped ZnO ceramics. <i>Journal of the Ceramic Society of Japan</i> , 2016 , 124, 515-522	1	15

578	An artificial photosynthesis anode electrode composed of a nanoparticulate photocatalyst film in a visible light responsive GaN-ZnO solid solution system. <i>Scientific Reports</i> , 2016 , 6, 35593	4.9	15
577	Full picture discovery for mixed-fluorine anion effects on high-voltage spinel lithium nickel manganese oxide cathodes. <i>NPG Asia Materials</i> , 2017 , 9, e398-e398	10.3	15
576	Atomic and electronic structure of the SrNbO ₃ /SrNbO _{3.4} interface. <i>Applied Physics Letters</i> , 2014 , 105, 221602	3.4	15
575	The three-dimensional morphology of nickel nanodots in amorphous silica and their role in high-temperature permselectivity for hydrogen separation. <i>Nanotechnology</i> , 2009 , 20, 315703	3.4	15
574	Synthesis and Evaluation of Bulky Y-Zeolites by Hydrothermal Hot-Pressing Method. <i>Journal of the American Ceramic Society</i> , 2007 , 90, 2322-2326	3.8	15
573	Dopant-segregation-controlled ZnO single-grain-boundary varistors. <i>Applied Physics Letters</i> , 2005 , 86, 152112	3.4	15
572	Current-Voltage Characteristics of π Boundaries with and without Cobalt Ions in Niobium-Doped SrTiO ₃ Bicrystals. <i>Journal of the American Ceramic Society</i> , 2000 , 83, 1527-1529	3.8	15
571	A high-resolution electron microscopy study of vanadium deposited on the basal plane of sapphire. <i>Ultramicroscopy</i> , 1993 , 52, 421-428	3.1	15
570	Atomic Scale Origin of Enhanced Ionic Conductivity at Crystal Defects. <i>Nano Letters</i> , 2019 , 19, 2162-2168	11.5	15
569	Crystallographic orientation-surface energy-wetting property relationships of rare earth oxides. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 18384-18388	13	15
568	Inversion domain boundaries in Mn and Al dual-doped ZnO: Atomic structure and electronic properties. <i>Journal of the American Ceramic Society</i> , 2017 , 100, 4252-4262	3.8	14
567	Three-Dimensional Visualization and Characterization of Polymeric Self-Assemblies by Transmission Electron Microtomography. <i>Accounts of Chemical Research</i> , 2017 , 50, 1293-1302	24.3	14
566	Buffer layer-less fabrication of a high-mobility transparent oxide semiconductor, La-doped BaSnO ₃ . <i>Journal of Materials Chemistry C</i> , 2019 , 7, 5797-5802	7.1	14
565	Atomic-scale assessment of the crystallization onset in silicon carbonitride. <i>Journal of the European Ceramic Society</i> , 2015 , 35, 3355-3362	6	14
564	High-performance, semiconducting membrane composed of ultrathin, single-crystal organic semiconductors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 80-85	11.5	14
563	Grain boundary Li-ion conductivity in (Li _{0.33} La _{0.56})TiO ₃ polycrystal. <i>Applied Physics Letters</i> , 2020 , 116, 043901	3.4	14
562	Multiphase nanodomains in a strained BaTiO ₃ film on a GdScO ₃ substrate. <i>Journal of Applied Physics</i> , 2018 , 123, 064102	2.5	14
561	Segregation of Mn ²⁺ Dopants as Interstitials in SrTiO ₃ Grain Boundaries. <i>Materials Research Letters</i> , 2014 , 2, 16-22	7.4	14

560	Atomic scale imaging of structural variations in La(1-)/3Li NbO ₃ (001) solid electrolytes. <i>Acta Materialia</i> , 2017 , 123, 167-176	8.4	14
559	Structural and electronic properties of Σ grain boundaries in α -Al ₂ O ₃ . <i>Acta Materialia</i> , 2015 , 99, 16-28	8.4	14
558	Low-Temperature Superplasticity in Nanocrystalline Tetragonal Zirconia Polycrystal (TZP). <i>Journal of the American Ceramic Society</i> , 2012 , 95, 1701-1708	3.8	14
557	Dislocation structures and strain fields in [111] low-angle tilt grain boundaries in zirconia bicrystals. <i>Journal of Electron Microscopy</i> , 2010 , 59 Suppl 1, S117-21		14
556	Domain formation in anatase TiO ₂ thin films on LaAlO ₃ substrates. <i>Applied Physics Letters</i> , 2012 , 101, 191602	3.4	14
555	Mechanical properties of 2.0-3.5 mol% Y ₂ O ₃ -stabilized zirconia polycrystals fabricated by the solid phase mixing and sintering method. <i>Journal of the Ceramic Society of Japan</i> , 2008 , 116, 1270-1277	1	14
554	Structural Transformation of Ca-Arrangements and Carrier Transport Properties in Ca _{0.33} CoO ₂ Epitaxial Films. <i>Applied Physics Express</i> , 2009 , 2, 035503	2.4	14
553	TEM study on microstructure of thermally grown oxide in EB-PVD thermal barrier coatings. <i>Surface and Coatings Technology</i> , 2006 , 200, 6130-6136	4.4	14
552	Improvement of superconducting properties of SmBa ₂ Cu ₃ O _y films on MgO substrate by using BaZrO ₃ buffer layer. <i>Physica C: Superconductivity and Its Applications</i> , 2003 , 392-396, 835-840	1.3	14
551	Termination mechanism of inversion domains by stacking faults in GaN. <i>Journal of Applied Physics</i> , 2003 , 93, 3264-3269	2.5	14
550	Transmission electron microscopy characterization of a Yttria-stabilized zirconia coating fabricated by electron beam physical vapor deposition. <i>Surface and Coatings Technology</i> , 2005 , 194, 16-23	4.4	14
549	HRTEM study on grain boundary atomic structures related to the sliding behavior in alumina bicrystals. <i>Applied Surface Science</i> , 2005 , 241, 75-79	6.7	14
548	Effect of Chemical Bonding States on the Tensile Ductility in Glass-Doped TZP. <i>Materials Science Forum</i> , 2001 , 357-359, 399-404	0.4	14
547	Effects of the Initial Heat-Treatment Conditions on Microstructures of YbBa ₂ Cu ₃ O _{7-δ} Superconducting Films Deposited on SrTiO ₃ (001) Substrates by the Dipping-Pyrolysis Process. <i>Japanese Journal of Applied Physics</i> , 1999 , 38, 5050-5053	1.4	14
546	Improvement of creep resistance in polycrystalline Al ₂ O ₃ by Lu-doping. <i>Solid State Sciences</i> , 1999 , 1, 229-234		14
545	Growth Mechanism of Y123 Film by MOD-TFA Method. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2002 , 66, 151-154	0.4	14
544	High spatiotemporal-resolution imaging in the scanning transmission electron microscope. <i>Microscopy (Oxford, England)</i> , 2020 , 69, 240-247	1.3	13
543	First principles pseudopotential calculation of electron energy loss near edge structures of lattice imperfections. <i>Micron</i> , 2012 , 43, 37-42	2.3	13

542	Local atomic structure of a near-sigma 5 tilt grain boundary in MgO. <i>Journal of Materials Science</i> , 2013 , 48, 5470-5474	4.3	13
541	Grain-boundary structural transformation induced by geometry and chemistry. <i>Physical Review B</i> , 2013 , 87,	3.3	13
540	Periodic nanowire array at the crystal interface. <i>ACS Nano</i> , 2013 , 7, 6297-302	16.7	13
539	Blunt corners of WC grains induced by lowering carbon content in WC ₂ mass%Co cemented carbides. <i>Journal of Materials Science</i> , 2011 , 46, 4413-4419	4.3	13
538	Facile Route to Polycrystalline Pd/ SnO ₂ Nanowires Using ZnO-Nanowire Templates for Gas-Sensing Applications. <i>IEEE Nanotechnology Magazine</i> , 2010 , 9, 634-639	2.6	13
537	Axial growth of Zn ₂ GeO ₄ /ZnO nanowire heterojunction using chemical vapor deposition. <i>Journal of Crystal Growth</i> , 2011 , 316, 46-50	1.6	13
536	Structure and Configuration of Boundary Dislocations on Low Angle Tilt Grain Boundaries in Alumina. <i>Materials Transactions</i> , 2009 , 50, 1008-1014	1.3	13
535	Fabrication and characterization of Nd _{1-x} Ba _{2x} Cu ₃ O _{7-y} thin films deposited by metal-organic chemical vapor deposition using liquid state sources. <i>Physica C: Superconductivity and Its Applications</i> , 1998 , 304, 35-42	1.3	13
534	Synthesis and Characterization of Bulky FSM with Interconnected Mesopore-Networks Using an HHP Method. <i>Journal of the Ceramic Society of Japan</i> , 2006 , 114, 554-557		13
533	The influence of trace elements on grain boundary processes in yttria-stabilized tetragonal zirconia. <i>Materials Letters</i> , 2003 , 57, 4196-4201	3.3	13
532	Fabrication of Ti-nanowires in sapphire single crystals. <i>Applied Surface Science</i> , 2005 , 241, 38-42	6.7	13
531	TEM in situ observation of fracture behavior in ceramic materials. <i>Applied Surface Science</i> , 2005 , 241, 68-74	6.7	13
530	Effect of Chemical Bonding State on High-temperature Plastic Flow Behavior in Fine-grained, Polycrystalline Cation-doped Al ₂ O ₃ . <i>Materials Transactions</i> , 2002 , 43, 1566-1572	1.3	13
529	Electron transport behaviour in Nb-doped SrTiO ₃ bicrystals. <i>Journal of Electron Microscopy</i> , 2001 , 50, 485-8		13
528	High-Temperature Behavior of SiO ₂ at Grain Boundaries in TZP. <i>Journal of Materials Science</i> , 1999 , 7, 77-84		13
527	Interfacial Atomic Structure of Twisted Few-Layer Graphene. <i>Scientific Reports</i> , 2016 , 6, 21273	4.9	13
526	In situ electron microscopy analysis of electrochemical Zn deposition onto an electrode. <i>Journal of Power Sources</i> , 2021 , 481, 228831	8.9	13
525	Direct Imaging for Single Molecular Chain of Surfactant on CeO Nanocrystals. <i>Small</i> , 2018 , 14, e180109311		13

524	One-dimensional van der Waals heterostructures: Growth mechanism and handedness correlation revealed by nondestructive TEM. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	13
523	Three-Dimensional Imaging of a Single Dopant in a Crystal. <i>Physical Review Applied</i> , 2020 , 13,	4.3	12
522	Morphology-Controlled Synthesis of Cubic Cesium Hydrogen Silicododecatungstate Crystals. <i>Crystal Growth and Design</i> , 2014 , 14, 6620-6626	3.5	12
521	Atomistic study of abnormal grain growth structure in BaTiO ₃ by transmission electron microscopy and scanning transmission electron microscopy. <i>Acta Materialia</i> , 2013 , 61, 2298-2307	8.4	12
520	Structural evolution and enhanced piezoresponse in cobalt-substituted BiFeO ₃ thin films. <i>Applied Physics Express</i> , 2014 , 7, 091501	2.4	12
519	Real-space distribution of local WO ₄ ordering in negative thermal expansive ZrW ₂ O ₈ . <i>Journal of the American Chemical Society</i> , 2012 , 134, 13942-5	16.4	12
518	Quantifying stoichiometry-induced variations in structure and energy of a SrTiO ₃ symmetric $\{110\}$ grain boundary. <i>Philosophical Magazine</i> , 2013 , 93, 1219-1229	1.6	12
517	Mass transfer through a single grain boundary in alumina bicrystals under oxygen potential gradients. <i>Journal of Materials Science</i> , 2011 , 46, 4407-4412	4.3	12
516	High-resolution transmission electron microscopy (HRTEM) observation of dislocation structures in AlN thin films. <i>Journal of Materials Research</i> , 2008 , 23, 2188-2194	2.5	12
515	Influence of Interaction between Neighboring Oxygen Ions on Phase Stability in Cubic Zirconia. <i>Journal of the American Ceramic Society</i> , 2002 , 85, 2557-2561	3.8	12
514	Identification of crack path of inter- and transgranular fractures in sintered silicon nitride by in situ TEM. <i>Journal of Electron Microscopy</i> , 2004 , 53, 121-7		12
513	Control of point defects and grain boundaries in advanced materials. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005 , 232, 343-347	1.2	12
512	Effect of boundary plane on the atomic structure of $[0001]$ Σ tilt grain boundaries in ZnO. <i>Journal of Materials Science</i> , 2005 , 40, 3067-3074	4.3	12
511	Grain Boundary Sliding and Atomic Structures in Alumina Bicrystals with $[0001]$ Symmetric Tilt Grain Boundaries. <i>Materials Transactions</i> , 2002 , 43, 1561-1565	1.3	12
510	Effects of Microstructure on Superplastic Behavior and Deformation Mechanisms in Silicon Nitride Ceramics. <i>Journal of the American Ceramic Society</i> , 2000 , 83, 3179-3184	3.8	12
509	On Epitaxy and Orientation Relationships in Bicrystals. <i>Solid State Phenomena</i> , 1998 , 59-60, 51-62	0.4	12
508	Grain boundary in cemented carbide. <i>Philosophical Magazine Letters</i> , 1995 , 71, 289-292	1	12
507	Ceramic phases with one-dimensional long-range order. <i>Nature Materials</i> , 2019 , 18, 19-23	27	12

506	Relative Li-ion mobility mapping in Li _{0.33} La _{0.56} TiO ₃ polycrystalline by electron backscatter diffraction and electrochemical strain microscopy. <i>Applied Physics Express</i> , 2017 , 10, 061102	2.4	11
505	Carbon content dependence of grain growth mode in VC-doped WC ₁₀ hardmetals. <i>International Journal of Refractory Metals and Hard Materials</i> , 2015 , 52, 245-251	4.1	11
504	Patterning Oxide Nanopillars at the Atomic Scale by Phase Transformation. <i>Nano Letters</i> , 2015 , 15, 6469-745	1.5	11
503	Magnetic-structure imaging in polycrystalline materials by specimen-tilt series averaged DPC STEM. <i>Microscopy (Oxford, England)</i> , 2020 , 69, 312-320	1.3	11
502	First-principles study in an inter-granular glassy film model of silicon nitride. <i>Journal of the American Ceramic Society</i> , 2018 , 101, 2673-2688	3.8	11
501	An experimental system combined with a micromachine and double-tilt TEM holder. <i>Microelectronic Engineering</i> , 2016 , 164, 43-47	2.5	11
500	Low-temperature degradation in yttria-stabilized tetragonal zirconia polycrystal doped with small amounts of alumina: Effect of grain-boundary energy. <i>Journal of the European Ceramic Society</i> , 2016 , 36, 155-162	6	11
499	Epitaxial growth of Li ₄ Ti ₅ O ₁₂ thin films using RF magnetron sputtering. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 058001	1.4	11
498	Labyrinth-type domain structure of heteroepitaxial SrMnO _{2.5} film. <i>Applied Physics Letters</i> , 2013 , 102, 231911	3.4	11
497	On the Periodicity of π -Symmetrical Tilt Grain Boundaries. <i>Materials Transactions</i> , 2015 , 56, 281-287	1.3	11
496	Selective impurity segregation at a near- π grain boundary in MgO. <i>Journal of Materials Science</i> , 2014 , 49, 3956-3961	4.3	11
495	New Polytypoid SnO ₂ (ZnO:Sn) _m Nanowire: Characterization and Calculation of Its Electronic Structure. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 5009-5013	3.8	11
494	Structural and electronic impact of SrTiO ₃ substrate on TiO ₂ thin films. <i>Journal of Materials Science</i> , 2012 , 47, 5148-5157	4.3	11
493	Characterization and atomic modeling of an asymmetric grain boundary. <i>Physical Review B</i> , 2011 , 84,	3.3	11
492	Oxygen-Vacancy Ordering at Surfaces of Lithium Manganese(III,IV) Oxide Spinel Nanoparticles. <i>Angewandte Chemie</i> , 2011 , 123, 3109-3113	3.6	11
491	HAADF-STEM observations of a $\pi/3$ grain boundary in Al ₂ O ₃ from two orthogonal directions. <i>Philosophical Magazine Letters</i> , 2010 , 90, 539-546	1	11
490	Atomic and electronic structure of the YBa ₂ Cu ₃ O ₇ /SrTiO ₃ interface from first principles. <i>Journal of Applied Physics</i> , 2009 , 106, 093714	2.5	11
489	Orientation-Dependent Arrangement of Antisite Defects in Lithium Iron(II) Phosphate Crystals. <i>Angewandte Chemie</i> , 2009 , 121, 551-554	3.6	11

- 488 A new iron pnictide oxide (Fe₂As₂)(Ca₅(Mg, Ti)₄O_y) and a new phase in the FeAsCaMgTiO system. *Superconductor Science and Technology*, **2011**, 24, 085020 3.1 11
- 487 A High-Coincidence Twin Boundary in Lithium Battery Material LiCoO₂. *Nanoscience and Nanotechnology Letters*, **2012**, 4, 165-168 0.8 11
- 486 Direct observations of Ca ordering in Ca_{0.33}CoO₂ thin films with different superstructures. *Applied Physics Letters*, **2008**, 93, 181907 3.4 11
- 485 Non-linear current-voltage characteristics related to native defects in SrTiO₃ and ZnO bicrystals. *Science and Technology of Advanced Materials*, **2003**, 4, 605-611 7.1 11
- 484 Transient creep in fine-grained polycrystalline Al₂O₃ with Lu³⁺ ion segregation at the grain boundaries. *Journal of Materials Research*, **2001**, 16, 716-720 2.5 11
- 483 Crystallography and structural evolution of LiNbO₃ and LiNb_{1-x}TaxO₃ films on sapphire prepared by high-rate thermal plasma spray chemical vapor deposition. *Journal of Materials Research*, **2001**, 16, 2271-2279 2.5 11
- 482 Thickness dependence of transport behaviors in SrRuO₃/SrTiO₃ superlattices. *Physical Review Materials*, **2020**, 4, 3.2 11
- 481 Dislocation structures and electrical conduction properties of low angle tilt grain boundaries in LiNbO₃. *Journal of Applied Physics*, **2016**, 120, 142107 2.5 11
- 480 Mathematical analysis and STEM observations of arrangement of structural units in <001> symmetrical tilt grain boundaries. *Microscopy (Oxford, England)*, **2016**, 65, 479-487 1.3 11
- 479 Insights into fundamental deformation processes from advanced in situ transmission electron microscopy. *MRS Bulletin*, **2019**, 44, 443-449 3.2 10
- 478 Phase Interface Structures in Li_{1+x}Rh₂O₄ Zero Strain Cathode Material Analyzed by Scanning Transmission Electron Microscopy. *Chemistry of Materials*, **2015**, 27, 938-943 9.6 10
- 477 Direct in situ observation of metallic glass deformation by real-time nano-scale indentation. *Scientific Reports*, **2015**, 5, 9122 4.9 10
- 476 Single adatom dynamics at monatomic steps of free-standing few-layer reduced graphene. *Scientific Reports*, **2014**, 4, 6037 4.9 10
- 475 Orientation control of LiCoO₂ epitaxial thin films on metal substrates. *Thin Solid Films*, **2016**, 600, 175-178 2.2 10
- 474 Fast Li-ion conduction at grain boundaries in (La,Li)NbO₃ polycrystals. *Journal of Power Sources*, **2019**, 441, 227187 8.9 10
- 473 Flower-like surface modification of titania materials by lithium hydroxide solution. *Journal of Colloid and Interface Science*, **2012**, 374, 291-6 9.3 10
- 472 Nanowire of hexagonal gallium oxynitride: Direct observation of its stacking disorder and its long nanowire growth. *Journal of the European Ceramic Society*, **2012**, 32, 1989-1993 6 10
- 471 Spatially-resolved mapping of history-dependent coupled electrochemical and electrical behaviors of electroresistive NiO. *Scientific Reports*, **2014**, 4, 6725 4.9 10

470	Existence of basal oxygen vacancies on the rutile TiO ₂ (110) surface. <i>Physical Review B</i> , 2014 , 90,	3.3	10
469	Double Columnar Structure with a Nanogradient Composite for Increased Oxygen Diffusivity and Reduction Activity. <i>Advanced Energy Materials</i> , 2014 , 4, 1400783	21.8	10
468	Core structure and dissociation energetics of basal edge dislocation in α -Al ₂ O ₃ : A combined atomistic simulation and transmission electron microscopy analysis. <i>Acta Materialia</i> , 2014 , 65, 76-84	8.4	10
467	The influence of charge ordering on the phase stability of spinel LiNi ₂ O ₄ . <i>RSC Advances</i> , 2012 , 2, 12940	3.7	10
466	Zr segregation and associated Al vacancies in alumina grain boundaries. <i>Journal of the Ceramic Society of Japan</i> , 2011 , 119, 840-844	1	10
465	Electric field modulation of thermopower for transparent amorphous oxide thin film transistors. <i>Applied Physics Letters</i> , 2010 , 97, 182105	3.4	10
464	Preparation and characterization of mesoporous ceria/zirconia/alumina nanocomposite with high hydrothermal stability. <i>Journal of Materials Research</i> , 2007 , 22, 3201-3209	2.5	10
463	Distribution and structures of nanopores in YSZ-TBC deposited by EB-PVD. <i>Science and Technology of Advanced Materials</i> , 2003 , 4, 571-574	7.1	10
462	High Resolution Microscopy Study for [001] Symmetric Tilt Boundary with a Tilt Angle of 66°; in Rutile-type TiO ₂ Bicrystal. <i>Materials Transactions</i> , 2004 , 45, 2117-2121	1.3	10
461	Non-linear Current-Voltage Property across $\sigma_5(210)$ Symmetric Tilt Boundary in Nb-Doped SrTiO ₃ Bicrystal. <i>Materials Transactions</i> , 2004 , 45, 2112-2116	1.3	10
460	High temperature plastic flow and grain boundary chemistry in oxide ceramics. <i>Journal of Materials Science</i> , 2005 , 40, 3129-3135	4.3	10
459	Local Bonding States of Titanium and Germanium-doped Tetragonal Zirconia Polycrystal and Their Correlation to High Temperature Ductility. <i>Materials Transactions</i> , 2002 , 43, 2468-2472	1.3	10
458	Nanoprobe analysis of core-shell structure of carbides in TiC ₂₀ wt% Mo ₂ C ₂₀ wt% Ni cermet. <i>Journal of Materials Research</i> , 1999 , 14, 4129-4131	2.5	10
457	Direct Observation of Channel Structures in Zeolite Y and A with a Slow-Scan, Charge-Coupled-Device Camera. <i>Journal of the American Ceramic Society</i> , 1995 , 78, 1411-1413	3.8	10
456	Growth mechanism and crystalline orientation of liquid-phase epitaxially grown YBa ₂ Cu ₃ O ₇ -films. <i>Journal of Crystal Growth</i> , 1996 , 166, 854-858	1.6	10
455	Formation of copper nanoscale particles in implanted silica glass. <i>Journal of Materials Science Letters</i> , 1992 , 11, 1257-1259		10
454	An elastic metal-organic crystal with a densely catenated backbone. <i>Nature</i> , 2021 , 598, 298-303	50.4	10
453	Large angle illumination enabling accurate structure reconstruction from thick samples in scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2019 , 197, 112-121	3.1	10

452	Unique fitting of electrochemical impedance spectra by random walk Metropolis Hastings algorithm. <i>Journal of Power Sources</i> , 2018 , 403, 184-191	8.9	10
451	Hierarchically Structured Thermoelectric Materials in Quaternary System Cu_2NiSn Featuring a Mosaic-type Nanostructure. <i>ACS Applied Nano Materials</i> , 2018 , 1, 2579-2588	5.6	10
450	Study on the deterioration mechanism of layered rock-salt electrodes using epitaxial thin films $\text{Li}(\text{Ni}, \text{Co}, \text{Mn})\text{O}_2$ and their Zr-O surface modified electrodes. <i>Journal of Power Sources</i> , 2017 , 345, 108-119	8.9	9
449	Grain Boundary Plane Effect on Pr Segregation Site in ZnO $\{111\}$ [0001] Symmetric Tilt Grain Boundaries. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 1932-1936	3.8	9
448	Interfacial Atomic Structures of Single-Phase Li_2MnO_3 Thin Film with Superior Initial Charge-Discharge Behavior. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A55-A60	3.9	9
447	Structural changes and their effect on Li-ion conductivity upon quenching of $\text{La}_{1-x}\text{Li}_x\text{NbO}_3$ solid electrolytes. <i>Acta Materialia</i> , 2018 , 156, 379-388	8.4	9
446	Synthesis of ultrasmall Li-Mn spinel oxides exhibiting unusual ion exchange, electrochemical, and catalytic properties. <i>Scientific Reports</i> , 2015 , 5, 15011	4.9	9
445	The effect of vacancies on the annular dark field image contrast of grain boundaries: a SrTiO_3 case study. <i>Ultramicroscopy</i> , 2011 , 111, 1531-9	3.1	9
444	Magnetic properties of ilmenite-hematite solid-solution thin films: Direct observation of antiphase boundaries and their correlation with magnetism. <i>Physical Review B</i> , 2009 , 80,	3.3	9
443	Atomic structure of $\text{AlN}/\text{Al}_2\text{O}_3$ interfaces fabricated by pulsed-laser deposition. <i>Journal of Materials Science</i> , 2006 , 41, 2553-2557	4.3	9
442	Interfacial structures of Y_2O_3 and Nd_2O_3 films formed on $\text{MgO}(001)$ substrates by liquid phase epitaxy. <i>Journal of Materials Research</i> , 2004 , 19, 2674-2682	2.5	9
441	Transmission electron microscopy studies of a $\text{CeO}_2/\text{Gd}_2\text{Zr}_2\text{O}_7$ buffer layer on an Ni-based alloy for YBCO coated conductor. <i>Physica C: Superconductivity and Its Applications</i> , 2004 , 412-414, 813-818	1.3	9
440	Transmission electron microscopy studies of YBCO coated conductors prepared by pulsed-laser deposition and multiple-stage chemical vapor deposition processes. <i>Physica C: Superconductivity and Its Applications</i> , 2005 , 426-431, 1033-1042	1.3	9
439	Direct Evidence of Dopant-Enhanced Grain-Boundary Sliding in Yttria-Stabilized Zirconia Bicrystals. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 938-942	3.8	9
438	Current-Voltage Characteristics Across Small Angle Symmetric Tilt Boundaries in Nb-Doped SrTiO_3 Bicrystals. <i>Materials Transactions</i> , 2002 , 43, 1537-1541	1.3	9
437	Formation of Protection Layer during Oxidation of Al-Implanted TiN Coating. <i>Materials Transactions</i> , 2002 , 43, 1291-1297	1.3	9
436	High-resolution Electron Microscopy Observation of Grain-boundary Films in Superplastically Deformed Silicon Nitride. <i>Journal of Materials Research</i> , 2000 , 15, 1551-1555	2.5	9
435	Grain Boundary Energy and Atomic Structure in Alumina Bicrystals. <i>Materials Science Forum</i> , 1999 , 304-306, 601-608	0.4	9

434	Photoindentation: A New Route to Understanding Dislocation Behavior in Light. <i>Nano Letters</i> , 2021 , 21, 1962-1967	11.5	9
433	Dislocation Structures in Low-Angle Grain Boundaries of α -Al ₂ O ₃ . <i>Crystals</i> , 2018 , 8, 133	2.3	9
432	Solid-phase epitaxial film growth and optical properties of a ferroelectric oxide, Sr ₂ Nb ₂ O ₇ . <i>Journal of Applied Physics</i> , 2017 , 122, 135305	2.5	8
431	Stabilizing the metastable superhard material wurtzite boron nitride by three-dimensional networks of planar defects. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 11181-11186	11.5	8
430	Quantitative electric field mapping of a p-n junction by DPC STEM. <i>Ultramicroscopy</i> , 2020 , 216, 113033	3.1	8
429	Direct-bonded aluminum on aluminum nitride substrates by transient liquid phase bonding. <i>Journal of the Ceramic Society of Japan</i> , 2017 , 125, 165-167	1	8
428	Subgrain boundary analyses in deformed orthopyroxene by TEM/STEM with EBSD-FIB sample preparation technique. <i>Earth, Planets and Space</i> , 2014 , 66,	2.9	8
427	Terraces at ohmic contact in SiC electronics: Structure and electronic states. <i>Journal of Applied Physics</i> , 2012 , 111, 113717	2.5	8
426	Spontaneous structural distortion and quasi-one-dimensional quantum confinement in a single-phase compound. <i>Advanced Materials</i> , 2013 , 25, 218-22	24	8
425	Dislocation structures in a $\{104\}/\langle 110 \rangle$ low-angle tilt grain boundary of alumina (α -Al ₂ O ₃). <i>Journal of Materials Science</i> , 2011 , 46, 4428-4433	4.3	8
424	Cr diffusion in α -Al ₂ O ₃ : Secondary ion mass spectroscopy and first-principles study. <i>Physical Review B</i> , 2010 , 82,	3.3	8
423	Direct bandgap measurements in a three-dimensionally macroporous silicon 9R polytype using monochromated transmission electron microscope. <i>Applied Physics Letters</i> , 2010 , 97, 213102	3.4	8
422	Electrical current flow at conductive nanowires formed in GaN thin films by a dislocation template technique. <i>Applied Physics Letters</i> , 2010 , 96, 193109	3.4	8
421	What atomic resolution annular dark field imaging can tell us about gold nanoparticles on TiO ₂ (110). <i>Ultramicroscopy</i> , 2009 , 109, 1435-46	3.1	8
420	Atomic-scale Ti ₃ SiC ₂ bilayers embedded in SiC: Formation of point Fermi surface. <i>Applied Physics Letters</i> , 2011 , 98, 104101	3.4	8
419	Electron holographic studies of irradiation damage in BaTiO ₃ . <i>Nanotechnology</i> , 2004 , 15, 1324-1327	3.4	8
418	Towards New Transmission Electron Microscopy in Advanced Ceramics.. <i>Journal of the Ceramic Society of Japan</i> , 2002 , 110, 139-145		8
417	Segregation of yttrium ions to domain boundaries of tetragonal zirconia. <i>Philosophical Magazine Letters</i> , 1998 , 77, 199-203	1	8

416	Transmission electron microscopy-energy-dispersive X-ray spectroscopy analysis of the modulated structure in ZrO-6 mol% Y O alloy 2 2 3. <i>Philosophical Magazine Letters</i> , 1998 , 78, 45-49	1	8
415	TEM Study on Stability of Mg-Doped γ -Alumina Fine Particles. <i>Materials Transactions, JIM</i> , 1998 , 39, 110-113		8
414	Evaluation of Atomic Grain Boundary Structure in Alumina by Molecular Orbital Method. <i>Journal of the Ceramic Society of Japan</i> , 1998 , 106, 888-892		8
413	High-Temperature Deformation in Unidirectionally Solidified Eutectic Al ₂ O ₃ -YAG Single Crystal. <i>Key Engineering Materials</i> , 1999 , 171-174, 855-0	0.4	8
412	Superplastic Behavior in GeO ₂ Doped Y-TZP. <i>Materials Transactions, JIM</i> , 1999 , 40, 836-841		8
411	Structure and Strength of Grain-Boundaries in Si Bicrystals with $\sim 11^\circ$ Twist Misorientations. <i>Materials Transactions, JIM</i> , 1990 , 31, 865-872		8
410	Investigation of electrical and thermal transport property reductions in La-doped BaSnO ₃ films. <i>Physical Review Materials</i> , 2019 , 3,	3.2	8
409	Carrier Depletion near the Grain Boundary of a SiC Bicrystal. <i>Scientific Reports</i> , 2019 , 9, 18014	4.9	8
408	Toward quantitative electromagnetic field imaging by differential-phase-contrast scanning transmission electron microscopy. <i>Microscopy (Oxford, England)</i> , 2021 , 70, 148-160	1.3	8
407	One-pot synthesis of a C/SiFeN(O)-based ceramic paper with in-situ generated hierarchical micro/nano-morphology. <i>Journal of the European Ceramic Society</i> , 2017 , 37, 5193-5203	6	7
406	The core structure of 60 μ m mixed basal dislocation in alumina (α -Al ₂ O ₃) introduced by in situ TEM nanoindentation. <i>Scripta Materialia</i> , 2019 , 163, 157-162	5.6	7
405	Inversion domain network stabilization and spinel phase suppression in ZnO. <i>Journal of the American Ceramic Society</i> , 2018 , 101, 2616-2626	3.8	7
404	Effects of an oxygen potential gradient and water vapor on mass transfer in polycrystalline alumina at high temperatures. <i>Acta Materialia</i> , 2018 , 151, 21-30	8.4	7
403	Misalignment Induced Artifacts in Quantitative Annular Bright-Field Imaging. <i>Microscopy and Microanalysis</i> , 2016 , 22, 888-889	0.5	7
402	Strong metal-metal interaction and bonding nature in metal/oxide interfaces with large mismatches. <i>Acta Materialia</i> , 2019 , 179, 237-246	8.4	7
401	The Decomposition Formula of $\sim 001^\circ$ Symmetrical Tilt Grain Boundaries. <i>Materials Transactions</i> , 2015 , 56, 1945-1952	1.3	7
400	First principles calculation of dopant solution energy in HfO ₂ polymorphs. <i>Journal of Applied Physics</i> , 2012 , 112, 084514	2.5	7
399	Atomic structure, energetics, and chemical bonding of Y doped α -Al ₂ O ₃ grain boundaries in α -Al ₂ O ₃ . <i>Philosophical Magazine</i> , 2013 , 93, 1158-1171	1.6	7

398	Magnetic properties of Sr ₂ FeTaO ₆ double perovskite epitaxially grown by pulsed-laser deposition. <i>Applied Physics Letters</i> , 2011 , 99, 223101	3-4	7
397	Heterointerfaces: atomic structures, electronic states, and related properties. <i>Journal of the Ceramic Society of Japan</i> , 2011 , 119, 783-793	1	7
396	TEM observation of liquid-phase bonded aluminum-silicon/aluminum nitride hetero interface. <i>Journal of Materials Science</i> , 2011 , 46, 4392-4396	4-3	7
395	Structures of a $\sqrt{9}$, [110]/{221} symmetrical tilt grain boundary in SrTiO ₃ . <i>Journal of Materials Science</i> , 2011 , 46, 4162-4168	4-3	7
394	Crack Propagation in a Ruby Single Crystal by Femtosecond Laser Irradiation. <i>Journal of the American Ceramic Society</i> , 2009 , 92, 3118-3121	3-8	7
393	High-Resolution Transmission Electron Microscopy Observation of Liquid-Phase Bonded Aluminum/Sapphire Interfaces. <i>Materials Transactions</i> , 2009 , 50, 1037-1040	1-3	7
392	Nanostructural characterization of YBCO films on metal tape with textured buffer layer fabricated by pulsed-laser deposition. <i>Journal of Materials Science</i> , 2006 , 41, 2587-2595	4-3	7
391	High temperature plastic deformation related to grain boundary chemistry in cation-doped alumina. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 387-389, 723-727	5-3	7
390	High Temperature Deformation Behavior of [0001] Symmetrical Tilt $\sqrt{7}$ and $\sqrt{21}$ Grain Boundaries in Alumina Bicrystals. <i>Materials Transactions</i> , 2004 , 45, 2122-2127	1-3	7
389	Microstructure characterization of Bi ₂ Sr ₂ CaCu ₂ O _x single crystal irradiated with 18 MeV Fe ⁸⁺ ions. <i>Physica C: Superconductivity and Its Applications</i> , 1994 , 234, 323-332	1-3	7
388	Intergranular pinning potential and transport current path in Bi ₂ Pb ₂ Sr ₂ Ca ₂ Cu ₂ O polycrystal superconductor. <i>Physica C: Superconductivity and Its Applications</i> , 1991 , 185-189, 2213-2214	1-3	7
387	Direct visualization of anionic electrons in an electride reveals inhomogeneities. <i>Science Advances</i> , 2021 , 7,	14-3	7
386	Adsorption sites of single noble metal atoms on the rutile TiO ₂ (1 1 0) surface influenced by different surface oxygen vacancies. <i>Journal of Physics Condensed Matter</i> , 2016 , 28, 175002	1-8	7
385	Layered cobalt oxide epitaxial films exhibiting thermoelectric ZT = 0.11 at room temperature. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 274-280	13	7
384	Systematic analysis of electron energy-loss near-edge structures in Li-ion battery materials. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 25052-25061	3-6	7
383	High contrast STEM imaging for light elements by an annular segmented detector. <i>Ultramicroscopy</i> , 2019 , 202, 148-155	3-1	6
382	Amphoteric doping of praseodymium Pr ³⁺ in SrTiO ₃ grain boundaries. <i>Applied Physics Letters</i> , 2015 , 106, 121904	3-4	6
381	Site-Selective Analysis of Nickel-Substituted Li-Rich Layered Material: Migration and Role of Transition Metal at Charging and Discharging. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 20099-20107	3-8	6

380	On the quantitiveness of grain boundary chemistry using STEM EDS: A ZrO ₂ β model grain boundary case study. <i>Ultramicroscopy</i> , 2018 , 193, 33-38	3.1	6
379	Atomic Structure of ZnO $\sqrt{3} \times \sqrt{3}$ [0001]/{130} Symmetric Tilt Grain Boundary. <i>Journal of the American Ceramic Society</i> , 2014 , 97, 617-621	3.8	6
378	Atomic-Scale Origin of the Quasi-One-Dimensional Metallic Conductivity in Strontium Niobates with Perovskite-Related Layered Structures. <i>ACS Nano</i> , 2017 , 11, 12519-12525	16.7	6
377	Tetragonal BiFeO ₃ on yttria-stabilized zirconia. <i>APL Materials</i> , 2015 , 3, 116104	5.7	6
376	Atomic and electronic structure of La ₂ CoMnO ₆ on SrTiO ₃ and LaAlO ₃ substrates from first principles. <i>Journal of Applied Physics</i> , 2013 , 113, 203704	2.5	6
375	Scanning transmission electron microscopy imaging dynamics at low accelerating voltages. <i>Ultramicroscopy</i> , 2011 , 111, 999-1013	3.1	6
374	Cation diffusion along basal dislocations in sapphire. <i>Acta Materialia</i> , 2011 , 59, 1105-1111	8.4	6
373	High-resolution observation of basal-plane C-core edge dislocations in 4HSiC crystal by transmission electron microscopy. <i>Philosophical Magazine</i> , 2012 , 92, 3780-3788	1.6	6
372	ELECTRON CARRIER-MEDIATED ROOM TEMPERATURE FERROMAGNETISM IN ANATASE (Ti,Co)O ₂ . <i>Spin</i> , 2012 , 02, 1230005	1.3	6
371	Quantum electron transport through SrTiO ₃ : Effects of dopants on conductance channel. <i>Applied Physics Letters</i> , 2009 , 94, 252103	3.4	6
370	Grain boundary structure and chemical bonding state of superplastic SiO ₂ -doped TZP. <i>Journal of Electron Microscopy</i> , 1997 , 46, 467-472		6
369	Inherent nanoscale bend of crystal lattice in Fe-doped calcium copper titanate. <i>Applied Physics Letters</i> , 2006 , 89, 121903	3.4	6
368	High-Resolution Transmission Electron Microscopy Study of WC-Co Alloy doped with other Metal Carbides; VC, Cr ₃ C ₂ , and ZrC. <i>Materials Science Forum</i> , 2007 , 558-559, 993-996	0.4	6
367	Microstructure and Crystal Phase Development of Y ₂ O ₃ -Stabilized ZrO ₂ Polycrystal Fabricated by the Solid Phase Mixing and Sintering Method. <i>Journal of the Ceramic Society of Japan</i> , 2007 , 115, 210-215		6
366	HRTEM study of [001] low-angle tilt grain boundaries in fiber-textured BaTiO ₃ thin films. <i>Journal of Materials Science</i> , 2006 , 41, 5146-5150	4.3	6
365	Grain Boundary Energy and Tensile Ductility in Superplastic Cation-doped TZP. <i>Materials Transactions</i> , 2004 , 45, 2144-2149	1.3	6
364	Chemical Bonding States at Copper/Graphite Interfaces with Additional Elements. <i>Journal of the Ceramic Society of Japan</i> , 2005 , 113, 540-542		6
363	Vacancy effect of dopant cation on the high-temperature creep resistance in polycrystalline Al ₂ O ₃ . <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 319-321, 843-848	5.3	6

362	Current-voltage characteristics across 45°symmetric tilt boundary in highly donor-doped SrTiO ₃ bicrystal. <i>Journal of Materials Science Letters</i> , 2001 , 20, 1827-1829		6
361	A New Type of Stacking Fault in βSiC. <i>Japanese Journal of Applied Physics</i> , 2001 , 40, 505-508	1.4	6
360	A change in the chemical bonding strength and high-temperature creep resistance in Al ₂ O ₃ with lanthanoid oxide doping. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2002 , 82, 511-525		6
359	Processing of epitaxial LiMn ₂ O ₄ thin film on MgO(110) through metalorganic precursor. <i>Journal of Materials Research</i> , 2000 , 15, 2750-2757	2.5	6
358	The Role of Co Ions on the Appearance of Non-Linear I-V Characteristics of ZnO-Based Ceramics. <i>Key Engineering Materials</i> , 1998 , 157-158, 249-256	0.4	6
357	TEM Characterization of Grain Boundaries in Superplastic Al ₂ O ₃ -base Ceramics. <i>Materials Science Forum</i> , 1996 , 243-245, 425-430	0.4	6
356	Grain Boundary Structure and Strength of SiC Bicrystals. <i>Journal of the Ceramic Society of Japan</i> , 1989 , 97, 1511-1516		6
355	Structure and Strength of Grain Boundaries in Si Bicrystals with $\langle 111 \rangle$ Twist Misorientations. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1989 , 53, 536-542	0.4	6
354	Resolution Achievement of 40.5 pm in Scanning Transmission Electron Microscopy using 300 kV Microscope with Delta Corrector. <i>Microscopy and Microanalysis</i> , 2018 , 24, 120-121	0.5	6
353	Atomic scale imaging of structural changes in solid electrolyte lanthanum lithium niobate upon annealing. <i>Acta Materialia</i> , 2017 , 127, 211-219	8.4	5
352	Dissociation of the $\frac{1}{3}\langle 110 \rangle$ dislocation and formation of the anion stacking fault on the basal plane in βAl ₂ O ₃ . <i>Acta Materialia</i> , 2015 , 91, 152-161	8.4	5
351	Reversible Electrochemical Insertion/Extraction of Magnesium Ion into/from Robust NASICON-Type Crystal Lattice in a Mg(BF ₄) ₂ -Based Electrolyte. <i>ACS Applied Energy Materials</i> , 2020 , 3, 6824-6833	6.1	5
350	Discovery of Ternary Silicon Titanium Nitride with Spinel-Type Structure. <i>Scientific Reports</i> , 2020 , 10, 7372	4.9	5
349	Determination of Exact Positions of Individual Tungsten Atoms in Unisize Tungsten Oxide Clusters Supported on Carbon Substrate by HAADF-STEM Observation. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 1706-1711	3.8	5
348	Room-temperature dilute ferromagnetic dislocations in Sr _{1-x} MnxTiO ₃ . <i>Physical Review B</i> , 2017 , 96,	3.3	5
347	Structure of (angle 110 angle)-tilt boundaries in cubic zirconia. <i>Journal of Materials Science</i> , 2017 , 52, 4278-4287	4.3	5
346	Annular Bright-Field Scanning Transmission Electron Microscopy: Direct and Robust Atomic-Resolution Imaging of Light Elements in Crystalline Materials. <i>Microscopy Today</i> , 2017 , 25, 36-41	0.4	5
345	Fluorine in Shark Teeth: Its Direct Atomic-Resolution Imaging and Strengthening Function. <i>Angewandte Chemie</i> , 2014 , 126, 1569-1573	3.6	5

- 344 Unusual 90° domain structure in $(2/3)\text{Bi}(\text{Zn}_{1/2}\text{Ti}_{1/2})\text{O}_3$ - $(1/3)\text{BiFeO}_3$ epitaxial films with giant 22% tetragonal distortion. *Applied Physics Letters*, **2013**, 103, 042904 3-4 5
- 343 Individual charge-trapping dislocations in an ionic insulator. *Applied Physics Letters*, **2009**, 95, 184101 3-4 5
- 342 Atomic structure of threading dislocations in AlN thin films. *Physica B: Condensed Matter*, **2009**, 404, 4886-4888 3-4 5
- 341 Revealing Antiphase Boundaries and Defects at Atomic Resolution in NaLaMgWO₆ Double Perovskites. *Materials Express*, **2012**, 2, 51-56 1-3 5
- 340 Direct observation of the cleavage plane of sapphire by in-situ indentation TEM. *Journal of the Ceramic Society of Japan*, **2012**, 120, 473-477 1 5
- 339 Oxide Ceramics with High Density Dislocations and Their Properties. *Materials Transactions*, **2009**, 50, 1626-1632 1-3 5
- 338 High Resolution Electron Microscopy Study in ZrC-Doped WC-12 mass%Co Alloys. *Materials Transactions*, **2009**, 50, 1096-1101 1-3 5
- 337 Transmission Electron Microscopy Study of Sn-Doped Sintered Indium Oxide. *Materials Transactions*, **2009**, 50, 959-963 1-3 5
- 336 Application of coincidence of reciprocal lattice point model to metal/sapphire hetero interfaces. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 173, 234-238 3-1 5
- 335 The synthesis of diamond particles by a filament assisted CO₂ laser induced CVD. *Nuclear Instruments & Methods in Physics Research B*, **1997**, 121, 427-431 1-2 5
- 334 Microstructure characterization of YBa₂Cu₃O_{7- δ} thin film derived from the metal (Y, Ba, and Cu) naphthenates gels coated on the SrTiO₃ (100) substrate. *Physica C: Superconductivity and Its Applications*, **1998**, 306, 245-252 1-3 5
- 333 Thermoelectric Properties of the Layered Cobaltite Ca₃Co₄O₉ Epitaxial Films Fabricated by Topotactic Ion-Exchange Method. *Materials Transactions*, **2007**, 48, 2104-2107 1-3 5
- 332 Detecting Real Oxygen Ions in Polycrystalline Diamond Thin Film using Secondary Ion Mass Spectrometry. *Japanese Journal of Applied Physics*, **2007**, 46, 3391-3393 1-4 5
- 331 Effectiveness of BaZrO₃ buffer layer in SmBa₂Cu₃O_y epitaxial growth on MgO substrate: A first-principles study. *Journal of Applied Physics*, **2004**, 95, 2309-2318 2-5 5
- 330 Superplastic Characteristics in Germania Based Codoped Y-TZP. *Materials Science Forum*, **2001**, 357-359, 129-134 0-4 5
- 329 Atomic Structure and Diffusion in Amorphous Si-B-C-N by Molecular Dynamics Simulation. *Materials Transactions*, **2002**, 43, 1506-1511 1-3 5
- 328 Microstructure of diamond-like carbon films prepared by cathodic arc deposition. *Diamond and Related Materials*, **2002**, 11, 1436-1440 3-5 5
- 327 Chemical bonding state at grain boundaries in BaTiO₃ doped with a small amount of cation. *Philosophical Magazine Letters*, **1999**, 79, 327-331 1 5

326	Grain Boundary Structure and Sliding of Alumina Bicrystals. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 601, 125		5
325	Surface Defects and Local Strain in Polished Silicon by Transmission Electron Microscopy. <i>Japanese Journal of Applied Physics</i> , 1995 , 34, 3198-3203	1.4	5
324	Grain Boundary Characterization of Superplastic Ceramics by HREM and AEM. <i>Materials Science Forum</i> , 1996 , 243-245, 345-350	0.4	5
323	Mechanical Properties of Newly Developed Si ₃ N ₄ -SiC Composite Material with Relatively High Flexibility. <i>Journal of the Ceramic Association Japan</i> , 1985 , 93, 409-417		5
322	Real-space visualization of intrinsic magnetic fields of an antiferromagnet.. <i>Nature</i> , 2022 , 602, 234-239	50.4	5
321	Mechanism for Improvement of In-Plane Alignment of SmBa ₂ Cu ₃ O _y Films by BaZrO ₃ Buffer Layer on MgO Substrate. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2003 , 67, 295-301	0.4	5
320	Microstructure Evolutions at Severely-deformed Austenite/Martensite Interfaces of a Layer-integrated Steel. <i>ISIJ International</i> , 2009 , 49, 1406-1413	1.7	5
319	Single-source-precursor synthesis and high-temperature evolution of novel mesoporous SiVN(O)-based ceramic nanocomposites. <i>Journal of the European Ceramic Society</i> , 2020 , 40, 6280-6287	6	5
318	Atomic and electronic band structures of Ti-doped Al ₂ O ₃ grain boundaries. <i>Acta Materialia</i> , 2020 , 201, 488-493	8.4	5
317	Elemental intermixing within an ultrathin SrRuO ₃ electrode layer in epitaxial heterostructure BaTiO ₃ /SrRuO ₃ /SrTiO ₃ . <i>AIP Advances</i> , 2016 , 6, 015010	1.5	5
316	Atomistic origin of high-concentration Ce ³⁺ in {100}-faceted Cr-substituted CeO ₂ nanocrystals. <i>Acta Materialia</i> , 2021 , 203, 116473	8.4	5
315	Electrical polarization induced by atomically engineered compositional gradient in complex oxide solid solution. <i>NPG Asia Materials</i> , 2019 , 11,	10.3	4
314	Bioinspired selective synthesis of liquid-crystalline nanocomposites: formation of calcium carbonate-based composite nanodisks and nanorods. <i>Nanoscale Advances</i> , 2020 , 2, 2326-2332	5.1	4
313	Dissociation reaction of the 1/3($\left\langle \bar{1}101 \right\rangle$) edge dislocation in α -Al ₂ O ₃ . <i>Journal of Materials Science</i> , 2018 , 53, 8049-8058	4.3	4
312	Nanoepitaxy of Anatase-type TiO ₂ on CeO ₂ Nanocubes Self-Assembled on a Si Substrate for Fabricating Well-Aligned Nanoscale Heterogeneous Interfaces. <i>Crystal Growth and Design</i> , 2014 , 14, 4714-4720	2.5	4
311	Multiferroics: Realization of Large Electric Polarization and Strong Magnetoelectric Coupling in BiMn ₃ Cr ₄ O ₁₂ (Adv. Mater. 44/2017). <i>Advanced Materials</i> , 2017 , 29,	24	4
310	Quantitative analysis of Li distributions in battery material Li _{1-x} FePO ₄ using Fe M _{2,3} -edge and valence electron energy loss spectra. <i>Journal of Electron Microscopy</i> , 2017 , 66, 254-260		4
309	Solid-Phase Epitaxial Growth of A-Site-Ordered Perovskite Sr _{4-x} Er _x Co ₄ O ₁₂ A Room Temperature Ferrimagnetic p-Type Semiconductor. <i>Advanced Electronic Materials</i> , 2015 , 1, 1500199	6.4	4

308	Oxygen segregation at coherent grain boundaries of cubic boron nitride. <i>Applied Physics Letters</i> , 2013 , 102, 091607	3.4	4
307	Direct observation of cationic ordering in double perovskite SrFeReO ₆ crystals. <i>Microscopy and Microanalysis</i> , 2013 , 19 Suppl 5, 25-8	0.5	4
306	Prospects for 3D imaging of dopant atoms in ceramic interfaces. <i>Journal of Electron Microscopy</i> , 2010 , 59 Suppl 1, S29-38		4
305	Transmission electron microscopy and scanning transmission electron microscopy study on B-site cation ordered structures in a (1-x)Pb(Mg _{1/3} Nb _{2/3})O ₃ -PbTiO ₃ single crystal. <i>Applied Physics Letters</i> , 2009 , 95, 022906	3.4	4
304	Microstructure evolution of Ca _{0.33} CoO ₂ thin films investigated by high-angle annular dark-field scanning transmission electron microscopy. <i>Journal of Materials Research</i> , 2009 , 24, 279-287	2.5	4
303	Introduction of pinning centers in superconducting YBCO thick film prepared by liquid phase epitaxy. <i>IEEE Transactions on Applied Superconductivity</i> , 1997 , 7, 1392-1395	1.8	4
302	Lattice Mismatch Effects on the Hetero Interface Structure of YBCO Films Grown by Liquid Phase Epitaxy. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1997 , 61, 942-950	0.4	4
301	Mechanical properties of Y ₂ O ₃ -stabilized ZrO ₂ polycrystals fabricated by the solid phase mixing and sintering method. <i>Journal of the Ceramic Society of Japan</i> , 2008 , 116, 491-496	1	4
300	Misfit Dislocation Formation at the c/t Interphase Boundary in Y-TZP. <i>Journal of the American Ceramic Society</i> , 2008 , 91, 3810-3812	3.8	4
299	A new method for preparing plan-view TEM specimen of multilayered films using focused ion beam. <i>Journal of Electron Microscopy</i> , 2004 , 53, 501-4		4
298	Direct Characterization of Grain-Boundary Electrical Activity in Doped (Ba _{0.6} Sr _{0.4})TiO ₃ by Combined Imaging of Electron-Beam-Induced Current and Electron-Backscattered Diffraction. <i>Journal of the American Ceramic Society</i> , 2004 , 87, 1153-1156	3.8	4
297	Transmission electron microscopic studies on the growth mechanism of YBa ₂ Cu ₃ O _{7-x} and Nd _{1+x} Ba _{2-x} Cu ₃ O _{7-x} films formed by metalorganic deposition method using trifluoroacetates. <i>Physica C: Superconductivity and Its Applications</i> , 2002 , 378-381, 1039-1044	1.3	4
296	Al-doped ZnO ceramics fabricated by mechanical alloying and high-pressure sintering technique. <i>Journal of Materials Science Letters</i> , 2003 , 22, 1201-1204		4
295	YBa ₂ Cu ₃ O _{7-x} and YbBa ₂ Cu ₃ O _{7-x} superconducting films prepared by chemical solution deposition on SrTiO ₃ (001) substrate. <i>Chemical Physics Letters</i> , 2001 , 347, 285-290	2.5	4
294	Influence of antiphase boundaries on critical current densities in Yba ₂ Cu ₃ O _{7-x} single crystals. <i>Journal of Materials Research</i> , 2001 , 16, 1935-1941	2.5	4
293	Interfaces between solution-derived LiMn ₂ O ₄ thin films and MgO and Au/MgO substrates. <i>Journal of Materials Research</i> , 2002 , 17, 358-366	2.5	4
292	A Critical Factor to Determine the High-Temperature Creep Resistance in Cation-Doped Polycrystalline Al ₂ O ₃ . <i>Key Engineering Materials</i> , 1999 , 171-174, 809-816	0.4	4
291	Transmission electron microscopy observation of second-phase particles in Bi ₃ N ₄ grains. <i>Journal of Materials Research</i> , 1999 , 14, 2959-2965	2.5	4

290	. <i>IEEE Transactions on Applied Superconductivity</i> , 1995 , 5, 2015-2018	1.8	4
289	Carbon Nanocapsules Grown on Carbon Fibers. <i>Japanese Journal of Applied Physics</i> , 1995 , 34, 1610-1614	1.4	4
288	Formation mechanism of grain boundaries in YBa ₂ Cu ₃ O ₇ δ superconducting thick film by liquid phase epitaxy. <i>Physica C: Superconductivity and Its Applications</i> , 1996 , 262, 120-126	1.3	4
287	Joining of Reaction Bonded Si ₃ N ₄ Using Al. <i>Journal of the Ceramic Association Japan</i> , 1987 , 95, 921-928		4
286	Metastable oxysulfide surface formation on LiNi _{0.5} Mn _{1.5} O ₄ single crystal particles by carbothermal reaction with sulfur-doped heterocarbon nanoparticles: new insight into their structural and electrochemical characteristics, and their potential applications. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 22302-22314	1.3	4
285	Optimization of Two-Dimensional Channel Thickness in Nanometer-Thick SnO ₂ -Based Top-Gated Thin-Film Transistors Using Electric Field Thermopower Modulation: Implications for Flat-Panel Displays. <i>ACS Applied Nano Materials</i> , 2020 , 3, 12427-12432	5.6	4
284	Rational Low-Temperature Synthesis of Ultrasmall Nanocrystalline Manganese Binary Oxide Catalysts under Controlled Metal Cation Hydration in Organic Media. <i>ChemNanoMat</i> , 2016 , 2, 297-306	3.5	4
283	Microstructural analysis and thermoelectric properties of Sn-Al co-doped ZnO ceramics 2016 ,		4
282	Reactive Solid-Phase Epitaxy and Electrical Conductivity of Layered Sodium Manganese Oxide Films. <i>Crystal Growth and Design</i> , 2017 , 17, 1849-1853	3.5	3
281	Investigation of V-shaped extended defects in a 4H β -SiC epitaxial film. <i>Philosophical Magazine</i> , 2017 , 97, 657-670	1.6	3
280	Synthesis of Tunable-Aspect-Ratio Calcite Nanoparticles via Mg ²⁺ Doping. <i>Crystal Growth and Design</i> , 2019 , 19, 6784-6791	3.5	3
279	Atomic structure characterization of stacking faults on the {11 $\bar{1}$ 00} plane in α -alumina by scanning transmission electron microscopy 2016 ,		3
278	Structure of the Basal Edge Dislocation in ZnO. <i>Crystals</i> , 2018 , 8, 127	2.3	3
277	Transition-Metal Distribution in Brownmillerite CaFeCoO. <i>Inorganic Chemistry</i> , 2019 , 58, 10209-10216	5.1	3
276	First Principles Calculation of ELNES/XANES for Materials Science. <i>Materia Japan</i> , 2014 , 53, 414-418	0.1	3
275	Another origin of yield drop behavior in sapphire deformed via basal slip: Recombination of climb-dissociated partial dislocations. <i>Scripta Materialia</i> , 2017 , 138, 109-113	5.6	3
274	First principles study of oxygen diffusion in a α -alumina twin grain boundary. <i>Philosophical Magazine</i> , 2015 , 95, 3985-3999	1.6	3
273	Thin Films: Structural Distortion and Compositional Gradients Adjacent to Epitaxial LiMn ₂ O ₄ Thin Film Interfaces (Adv. Mater. Interfaces 8/2014). <i>Advanced Materials Interfaces</i> , 2014 , 1,	4.6	3

- 272 Systematic calculations of O_n ($n = 1$ to 6) polytypes of $LiCoO_2$. *Physica Status Solidi - Rapid Research Letters*, **2014**, 8, 545-548 2.5 3
- 271 Resolving 45 pm with 300 kV Aberration Corrected STEM. *Microscopy and Microanalysis*, **2014**, 20, 124-125 3
- 270 Oxygen polarity and interfacial atomic arrangement in an $Mg_xZn_{1-x}O/C-MgO/sapphire$ heterostructure. *Journal Physics D: Applied Physics*, **2013**, 46, 145303 3 3
- 269 Effects of TiO_2 Support on the Initial Stage of Pt Nanoparticle Growth. *Applied Physics Express*, **2013**, 6, 025503 2.4 3
- 268 First-principles sliding simulation of Al-terminated $\sqrt{3}$ pyramidal twin grain boundary in $\alpha-Al_2O_3$. *Philosophical Magazine Letters*, **2010**, 90, 159-172 1 3
- 267 Determination of reversible hydrogen adsorption site in Ni-nanoparticle-dispersed amorphous silica for hydrogen separation at high temperature. *Journal of Materials Research*, **2010**, 25, 2008-2014 2.5 3
- 266 Electric field thermopower modulation analysis of an interfacial conducting layer formed between Y_2O_3 and rutile TiO_2 . *Journal of Applied Physics*, **2011**, 110, 063719 2.5 3
- 265 High Crystallinity $CuScO_2$ Delafossite Films Exhibiting Ultraviolet Photoluminescence Grown by Vapor-Liquid-Solid Tri-phase Epitaxy. *Applied Physics Express*, **2012**, 5, 011201 2.4 3
- 264 Effect of Al_2O_3 on High Temperature Mechanical Properties of Silicon Nitride with $Yb_4Si_2O_7N_2$. *Journal of the Ceramic Society of Japan*, **1997**, 105, 801-804 3
- 263 Interface structures of heteroepitaxially grown Pr_{123}/Y_{123} and Pr_{123}/Nd_{123} crystals by liquid phase epitaxy. *Physica C: Superconductivity and Its Applications*, **1998**, 298, 185-194 1.3 3
- 262 $\sqrt{1}$ resolution chemical imaging by phase contrast technique. *Journal of Applied Physics*, **2006**, 99, 104909 2.5 3
- 261 In situ HRTEM observations of the formation of reaction phases from liquid $Ag_{100}Cu_{10}$ alloy and Si, Si and C substrates. *Nanotechnology*, **2004**, 15, S398-S401 3.4 3
- 260 Thermal Change of Unstable Stacking Faults in $\beta-SiC$. *Japanese Journal of Applied Physics*, **2001**, 40, 3969-3974 3
- 259 Transmission Electron Microscopic Studies of $LiNb_{0.5}Ta_{0.5}O_3$ Films Deposited on Sapphire Substrates by Thermal Plasma Spray CVD (Microstructure of $LiNb_{0.5}Ta_{0.5}O_3$ Films Deposited by Thermal Plasma Spray CVD). *Materials Transactions*, **2002**, 43, 1517-1524 1.3 3
- 258 A change in the chemical bonding strength and high-temperature creep resistance in Al_2O_3 with lanthanoid oxide doping. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **2002**, 82, 511-525 3
- 257 Precursor derived $LiMn_2O_4$ thin films as ionic conductor. *Ionics*, **2000**, 6, 156-160 2.7 3
- 256 Long columnar defects with constant column size in 180-MeV Fe-irradiated $Bi_2Sr_2CaCu_2O_x$ crystals. *Physical Review B*, **2000**, 61, 15442-15449 3.3 3
- 255 Misorientation Dependence of Grain Boundary Resistivity in Nb-Doped Barium Titanate. *Key Engineering Materials*, **2000**, 181-182, 51-54 0.4 3

254	Grian Boundary Structure in BaTiO ₃ with a Small Excess of Ti-Site Dopant. <i>Materials Science Forum</i> , 1998 , 294-296, 247-250	0.4	3
253	Interface structure of AlN/TiN/MgO(001) prepared by molecular beam epitaxy. <i>Journal of Materials Research</i> , 1999 , 14, 4685-4689	2.5	3
252	Superplasticity in GeO ₂ -Doped TZP. <i>Materials Science Forum</i> , 1999 , 304-306, 543-548	0.4	3
251	Grain Boundary Analysis in Superplastic SiO ₂ - Doped TZP. <i>Materials Science Forum</i> , 1996 , 233-234, 367-374	3.4	3
250	Evidences for dilute solid solutions in the Si ₃ N ₄ -TiN system. <i>Scripta Metallurgica Et Materialia</i> , 1994 , 31, 403-406		3
249	First-principles calculations of group IIA and group IV impurities in Al ₂ O ₃ . <i>Physical Review Materials</i> , 2020 , 4,	3.2	3
248	Ferroelectric Oxide Thin Film with an Out-of-Plane Electrical Conductivity. <i>Nano Letters</i> , 2020 , 20, 1047-1053	10.5	3
247	Grain boundary functions as a spin valve. <i>National Science Review</i> , 2020 , 7, 1148-1149	10.8	3
246	Atomic-Scale Analysis of Biphasic Boundaries in the Lithium-Ion Battery Cathode Material LiFePO ₄ . <i>ACS Applied Energy Materials</i> , 2020 , 3, 8009-8016	6.1	3
245	Coexistence of High Electron Conduction and Low Heat Conduction in Tungsten Oxide Epitaxial Films with 1D Atomic Defect Tunnels. <i>ACS Applied Electronic Materials</i> , 2020 , 2, 2507-2513	4	3
244	Anatase-like Grain Boundary Structure in Rutile Titanium Dioxide. <i>Nano Letters</i> , 2021 , 21, 2745-2751	11.5	3
243	Solid-liquid phase epitaxial growth of Li ₄ Ti ₅ O ₁₂ thin film. <i>Applied Physics Express</i> , 2016 , 9, 125501	2.4	3
242	Ultra-high contrast STEM imaging for segmented/pixelated detectors by maximizing the signal-to-noise ratio. <i>Ultramicroscopy</i> , 2021 , 220, 113133	3.1	3
241	3D arrangement of atomic polyhedra in tilt grain boundaries. <i>Acta Materialia</i> , 2021 , 202, 266-276	8.4	3
240	Anomalously Low Heat Conduction in Single-Crystal Superlattice Ceramics Lower Than Randomly Oriented Polycrystals. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2001932	4.6	3
239	Impact of a surface TiO ₂ atomic sheet on the electronic transport properties of LaAlO ₃ /SrTiO ₃ heterointerfaces. <i>Applied Physics Letters</i> , 2018 , 113, 141602	3.4	3
238	Atomic-scale mechanism of internal structural relaxation screening at polar interfaces. <i>Physical Review B</i> , 2018 , 97,	3.3	3
237	Flexoelectric nanodomains in rare-earth iron garnet thin films under strain gradient. <i>Communications Materials</i> , 2021 , 2,	6	3

236	Imaging Low Z Materials in Crystalline Environments Via Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1732-1733	0.5	2
235	Synthesis of Novel Melilite-Type Iron/Cobalt Oxides and Their Oxygen Evolution Reaction Electrocatalytic Activity. <i>Chemistry of Materials</i> , 2020 , 32, 6847-6854	9.6	2
234	In situ STEM Mechanical Experiments at Atomic-Resolution Using a MEMS Device. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1884-1885	0.5	2
233	Atomistic structure and segregation behavior in secondary structure and facet of Pr-doped ZnO $\approx 27.8^\circ$ [0001] tilt grain boundary. <i>Journal of the Ceramic Society of Japan</i> , 2014 , 122, 381-385	1	2
232	Atomic-scale structure and electronic property of the La ₂ FeCrO ₆ /SrTiO ₃ interface. <i>Journal of Applied Physics</i> , 2013 , 114, 113705	2.5	2
231	Innentitelbild: A Complex Perovskite-Type Oxynitride: The First Photocatalyst for Water Splitting Operable at up to 600 nm (Angew. Chem. 10/2015). <i>Angewandte Chemie</i> , 2015 , 127, 2900-2900	3.6	2
230	Preface to the special issue on intergranular and interphase boundaries in materials. <i>Journal of Materials Science</i> , 2011 , 46, 4093-4094	4.3	2
229	Optical and Structural Characterization of InGaN/GaN Multiple Quantum Wells by Epitaxial Lateral Overgrowth. <i>Materials Transactions</i> , 2009 , 50, 1085-1090	1.3	2
228	Interface atomic structure of LaCuOSe:Mg epitaxial thin film and MgO substrate. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010 , 173, 229-233	3.1	2
227	Cross patterning on MgO based on dislocations using femtosecond laser irradiation. <i>Applied Physics A: Materials Science and Processing</i> , 2008 , 92, 913-916	2.6	2
226	Atomic Structure and Relaxation Behavior at AlN(0001)/Al ₂ O ₃ (0001)Interface. <i>Journal of the Ceramic Society of Japan</i> , 2006 , 114, 1018-1021		2
225	Grain Boundary Characters and Structures in Oxide Ceramics. <i>Key Engineering Materials</i> , 2003 , 247, 335-340		2
224	ELNES Analysis of Local Electronic Structures at Cu/Al ₂ O ₃ (0001) Interface. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2005 , 69, 86-89	0.4	2
223	Localized Strain and Atomic Structures of Symmetrical Tilt Grain Boundaries in Al ₂ O ₃ Bicrystals. <i>Journal of the Ceramic Society of Japan</i> , 2005 , 113, 605-610		2
222	Stress-induced facet coarsening in a $\{10\bar{4}\}$ symmetrical tilt grain boundary in an alumina bicrystal. <i>Journal of Materials Science</i> , 2005 , 40, 3137-3142	4.3	2
221	Atomic and Electronic Structures of Cu/Sapphire Interfaces by HRTEM and EELS Analyses. <i>Materials Science Forum</i> , 2005 , 475-479, 3859-3862	0.4	2
220	Grain Boundary Structure and Electrical Properties in Nb-Doped SrTiO ₃ Bicrystals. <i>Key Engineering Materials</i> , 2000 , 181-182, 225-230	0.4	2
219	Atomic Interface Structure of Superplastic Ceramics. <i>Key Engineering Materials</i> , 1998 , 161-163, 549-554	0.4	2

218	Superplasticity in GeO ₂ -Nd ₂ O ₃ Doped Y-TZP. <i>Key Engineering Materials</i> , 1999 , 171-174, 343-348	0.4	2
217	Characterization of YbBa ₂ Cu ₃ O _{7-δ} Superconducting Thin Films Prepared by Chemical Solution Deposition on SrTiO ₃ (001) and LaAlO ₃ (001) Substrates. <i>Physica Status Solidi A</i> , 1999 , 173, 441-450		2
216	High-Temperature Deformation and Fracture Behavior of Al ₂ O ₃ -Y ₂ O ₃ Doped Silicon Nitride. <i>Materials Transactions, JIM</i> , 1996 , 37, 430-434		2
215	Cascade Defects as Flux Pinning Centers in Bi ₂ Sr ₂ CaCu ₂ O _x Single Crystal Generated by Ion Irradiation. <i>Materials Transactions, JIM</i> , 1996 , 37, 902-906		2
214	Grain Boundary Structure of c-BN Thin Film Synthesized by PVD Method. <i>Materials Transactions, JIM</i> , 1996 , 37, 1122-1126		2
213	Effects of 18MeV Fe ⁸⁺ Ion Irradiation on Superconductivity and Microstructure of Bi ₂ Sr ₂ CaCu ₂ O _x Superconductor. <i>Journal of the Ceramic Society of Japan</i> , 1995 , 103, 195-198		2
212	Solid-State Electrochemical Switch of Superconductor-Metal-Insulators. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 54204-54209	9.5	2
211	Breaking of Thermopower-Conductivity Trade-Off in LaTiO Film around Mott Insulator to Metal Transition. <i>Advanced Science</i> , 2021 , 8, e2102097	13.6	2
210	Unveiling the Electronic Structure of Grain Boundaries in Anatase with Electron Microscopy and First-Principles Modeling. <i>Nano Letters</i> , 2021 , 21, 9217-9223	11.5	2
209	Flow Stress Oscillation in Silicon Carbide during High Temperature Deformation. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1995 , 59, 263-270	0.4	2
208	Unusually Large Thermopower Change from +330 to -185 μ K of Brownmillerite SrCoO _{2.5} . <i>ACS Applied Electronic Materials</i> , 2020 , 2, 2250-2256	4	2
207	Atomic structures of Ti-doped γ -Al ₂ O ₃ grain boundary with a small amount of Si impurity. <i>Journal of the American Ceramic Society</i> , 2020 , 103, 6659-6665	3.8	2
206	Automated geometric aberration correction for large-angle illumination STEM. <i>Ultramicroscopy</i> , 2021 , 222, 113215	3.1	2
205	Two-Dimensional Room-Temperature Giant Antiferrodistortive SrTiO ₃ at a Grain Boundary. <i>Physical Review Letters</i> , 2021 , 126, 225702	7.4	2
204	Arrangement of polyhedral units for [0001]-symmetrical tilt grain boundaries in zinc oxide. <i>Acta Materialia</i> , 2021 , 212, 116864	8.4	2
203	Effect of Oxygen Potential Gradient on Mass Transfer in Polycrystalline γ -Alumina at High Temperature. <i>Materials Science Forum</i> , 2016 , 879, 966-971	0.4	2
202	Piezoelectric Materials: Enhanced Piezoelectric Response due to Polarization Rotation in Cobalt-Substituted BiFeO ₃ Epitaxial Thin Films (Adv. Mater. 39/2016). <i>Advanced Materials</i> , 2016 , 28, 8785-8785 ²	24	2
201	Dislocation-induced large local polarization inhomogeneity of ferroelectric materials. <i>Scripta Materialia</i> , 2021 , 194, 113624	5.6	2

200	Anisotropic Electrical Conductivity of Oxygen-Deficient Tungsten Oxide Films with Epitaxially Stabilized 1D Atomic Defect Tunnels. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 6864-6869	9.5	2
199	Phase relation between supercooled liquid and amorphous silicon. <i>Applied Physics Letters</i> , 2020 , 116, 093705	3.4	1
198	Analysis of Periodic Atomic Structures in Grain Boundaries by Number Theory. <i>Materia Japan</i> , 2017 , 56, 589-596	0.1	1
197	Dislocation at a $\{2(\bar{1})\}(\bar{1})_0$ low-angle grain boundary in LiNbO ₃ . <i>Journal of Materials Science</i> , 2018 , 53, 333-344	4.3	1
196	Full determination of individual reconstructed atomic columns in intermixed heterojunctions. <i>Nano Letters</i> , 2014 , 14, 6584-9	11.5	1
195	Atomic-Resolution Scanning Transmission Electron Microscopy with Segmented Annular All Field Detector. <i>Microscopy and Microanalysis</i> , 2014 , 20, 64-65	0.5	1
194	Three-Dimensional Point Defect Imaging by Large-angle Illumination STEM. <i>Microscopy and Microanalysis</i> , 2017 , 23, 424-425	0.5	1
193	Observations of crack propagation along a Zr-doped alumina grain boundary. <i>Microscopy (Oxford, England)</i> , 2014 , 63 Suppl 1, i20-i21	1.3	1
192	Characterization of Threading Edge Dislocation in 4H-SiC by X-Ray Topography and Transmission Electron Microscopy. <i>Materials Science Forum</i> , 2014 , 778-780, 366-369	0.4	1
191	The Latest Analytical Electron Microscope and its Application to Ceramics 2013 , 3-21		1
190	Scanning Transmission Electron Microscopy and Thermoelectric Properties of Sr-Doped Misfit Cobalt Oxide. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 071101	1.4	1
189	Atomistic geometry and bonding characteristics at the Sr ₂ FeTaO ₆ /SrTiO ₃ interface. <i>Applied Physics Letters</i> , 2013 , 102, 221602	3.4	1
188	TEM analysis of dislocation structures formed in the Cr-doped grain boundary of alumina. <i>Journal of the Ceramic Society of Japan</i> , 2011 , 119, 817-821	1	1
187	Morphology change from nanocrack into periodic pore array formed by femtosecond laser pulses. <i>Journal of Applied Physics</i> , 2011 , 109, 013517	2.5	1
186	Formation of a Cr ³⁺ -rich luminescent thin phase along a grain boundary of .ALPHA.-Al ₂ O ₃ . <i>Journal of the Ceramic Society of Japan</i> , 2011 , 119, 620-622	1	1
185	Wear Resistance of SiO ₂ -Doped Y-TZP Grinding Media During Wet Milling. <i>International Journal of Applied Ceramic Technology</i> , 2009 , 7, 502	2	1
184	Understanding Structural Variability Induced by Pr segregation in SrTiO ₃ Grain Boundaries. <i>Microscopy and Microanalysis</i> , 2012 , 18, 426-427	0.5	1
183	Structural Analysis of Threading Dislocations in AlN Thin Films. <i>Microscopy and Microanalysis</i> , 2008 , 14, 258-259	0.5	1

182	Towards Interface Studies by Cs-Corrected STEM. <i>Journal of the Vacuum Society of Japan</i> , 2008 , 51, 700-706		1
181	Oxygen Diffusion along Symmetric [0001] Tilt Grain Boundaries in α -Alumina. <i>Key Engineering Materials</i> , 2006 , 317-318, 415-418	0.4	1
180	Dislocation Structure of 10° Low-Angle Tilt Grain Boundary in α -Al ₂ O ₃ . <i>Materials Science Forum</i> , 2007 , 558-559, 979-982	0.4	1
179	TEM Characterization of 2° Tilt Grain Boundary in Alumina. <i>Materials Science Forum</i> , 2007 , 561-565, 2427-2430	0.4	1
178	Grain Boundary Atomic Structures in SrTiO ₃ and BaTiO ₃ . <i>Materials Science Forum</i> , 2007 , 558-559, 851-856	0.4	1
177	Origin of Giant Seebeck Coefficient for High Density 2DEGs Confined in the SrTiO ₃ /SrTi _{0.8} Nb _{0.2} O ₃ Superlattices. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1044, 1		1
176	Microstructure and Surface Segregation of 3 mol% Y ₂ O ₃ -Doped ZrO ₂ Particles. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 060612075903007-???	3.8	1
175	Grain Boundary Characters and Sliding of [0001] Symmetric Tilt Boundaries in Alumina. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 778, 3161		1
174	Grain Boundary Structures and High Temperature Deformations in Alumina Bicrystals. <i>Journal of the Ceramic Society of Japan</i> , 2003 , 111, 688-691		1
173	Dopant Effect on the High-Temperature Grain Boundary Sliding in Alumina. <i>Materials Science Forum</i> , 2004 , 447-448, 299-304	0.4	1
172	A Modern Approach to Control Grain Boundaries in Ceramics. <i>Materials Science Forum</i> , 2004 , 467-470, 557-566	0.4	1
171	Pre-holed tensile specimens for superplastic Y-TZP ceramics. <i>Journal of Materials Science</i> , 2002 , 37, 3307-3313	1.3	1
170	Effect of GeO ₂ and NdO _{1.5} Co-doping on High-temperature Ductility in TZP. <i>Materials Transactions</i> , 2004 , 45, 2564-2568	1.3	1
169	High Resolution Microscopy Study of [001] Symmetric Tilt Boundary with a Tilt Angle of 66° in Rutile-Type TiO ₂ Bicrystal. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2005 , 69, 1004-1009	0.4	1
168	Current-Voltage Characteristic and Grain Boundary Structure in Undoped and Pr and Co Doped ZnO Bicrystals. <i>Materials Science Forum</i> , 2005 , 475-479, 3867-3870	0.4	1
167	Systematic study of grain boundary atomistic structures and related properties in cubic zirconia bicrystals. <i>International Journal of Materials Research</i> , 2005 , 96, 177-185		1
166	Superplastic Flow Stress in Cation-Doped YSZ. <i>Materials Science Forum</i> , 2001 , 357-359, 141-146	0.4	1
165	Internal Friction Behavior of Alumina Polycrystals with Engineered Grain Boundaries. <i>Materials Transactions</i> , 2002 , 43, 1557-1560	1.3	1

164	Internal Friction Analysis of CaO-Doped Silicon Carbides. <i>Materials Transactions</i> , 2002 , 43, 1552-1556	1.3	1
163	Grain Boundary Character Dependence of Potential Barrier in Barium Titanate. <i>Materials Science Forum</i> , 1998 , 294-296, 711-714	0.4	1
162	Microstructure characterization of one-directionally oriented ulexite. <i>Journal of Materials Research</i> , 1998 , 13, 778-783	2.5	1
161	High Resolution TEM Observation of Si Nanoparticle Interfaces Fabricated by SIMOX. <i>Journal of the Ceramic Society of Japan</i> , 1998 , 106, 1255-1258		1
160	Analysis of Crystallographic Orientation of Elongated Si_3N_4 Particles in In Situ Si_3N_4 Composite by Electron Back Scattered Diffraction Method. <i>Journal of the Ceramic Society of Japan</i> , 1998 , 106, 980-983		1
159	Characterization of the $\text{YbBa}_2\text{Cu}_3\text{O}_{7-y}$ and $\text{YBa}_2\text{Cu}_3\text{O}_{7-y}$ thin superconducting films prepared by chemical solution deposition on $\text{MgO}(001)$ substrate. <i>Journal of Electron Microscopy</i> , 1999 , 48, 785-9		1
158	TEM In-Situ Observation of SiO_2 Doped TZP at High Temperatures. <i>Materials Science Forum</i> , 1999 , 304-306, 525-530	0.4	1
157	Grain Boundary Analysis and Superplastic Characteristics in GeO_2 -Doped TZP. <i>Key Engineering Materials</i> , 1999 , 171-174, 383-388	0.4	1
156	High resolution electron microscopy observation of TiC coated cemented carbide. <i>Surface and Coatings Technology</i> , 1996 , 79, 268-275	4.4	1
155	On-Chip Electrochemical Analysis Combined with Liquid-Phase Electron Microscopy of Zinc Deposition/Dissolution. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 112511	3.9	1
154	Direct Determination of Cationic Disorder in Sodium Bismuth Titanate. <i>Applied Microscopy</i> , 2012 , 42, 164-173	1.1	1
153	Improving the depth resolution of STEM-ADF sectioning by 3D deconvolution. <i>Microscopy (Oxford, England)</i> , 2021 , 70, 241-249	1.3	1
152	Recent Technical Trend and Future of Transmission Electron Microscopy (Atomic Resolution Imaging). <i>Materia Japan</i> , 2017 , 56, 254-259	0.1	1
151	Ultrafast Encapsulation of Metal Nanoclusters into MFI Zeolite in the Course of Its Crystallization: Catalytic Application for Propane Dehydrogenation. <i>Angewandte Chemie</i> , 2020 , 132, 19837-19842	3.6	1
150	Low thermal conductivity of $\text{SrTiO}_3\text{-LaTiO}_3$ and $\text{SrTiO}_3\text{-BrNbO}_3$ thermoelectric oxide solid solutions. <i>Journal of the American Ceramic Society</i> , 2021 , 104, 4075-4085	3.8	1
149	Atomic-Resolution Topographic Imaging of Crystal Surfaces. <i>ACS Nano</i> , 2021 , 15, 9186-9193	16.7	1
148	Fabrication of calcite-core/Mg-calcite-shell nanorods for better thermal stability. <i>Advanced Powder Technology</i> , 2021 , 32, 2577-2577	4.6	1
147	Single-Dislocation Schottky Diodes. <i>Nano Letters</i> , 2021 , 21, 5586-5592	11.5	1

146	Quantitative Atomic Resolution Differential Phase Contrast Imaging Using a Segmented Area All Field Detector. <i>Microscopy and Microanalysis</i> , 2016 , 22, 504-505	0.5	1
145	Coexistence of two different atomic structures in the $\sqrt{3}$ pyramidal twin boundary in α -Al ₂ O ₃ . <i>Philosophical Magazine Letters</i> , 2019 , 99, 435-443	1	1
144	Nanoscale Defluorination Mechanism and Solid Electrolyte Interphase of a MgF ₂ Anode in Fluoride-Shuttle Batteries. <i>ACS Applied Energy Materials</i> , 2021 , 4, 996-1003	6.1	1
143	Surface segregation of 3 mol % yttria-doped tetragonal zirconia particle studied by atomic-resolution scanning transmission electron microscopy-energy-dispersive X-ray spectroscopy. <i>Journal of the Ceramic Society of Japan</i> , 2021 , 129, 561-565	1	1
142	Atomic-scale mechanism of rhombohedral twinning in sapphire. <i>Acta Materialia</i> , 2021 , 216, 117137	8.4	1
141	Surfactant-mediated morphology evolution and self-assembly of cerium oxide nanocrystals for catalytic and supercapacitor applications. <i>Nanoscale</i> , 2021 , 13, 10393-10401	7.7	1
140	Spin Polarization-Assisted Dopant Segregation at a Coherent Phase Boundary. <i>ACS Nano</i> , 2021 ,	16.7	1
139	Quantitative electric field mapping in semiconductor heterostructures via tilt-scan averaged DPC STEM.. <i>Ultramicroscopy</i> , 2022 , 238, 113538	3.1	1
138	Phase-Contrast-Based Structure Retrieval Methods in Atomic Resolution Scanning Transmission Electron Microscopy [When They Hold and When They Don't. <i>Microscopy and Microanalysis</i> , 2020 , 26, 442-443	0.5	0
137	Thickness-dependent frictional behavior of topological insulator Bi ₂ Se ₃ nanoplates. <i>Applied Physics A: Materials Science and Processing</i> , 2020 , 126, 1	2.6	0
136	Synthesis and Magnetic Behavior of Nickel Zinc Ferrite Nanoparticles Coated Onto Carbon Microcoils. <i>IEEE Transactions on Magnetics</i> , 2013 , 49, 4824-4826	2	0
135	Grain Boundary Segregation-Induced Phase Transformation and Grain Growth in Y ₂ O ₃ -Stabilized ZrO ₂ Polycrystals. <i>Key Engineering Materials</i> , 2014 , 616, 8-13	0.4	0
134	First-principles sliding simulation of Al-terminated $\sqrt{3}$ pyramidal twin grain boundary in α -Al ₂ O ₃ [Philosophical Magazine Letters , Volume 90, Issue 3, pp. 159-172 (2010)]. <i>Philosophical Magazine Letters</i> , 2011 , 91, 561-562	1	0
133	Low-temperature degradation in yttria-stabilized tetragonal zirconia polycrystal: effect of Y ₃₊ distribution in grain interiors. <i>Acta Materialia</i> , 2022 , 117659	8.4	0
132	SILICON CLUSTER LATTICE SYSTEM (CLS) FORMED ON AN AMORPHOUS CARBON SURFACE BY SUPERSONIC CLUSTER BEAM IRRADIATION 2004 , 363-371		0
131	Factors limiting quantitative phase retrieval in atomic-resolution differential phase contrast scanning transmission electron microscopy using a segmented detector.. <i>Ultramicroscopy</i> , 2021 , 233, 113457	3.1	0
130	Oxygen atom ordering on SiO ₂ /4H-SiC {0001} polar interfaces formed by wet oxidation. <i>Acta Materialia</i> , 2021 , 221, 117360	8.4	0
129	Atomic Resolution STEM and Spectroscopic Characterization of Battery Related Materials 2016 , 782-783		0

128	Fabrication and characterization of tetragonal yttria-stabilized zirconia single-crystalline thin film. <i>Journal of the American Ceramic Society</i> , 2021 , 104, 1198-1203	3.8	○
127	Room temperature fluoride ion conductivity in defective $\text{K}_2\text{Sb}_2\text{F}_{10}$ polycrystals. <i>Journal of Power Sources</i> , 2021 , 483, 229173	8.9	○
126	Atomistic Origin of Li-Ion Conductivity Reduction at (LiLa)TiO Grain Boundary. <i>Nano Letters</i> , 2021 , 21, 6282-6288	11.5	○
125	Direct visualization of nucleation intermediate state of magnetic skyrmion from helical stripes assisted by artificial surface pits. <i>Journal of Magnetism and Magnetic Materials</i> , 2021 , 531, 167976	2.8	○
124	Direct imaging of the disconnection climb mediated point defects absorption by a grain boundary.. <i>Nature Communications</i> , 2022 , 13, 1455	17.4	○
123	Atomic and electronic band structures of Y-doped Al_2O_3 grain boundaries. <i>Journal of the Ceramic Society of Japan</i> , 2022 , 130, 286-289	1	○
122	Advanced Scanning Transmission Electron Microscopy as a Tool for Direct Real-Space Visualization and Artificial Control of Quantum Spin Textures. <i>Microscopy and Microanalysis</i> , 2019 , 25, 954-955	0.5	
121	Light Element Imaging Technique at Low Dose Condition by Processing Simultaneously Obtained STEM Images Using a Segmented Detector. <i>Microscopy and Microanalysis</i> , 2019 , 25, 484-485	0.5	
120	ABF-STEM Characterization of the {1100} Stacking Fault in Alumina. <i>Materia Japan</i> , 2016 , 55, 610-610	0.1	
119	Atomic-Scale Structural Analysis of Metal/Nitride Interfaces Using Advanced Atomic-Resolution Analytical Electron Microscopy. <i>Nihon Kessho Gakkaishi</i> , 2017 , 59, 246-251	0	
118	Atomic-Scale Nanostructures by Advanced Electron Microscopy and Informatics 2018 , 157-178		
117	Grain Boundary Engineering of Alumina Ceramics 2018 , 237-257		
116	Direct Visualization of the Grain Boundary Solute Segregation in Oxide Material at Atomic Resolution Using STEM-EDS. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1340-1341	0.5	
115	Improvement of Superplasticity in Fine-Grained Oxide Ceramics Based on the Concept of Grain Boundary Plasticity. <i>Materials Science Forum</i> , 2016 , 838-839, 34-40	0.4	
114	Surface and Electric Field Imaging by Newly Designed Atomic-Resolution STEM. <i>Microscopy and Microanalysis</i> , 2018 , 24, 118-119	0.5	
113	Iterative Algorithm of Atomic Potential Reconstruction Based on DPC Signal from Thick Specimens. <i>Microscopy and Microanalysis</i> , 2019 , 25, 60-61	0.5	
112	Polar Oxide Interface Characterization by Differential Phase Contrast STEM. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1034-1035	0.5	
111	Better Contrast for Imaging Defects by ABF. <i>Microscopy and Microanalysis</i> , 2017 , 23, 480-481	0.5	

110	Quantitative Relation Between Differential Phase Contrast Images Obtained by Segmented and Pixelated Detectors. <i>Microscopy and Microanalysis</i> , 2017 , 23, 440-441	0.5
109	Interface and Surface Local Atomic Structures of Lithium Ion Battery Oxides. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1594-1595	0.5
108	Atomic-resolution STEM-EDS mapping of grain boundary solute segregation in yttria-stabilized zirconia. <i>Microscopy and Microanalysis</i> , 2015 , 21, 2283-2284	0.5
107	Atomic Observation of Phase Transformation from Spinel to Rock Salt in Lithium Manganese Oxide. <i>Microscopy and Microanalysis</i> , 2015 , 21, 333-334	0.5
106	B11-O-04 Atomic-resolution STEM-EDS investigation of grain boundary solute segregation behavior in yttria-stabilized zirconia. <i>Microscopy (Oxford, England)</i> , 2015 , 64, i12.1-i12	1.3
105	Resolving the Atomic Structure of Materials Containing Light Elements by Annular-Bright-Field Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1919-1920	0.5
104	What Does Quantitative Mean In Atomic-Resolution EDS STEM?. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1075-1076	0.5
103	Advanced Electron Microscopy for Energy Related Materials. <i>Microscopy and Microanalysis</i> , 2015 , 21, 471-472	0.5
102	Annular Bright-Field Electron Microscopy Tracking Solid-State Chemical Reaction. <i>Microscopy and Microanalysis</i> , 2015 , 21, 963-964	0.5
101	B11-O-11 Atomic-scale Tracking Cation Diffusion in Lithium Manganese Oxide. <i>Microscopy (Oxford, England)</i> , 2015 , 64, i15.2-i15	1.3
100	B21-O-12 Structure unit behavior in Pr-doped ZnO [0001] symmetric tilt grain boundaries. <i>Microscopy (Oxford, England)</i> , 2015 , 64, i45.1-i45	1.3
99	B22-O-11 Atomic scale STEM analysis of structure and dopant effects on alumina grain boundary. <i>Microscopy (Oxford, England)</i> , 2015 , 64, i52.1-i52	1.3
98	Dislocation imaging for orthopyroxene using an atom-resolved scanning transmission electron microscopy. <i>Microscopy (Oxford, England)</i> , 2014 , 63 Suppl 1, i17	1.3
97	Effect of Oxygen Pressure on Electrical Properties of BiFe _{0.9} Co _{0.1} O ₃ Thin Films Prepared by Pulsed Laser Deposition. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 09KD09	1.4
96	Application to Ceramic Interfaces 2011 , 467-521	
95	Grain-Boundary Segregation and Phase-Separation Mechanism in Yttria-Stabilized Tetragonal Zirconia Polycrystal. <i>Key Engineering Materials</i> , 2011 , 484, 82-88	0.4
94	Dislocation Arrays in Sapphire using Femtosecond Laser Irradiation. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1228, 55601	
93	Defect doping and characterization in oxide single crystals using femtosecond laser. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1298, 185	

- 92 TEM Observations of Characteristic Partial Dislocation Structures in an Alumina Low-angle Grain Boundary. *Materia Japan*, **2009**, 48, 600-600 0.1
- 91 STEM-EDS Observations of Roll-bonded Interfaces in a Layer-integrated Steel. *Materia Japan*, **2009**, 48, 627-627 0.1
- 90 Direct Imaging of Dopant Segregation in a Ceramic Grain Boundary. *Materia Japan*, **2009**, 48, 639-639 0.1
- 89 Prospects for 3D Imaging of Dopant Atoms in Ceramic Materials. *Microscopy and Microanalysis*, **2009**, 15, 44-45 0.5
- 88 Atomic Structures and Properties of Ceramic Interfaces: Combination of Cs-Corrected STEM and First Principles Calculations. *Microscopy and Microanalysis*, **2010**, 16, 1466-1467 0.5
- 87 Understanding Atomic-Scale Phenomena in Functional Materials by Using STEM, ELNES, and Theoretical Calculations. *Microscopy and Microanalysis*, **2010**, 16, 84-85 0.5
- 86 Atomic Resolution and In Situ Characterization of Structural Ceramics. *Key Engineering Materials*, **2008**, 403, 43-44 0.4
- 85 Superplastic Behavior in GeO₂ - TiO₂ Doped TZP. *Key Engineering Materials*, **2006**, 317-318, 407-410 0.4
- 84 High Temperature Plastic Flow and Ductility in Polycrystalline Oxide Ceramics: Doping Effect and Related Phenomena. *Advances in Science and Technology*, **2006**, 45, 1620-1625 0.1
- 83 Theoretical Tensile Deformation of $\sqrt{3}$ Pyramidal Twin Grain Boundary in Alumina. *Key Engineering Materials*, **2007**, 352, 21-24 0.4
- 82 Atomic-Scale Processes of Grain-Boundary Faceting in a Zirconia Bicrystal. *Materials Science Forum*, **2007**, 558-559, 955-958 0.4
- 81 Dislocation Structure Analysis of Low Angle Tilt Grain Boundaries in Alumina by Elastic Theory. *Materials Science Forum*, **2007**, 561-565, 2465-2468 0.4
- 80 Disruption of Dislocation Cores at Grain Boundary in Nb-Doped SrTiO₃ Bicrystals. *Materials Science Forum*, **2007**, 558-559, 869-872 0.4
- 79 Grain-Boundary Structure and Phase-Transformation Mechanism in Yttria-Stabilized Tetragonal Zirconia Polycrystal. *Materials Science Forum*, **2007**, 558-559, 921-926 0.4
- 78 Enhanced Seebeck Coefficient of Amorphous Oxide Semiconductor Superlattices. *Materials Research Society Symposia Proceedings*, **2007**, 1044, 1 0.4
- 77 Direct Measurement of Titanium Pipe Diffusion Coefficients in Sapphire. *Materials Science Forum*, **2007**, 558-559, 939-942 0.4
- 76 Quantum Size Effect of 2DEG Confined Within BaTiO₃/SrTiO₃:Nb Superlattices. *Materials Research Society Symposia Proceedings*, **2007**, 1044, 1 0.4
- 75 Microstructure and Concentration Distribution of Y₂O₃ in 3Y-TZP Powder. *Materia Japan*, **2006**, 45, 875-875 0.4

- 74 Grain Boundary Electronic Structure and High-Temperature Plastic Flow in Polycrystalline Al₂O₃. *Key Engineering Materials*, **2003**, 247, 263-266 0.4
- 73 High-Resolution Spectrochemical Analysis of Columnar Defects Formed in Bi₂Sr₂CaCu₂O_x by Swift Heavy Ion Irradiation. *Materials Research Society Symposia Proceedings*, **2003**, 792, 91
- 72 Nano-Structured Defects in an Oxide Superconductor Induced by Au and Fe Ion Irradiation. *Journal of the Ceramic Society of Japan*, **2005**, 113, 107-111
- 71 Effect of GeO₂ and NdO_{1.5} Co-Doping on High-Temperature Ductility in TZP. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2005**, 69, 1084-1088 0.4
- 70 ??????????????????????. *Materia Japan*, **2005**, 44, 302-307 0.1
- 69 Grain Boundary Dependence of Dopant Segregation and Electrical Property in ZnO. *Materia Japan*, **2005**, 44, 965-965 0.1
- 68 Theoretical and Experimental Ti-K NEXAFS of Various Ti-Oxides. *Materials Science Forum*, **2005**, 475-479, 3119-3122 0.4
- 67 Transmission Electron Microscopy Study of Thermal Barrier Coatings Fabricated by Electron Beam-Physical Vapor Deposition. *Materials Science Forum*, **2005**, 475-479, 2877-2882 0.4
- 66 First-Principles Calculations of Titanium Dopants in Alumina. *Materials Science Forum*, **2005**, 475-479, 3095-3098 0.4
- 65 Reactive Solid-Phase Epitaxy. *Materials Research Society Symposia Proceedings*, **2002**, 747, 1
- 64 Influence of SiO₂ and Fe₂O₃ on Properties and Microstructure of .BETA."-Alumina.. *Journal of the Ceramic Society of Japan*, **2002**, 110, 102-107
- 63 Effects of the Heat-Treatment Conditions on Microstructures of YbBa₂Cu₃O_{7- δ} Superconducting Films Formed by the Dipping-Pyrolysis Process. *Materials Research Society Symposia Proceedings*, **2000**, 623, 401
- 62 Stair-step columnar defects in ion-irradiated Bi₂Sr₂CaCu₂O_x crystals. *Physica C: Superconductivity and Its Applications*, **2000**, 339, 281-286 1.3
- 61 Grain Boundary Structure and Electronic States in Alumina Ceramics with Improved High-temperature Creep Resistance. *Materia Japan*, **2000**, 39, 992-992 0.1
- 60 Study of Crystallographic Orientation of in situ ϵ -Si₃N₄ Composite by Electron Back Scattered Diffraction (EBSD) Method. *Key Engineering Materials*, **1998**, 161-163, 31-34 0.4
- 59 Grain Boundary Structure and Chemical Bonding State of Superplastic Ceramics. *Materia Japan*, **1998**, 37, 980-980 0.1
- 58 Transmission Electron Microscopy Observation of 11MEV B⁵⁺ Ion Irradiation in Bi₂Sr₂CaCu₂O_{7-x} Single Crystal. *Microscopy and Microanalysis*, **1999**, 5, 758-759 0.5
- 57 Superplasticity in Zirconia and Yttria Stabilized Zirconia Mixed Powders. *Materials Science Forum*, **1999**, 304-306, 531-536 0.4

- 56 The Effect of Alumina Doping on the Superplastic Characteristics of 3 Y-TZP. *Key Engineering Materials*, **1999**, 171-174, 377-382 0.4
- 55 Superplasticity in Multi-Phase Alumina-Based Composites. *Materials Science Forum*, **1999**, 304-306, 537-542
- 54 Microstructure and Composition of Au/Si₃N₄ Model Interface.. *Journal of the Ceramic Society of Japan*, **1999**, 107, 1193-1195
- 53 ??????????????????. *Materia Japan*, **2000**, 39, 558-562 0.1
- 52 Metallic thin Films on Ceramic Substrates: Stress-Enhanced Intermixing and Spinel Formation. *Materials Research Society Symposia Proceedings*, **1994**, 356, 247
- 51 Carbon in Plasma Sintered SiC-C Composites. *Journal of the Ceramic Society of Japan*, **1989**, 97, 1403-1408
- 50 TEM Characterization of Lattice Defects Associated with Deformation and Fracture in Al₂O₃ **2022**, 133-156
- 49 Atomic structure and dopant segregation of [0001] tilt grain boundaries in ZnO bicrystals **2008**, 667-668
- 48 Effects of the Final Heat-Treatment Conditions on Microstructures of YbBa₂Cu₃O_{7- δ} Superconducting Final Films Deposited on LaAlO₃(001) Substrates by the Dipping Pyrolysis Process **2000**, 589-591
- 47 Grain Boundary Analysis of Lu-doped Al₂O₃ by EDS and EELS. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2001**, 65, 356-360 0.4
- 46 Electrical Properties of Co-chemical Boundary in a Semiconductive SrTiO₃ Bicrystal;. *Materia Japan*, **2001**, 40, 1011-1011 0.1
- 45 Solid State Phase Transformation of Nd_{1+x}Ba_{2-x}Cu₃O_{6+ δ} During Annealing Processing. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2001**, 65, 139-142 0.4
- 44 OS8(1)-3(OS08W0163) Measurement of Lattice Defect and Local Strain in Polished Sapphire by Transmission Electron Microscopy. *The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics*, **2003**, 2003, 220 0
- 43 OS08W0163 Measurement of lattice defect and local strain in polished sapphire by transmission electron microscopy. *The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics*, **2003**, 2003.2, _OS08W0163-_OS08W0163 0
- 42 Identification of Transgranular Crack Path in Silicon Nitride by TEM in-situ Observation. *Materia Japan*, **2004**, 43, 994-994 0.1
- 41 Atomic Structure of Tilt Grain Boundaries in ZnO. *Materia Japan*, **2004**, 43, 985-985 0.1
- 40 Direct Observation of Dislocation Emission from a Crack Tip in YSZ. *Materia Japan*, **2005**, 44, 998-998 0.1
- 39 Facetted Structure at a σ_3 Zirconia Grain Boundary. *Materia Japan*, **2005**, 44, 963-963 0.1

- 38 Dopant effect on high-temperature plastic flow behavior and grain boundary chemistry in oxide ceramics. *International Journal of Materials Research*, **2005**, 96, 108-116
- 37 Direct Observation of Y Segregation Sites at Alumina Grain Boundary. *Materia Japan*, **2006**, 45, 852-852 0.1
- 36 Structure Units of σ Zirconia Grain Boundary. *Materia Japan*, **2006**, 45, 842-842 0.1
- 35 2S-A1-4Soft Material Electron Tomography. *Microscopy (Oxford, England)*, **2017**, 66, i12-i12 1.3
- 34 Electron microscope control and image analysis by DigitalMicrograph. *Materia Japan*, **2018**, 57, 584-588 0.1
- 33 Atomic Scale Observation of Two Kinds of Stable Structures in $\text{Al}_2\text{O}_3/\text{Al}_2\text{O}_3$ Grain Boundary. *Materia Japan*, **2019**, 58, 91-91 0.1
- 32 Advanced Characterization Nanotechnology Platform, the University of Tokyo. *Materia Japan*, **2019**, 58, 727-732 0.1
- 31 Direct Electric Field Imaging of Atomistic Graphene Defects. *Nihon Kessho Gakkaishi*, **2019**, 61, 231-236 0
- 30 Reprint of: Automated geometric aberration correction for large-angle illumination STEM. *Ultramicroscopy*, **2021**, 231, 113410 3.1
- 29 Preparation of $\text{YBa}_2\text{Cu}_3\text{O}_{7-y}$ thick film on YSZ substrate by Liquid Phase Epitaxy **1996**, 771-774
- 28 Qualitative Determination of Relationship Between Flux Pinning Effect and Irradiation Defects in Bi-2212 Single Crystal **1996**, 517-520
- 27 Microstructure of $\text{YBa}_2\text{Cu}_3\text{O}_{7-y}$ Films on NdGaO_3 (110) Substrate Prepared by Liquid Phase Epitaxy **1997**, 1077-1080
- 26 Anomalous Peak Effect in M-H Loop and Phase Separation on $\text{Nd}_{1+x}\text{Ba}_{2-x}\text{Cu}_3\text{O}_{7-\delta}$ Crystal **1997**, 693-696
- 25 Defect Study along Au-ion Traces in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_x$ Single Crystal **1998**, 429-432
- 24 Transmission Electron Microscopy Studies of $\text{NdBa}_2\text{Cu}_3\text{O}_{7-y}/\text{MgO}$ Interface Fabricated by MOCVD **1998**, 1049-1052
- 23 J2210103 Dislocation structure at a (0001)/low angle tilt grain boundary in ferroelectric LiNbO_3 crystal. *The Proceedings of Mechanical Engineering Congress Japan*, **2015**, 2015, _J2210103--_J2210103- 0
- 22 OS1414-276 Dynamic observations of Mechanical twinning in Alumina by in-situ TEM nanoindentation. *The Proceedings of the Materials and Mechanics Conference*, **2015**, 2015, _OS1414-27-_OS1414-27 0
- 21 Atomic-Resolution STEM-EDS Mapping of Grain Boundary Solute Segregation in Yttria-Stabilized Zirconia. *Microscopy and Microanalysis*, **2015**, 21, 2281-2282 0.5

20	Atomic Resolution Imaging of Enamel in Shark Teeth. <i>Materia Japan</i> , 2016 , 55, 612-612	0.1
19	Atom-resolved STEM-EDS Mapping of a Liquid-phase Bonded Metal/Nitride Heterointerface. <i>Materia Japan</i> , 2016 , 55, 611-611	0.1
18	Complex Point Defect Structure in Cubic Boron Nitride. <i>Materia Japan</i> , 2016 , 55, 609-609	0.1
17	Mathematical Analysis of Tilt Boundaries and STEM Observations. <i>Materia Japan</i> , 2016 , 55, 582-582	0.1
16	Direct Imaging of Single Dopant Atoms in a Buried Crystalline Interface by Scanning Transmission Electron Microscopy. <i>Journal of the Vacuum Society of Japan</i> , 2011 , 54, 270-274	
15	Real-Space Imaging of Light Elements by Annular Bright-Field Scanning Transmission Electron Microscopy. <i>Nihon Kessho Gakkaishi</i> , 2013 , 55, 362-368	0
14	F221002 Dynamic Observations of plastic Deformation in Ceramic Materials by in-situ TEM mechanical test. <i>The Proceedings of Mechanical Engineering Congress Japan</i> , 2014 , 2014, _F221002-1-_F221002-2	0
13	Thermal Management Technologies: Anomalously Low Heat Conduction in Single-Crystal Superlattice Ceramics Lower Than Randomly Oriented Polycrystals (Adv. Mater. Interfaces 7/2021). <i>Advanced Materials Interfaces</i> , 2021 , 8, 2170039	4.6
12	Atom-Resolved STEM Imaging Using a Segmented Detector 2016 , 511-512	
11	Direct Electromagnetic Structure Observation by Aberration-corrected Differential Phase Contrast Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2016 , 22, 906-907	0.5
10	Direct Visualization of Magnetic Skyrmion by Aberration-Corrected Differential Phase Contrast Scanning Transmission Electron Microscopy 2016 , 689-690	
9	Annular Bright Field STEM Investigation of the (0001) Stacking Fault in Alumina. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1592-1593	0.5
8	Atomic-Resolution Composition Mapping in EDS STEM. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1432-1433.5	
7	PM-03 New Magnetic Structure Imaging Techniques in Polycrystalline Materials by DPC STEM. <i>Microscopy (Oxford, England)</i> , 2019 , 68, i36-i36	1.3
6	Cerium Valence State Distribution: Atomic-Scale Valence State Distribution inside Ultrafine CeO ₂ Nanocubes and Its Size Dependence (Small 42/2018). <i>Small</i> , 2018 , 14, 1870195	11
5	Revealing tetragonal-to-monoclinic phase transformation in Y-TZP at an initial stage of low temperature degradation using grazing incident-angle X-ray diffraction measurement. <i>Journal of the Ceramic Society of Japan</i> , 2018 , 126, 728-731	1
4	Development of High-Speed Scan System for Atomic Resolution STEM. <i>Microscopy and Microanalysis</i> , 2021 , 27, 2710-2712	0.5
3	Direct atomistic defect observations by depth sectioning and dynamic STEM. <i>Microscopy and Microanalysis</i> , 2021 , 27, 2138-2139	0.5

- 2 The Observation of Local Electric Fields in GaN/AlGa_N/InGa_N Multi-heterostructures by Differential Phase Contrast STEM. *IEEJ Transactions on Electronics, Information and Systems*, **2022**, 142, 367-372 0.1
- 1 Study of Grain Boundary Structure of Ceramics by Electron Backscattered Diffraction (EBSD) Analyses. *Ceramic Engineering and Science Proceedings*, 501-508 0.1