Naoya Shibata

List of Publications by Citations

337 papers	11,915 citations	54 h-index	101 g-index
353 ext. papers	14,448 ext. citations	7.1 avg, IF	6.49 L-index

#	Paper	IF	Citations
337	Scalable water splitting on particulate photocatalyst sheets with a solar-to-hydrogen energy conversion efficiency exceeding 1. *Nature Materials*, **2016**, 15, 611-5	27	979
336	Photocatalytic water splitting with a quantum efficiency of almost unity. *Nature*, **2020**, 581, 411-414	50.4	533
335	Surface Modification of CoO(x) Loaded BiVO Photoanodes with Ultrathin p-Type NiO Layers for Improved Solar Water Oxidation. *Journal of the American Chemical Society*, **2015**, 137, 5053-60	16.4	436
334	Dynamics of annular bright field imaging in scanning transmission electron microscopy. *Ultramicroscopy*, **2010**, 110, 903-23	3.1	331
333	Grain boundary strengthening in alumina by rare earth impurities. *Science*, **2006**, 311, 212-5	33.3	327
332	A complex perovskite-type oxynitride: the first photocatalyst for water splitting operable at up to 600 nm. *Angewandte Chemie - International Edition*, **2015**, 54, 2955-9	16.4	311
331	Robust atomic resolution imaging of light elements using scanning transmission electron microscopy. *Applied Physics Letters*, **2009**, 95, 191913	3.4	304
330	Observation of rare-earth segregation in silicon nitride ceramics at subnanometre dimensions. *Nature*, **2004**, 428, 730-3	50.4	264
329	Overall water splitting by Ta3N5 nanorod single crystals grown on the edges of KTaO3 particles. *Nature Catalysis*, **2018**, 1, 756-763	36.5	259
328	Differential phase-contrast microscopy at atomic resolution. *Nature Physics*, **2012**, 8, 611-615	16.2	247
327	Oxysulfide photocatalyst for visible-light-driven overall water splitting. *Nature Materials*, **2019**, 18, 827-832	27	222
326	Ultrastable low-bias water splitting photoanodes via photocorrosion inhibition and in situ catalyst regeneration. *Nature Energy*, **2017**, 2,	62.3	206
325	Direct atomic-resolution observation of two phases in the Li(1.2)Mn(0.567)Ni(0.166)Co(0.067)O2 cathode material for lithium-ion batteries. *Angewandte Chemie - International Edition*, **2013**, 52, 5969-73	16.4	196
324	A formation mechanism of carbon nanotube films on SiC(0001). *Applied Physics Letters*, **2000**, 77, 531-533	3.4	185
323	Positive onset potential and stability of Cu2O-based photocathodes in water splitting by atomic layer deposition of a Ga2O3 buffer layer. *Energy and Environmental Science*, **2015**, 8, 1493-1500	35.4	170
322	Enhancement of solar hydrogen evolution from water by surface modification with CdS and TiO2 on porous CuInS2 photocathodes prepared by an electrodeposition-sulfurization method. *Angewandte Chemie - International Edition*, **2014**, 53, 11808-12	16.4	151
321	Mg-Zr Cosubstituted Ta3N5 Photoanode for Lower-Onset-Potential Solar-Driven Photoelectrochemical Water Splitting. *Journal of the American Chemical Society*, **2015**, 137, 12780-3	16.4	147

320	Atomic structure of a CeO2 grain boundary: the role of oxygen vacancies. *Nano Letters*, **2010**, 10, 4668-72	11.5	143
319	Photoelectrochemical oxidation of water using BaTaO2N photoanodes prepared by particle transfer method. *Journal of the American Chemical Society*, **2015**, 137, 2227-30	16.4	140
318	Fabrication of a Core-Shell-Type Photocatalyst via Photodeposition of Group IV and V Transition Metal Oxyhydroxides: An Effective Surface Modification Method for Overall Water Splitting. *Journal of the American Chemical Society*, **2015**, 137, 9627-34	16.4	135
317	Photocatalytic solar hydrogen production from water on a 100-m scale. *Nature*, **2021**, 598, 304-307	50.4	134
316	Large magnetoelectric coupling in magnetically short-range ordered Bi□TiFeO□ film. *Scientific Reports*, **2014**, 4, 5255	4.9	120
315	Highly Active GaN-Stabilized Ta N Thin-Film Photoanode for Solar Water Oxidation. *Angewandte Chemie - International Edition*, **2017**, 56, 4739-4743	16.4	110
314	Electric field imaging of single atoms. *Nature Communications*, **2017**, 8, 15631	17.4	107
313	Direct imaging of reconstructed atoms on TiO2 (110) surfaces. *Science*, **2008**, 322, 570-3	33.3	105
312	Direct Imaging of Hydrogen within a Crystalline Environment. *Applied Physics Express*, **2010**, 3, 116603	2.4	103
311	Nonstoichiometric dislocation cores in alpha-alumina. *Science*, **2007**, 316, 82-5	33.3	101
310	Atomic-scale imaging of individual dopant atoms in a buried interface. *Nature Materials*, **2009**, 8, 654-8	27	96
309	High-temperature grain boundary sliding behavior and grain boundary energy in cubic zirconia bicrystals. *Acta Materialia*, **2004**, 52, 2349-2357	8.4	96
308	Towards quantitative, atomic-resolution reconstruction of the electrostatic potential via differential phase contrast using electrons. *Ultramicroscopy*, **2015**, 159 Pt 1, 124-37	3.1	92
307	New area detector for atomic-resolution scanning transmission electron microscopy. *Journal of Electron Microscopy*, **2010**, 59, 473-9		92
306	Role of Pr segregation in acceptor-state formation at ZnO grain boundaries. *Physical Review Letters* , **2006**, 97, 106802	7.4	92
305	A Novel Photocathode Material for Sunlight-Driven Overall Water Splitting: Solid Solution of ZnSe and Cu(In,Ga)Se2. *Advanced Functional Materials*, **2016**, 26, 4570-4577	15.6	91
304	Direct imaging of Pt single atoms adsorbed on TiO2 (110) surfaces. *Nano Letters*, **2014**, 14, 134-8	11.5	91
303	Atomic structure, electronic structure, and defect energetics in [001](310)Σ5 grain boundaries of SrTiO3 and BaTiO3. *Physical Review B*, **2008**, 78,	3.3	90

302	Imaging of built-in electric field at a p-n junction by scanning transmission electron microscopy. *Scientific Reports*, **2015**, 5, 10040	4.9	89
301	Structure, energy and solute segregation behaviour of [110] symmetric tilt grain boundaries in yttria-stabilized cubic zirconia. *Philosophical Magazine*, **2004**, 84, 2381-2415	1.6	86
300	Direct observation of individual dislocation interaction processes with grain boundaries. *Science Advances*, **2016**, 2, e1501926	14.3	85
299	Yttrium doping effect on oxygen grain boundary diffusion in □Al2O3. *Acta Materialia*, **2007**, 55, 6627-6638	8.4	83
298	Crystalline Grain Interior Configuration Affects Lithium Migration Kinetics in Li-Rich Layered Oxide. *Nano Letters*, **2016**, 16, 2907-15	11.5	83
297	Durable hydrogen evolution from water driven by sunlight using (Ag,Cu)GaSe photocathodes modified with CdS and CuGaSe. *Chemical Science*, **2015**, 6, 894-901	9.4	80
296	Direct observation of □ domain boundary core structure in magnetic skyrmion lattice. *Science Advances*, **2016**, 2, e1501280	14.3	80
295	Band structure engineering and defect control of Ta3N5 for efficient photoelectrochemical water oxidation. *Nature Catalysis*, **2020**, 3, 932-940	36.5	80
294	Visible Light-Driven Z-Scheme Water Splitting Using Oxysulfide H Evolution Photocatalysts. *Journal of Physical Chemistry Letters*, **2016**, 7, 3892-3896	6.4	78
293	Atomistic mechanisms of nonstoichiometry-induced twin boundary structural transformation in titanium dioxide. *Nature Communications*, **2015**, 6, 7120	17.4	77
292	Possible absence of critical thickness and size effect in ultrathin perovskite ferroelectric films. *Nature Communications*, **2017**, 8, 15549	17.4	74
291	Effects of Rare-Earth (RE) Intergranular Adsorption on the Phase Transformation, Microstructure Evolution, and Mechanical Properties in Silicon Nitride with RE2O3+MgO Additives: RE=La, Gd, and Lu. *Journal of the American Ceramic Society*, **2008**, 91, 2328-2336	3.8	73
290	Atomically ordered solute segregation behaviour in an oxide grain boundary. *Nature Communications*, **2016**, 7, 11079	17.4	70
289	Interface structures of gold nanoparticles on TiO2 (110). *Physical Review Letters*, **2009**, 102, 136105	7.4	68
288	Defect-Rich NiCeOx Electrocatalyst with Ultrahigh Stability and Low Overpotential for Water Oxidation. *ACS Catalysis*, **2019**, 9, 1605-1611	13.1	64
287	A new sealed lithium-peroxide battery with a co-doped Li2O cathode in a superconcentrated lithium bis(fluorosulfonyl)amide electrolyte. *Scientific Reports*, **2014**, 4, 5684	4.9	61
286	A Complex Perovskite-Type Oxynitride: The First Photocatalyst for Water Splitting Operable at up to 600 nm. *Angewandte Chemie*, **2015**, 127, 2998-3002	3.6	56
285	Atomic-Scale Measurement of Flexoelectric Polarization at SrTiO_{3} Dislocations. *Physical Review Letters*, **2018**, 120, 267601	7.4	55

284	Misfit accommodation mechanism at the heterointerface between diamond and cubic boron nitride. *Nature Communications*, **2015**, 6, 6327	17.4	54
283	Band engineering of perovskite-type transition metal oxynitrides for photocatalytic overall water splitting. *Journal of Materials Chemistry A*, **2016**, 4, 4544-4552	13	52
282	On the quantitativeness of EDS STEM. *Ultramicroscopy*, **2015**, 151, 150-159	3.1	51
281	Assessment of Strain-Generated Oxygen Vacancies Using SrTiO Bicrystals. *Nano Letters*, **2015**, 15, 4129-34	11.5	50
280	Direct Visualization of Local Electromagnetic Field Structures by Scanning Transmission Electron Microscopy. *Accounts of Chemical Research*, **2017**, 50, 1502-1512	24.3	49
279	Atomic mechanism of polarization-controlled surface reconstruction in ferroelectric thin films. *Nature Communications*, **2016**, 7, 11318	17.4	48
278	Photoreduced Graphene Oxide as a Conductive Binder to Improve the Water Splitting Activity of Photocatalyst Sheets. *Advanced Functional Materials*, **2016**, 26, 7011-7019	15.6	47
277	Efficient Solar-Driven Water Oxidation over Perovskite-Type BaNbO2N Photoanodes Absorbing Visible Light up to 740 nm. *Advanced Energy Materials*, **2018**, 8, 1800094	21.8	47
276	Metal selenide photocatalysts for visible-light-driven Z-scheme pure water splitting. *Journal of Materials Chemistry A*, **2019**, 7, 7415-7422	13	46
275	Atomic structures and oxygen dynamics of CeO2 grain boundaries. *Scientific Reports*, **2016**, 6, 20288	4.9	46
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273	Direct electric field imaging of graphene defects. *Nature Communications*, **2018**, 9, 3878	17.4	46
272	Bonding nature of metal/oxide incoherent interfaces by first-principles calculations. *Physical Review B*, **2006**, 74,	3.3	45
271	Rare-earth adsorption at intergranular interfaces in silicon nitride ceramics: Subnanometer observations and theory. *Physical Review B*, **2005**, 72,	3.3	45
270	Oxygen Pipe Diffusion in Sapphire Basal Dislocation. *Journal of the Ceramic Society of Japan*, **2006**, 114, 1013-1017		41
269	Observations on the Influence of Secondary Me Oxide Additives (Me=Si, Al, Mg) on the Microstructural Evolution and Mechanical Behavior of Silicon Nitride Ceramics Containing RE2O3 (RE=La, Gd, Lu). *Journal of the American Ceramic Society*, **2010**, 93, 570-580	3.8	40
268	Direct oxygen imaging within a ceramic interface, with some observations upon the dark contrast at the grain boundary. *Ultramicroscopy*, **2011**, 111, 285-9	3.1	39
267	Direct Observation of Oxygen Vacancy Distribution across Yttria-Stabilized Zirconia Grain Boundaries. *ACS Nano*, **2017**, 11, 11376-11382	16.7	37

266	Picometer-scale atom position analysis in annular bright-field STEM imaging. *Ultramicroscopy*, **2018**, 184, 177-187	3.1	37
265	Prospects for lithium imaging using annular bright field scanning transmission electron microscopy: a theoretical study. *Ultramicroscopy*, **2011**, 111, 1144-54	3.1	37
264	Enhanced Hydrogen Evolution under Simulated Sunlight from Neutral Electrolytes on (ZnSe) (CuIn Ga Se) Photocathodes Prepared by a Bilayer Method. *Angewandte Chemie - International Edition*, **2016**, 55, 15329-15333	16.4	35
263	High Electron Mobility of Nb-Doped SrTiO Films Stemming from Rod-Type Sr Vacancy Clusters. *ACS Nano*, **2015**, 9, 10769-77	16.7	34
262	Atomic structure of luminescent centers in high-efficiency Ce-doped w-AlN single crystal. *Scientific Reports*, **2014**, 4, 3778	4.9	34
261	First-principles study of rare earth adsorption at Si3N4 interfaces. *Physical Review B*, **2008**, 78,	3.3	34
260	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
259	Atomic-scale structure relaxation, chemistry and charge distribution of dislocation cores in SrTiO. *Ultramicroscopy*, **2018**, 184, 217-224	3.1	33
258	Highly Efficient Water Oxidation Photoanode Made of Surface Modified LaTiO N Particles. *Small*, **2016**, 12, 5468-5476	11	33
257	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
256	Functional complex point-defect structure in a huge-size-mismatch system. *Physical Review Letters*, **2013**, 110, 065504	7.4	33
255	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
254	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
253	Enhanced light element imaging in atomic resolution scanning transmission electron microscopy. *Ultramicroscopy*, **2014**, 136, 31-41	3.1	32
252	Resolving 45-pm-separated Si-Si atomic columns with an aberration-corrected STEM. *Microscopy (Oxford, England)*, **2015**, 64, 213-7	1.3	31
251	Influence of Dislocations in Transition Metal Oxides on Selected Physical and Chemical Properties. *Crystals*, **2018**, 8, 241	2.3	31
250	Direct Atomic-Resolution Observation of Two Phases in the Li1.2Mn0.567Ni0.166Co0.067O2 Cathode Material for Lithium-Ion Batteries. *Angewandte Chemie*, **2013**, 125, 6085-6089	3.6	30
249	Strontium vacancy clustering in Ti-excess SrTiO3 thin film. *Applied Physics Letters*, **2011**, 99, 033110	3.4	30

248	First-principles study of grain boundary sliding in Al2O3. *Physical Review B*, **2007**, 75,	3.3	30
247	Oxygen diffusion blocking of single grain boundary in yttria-doped zirconia bicrystals. *Journal of Materials Science*, **2005**, 40, 3185-3190	4.3	30
246	Surface Modifications of (ZnSe)(CuGaSe) to Promote Photocatalytic Z-Scheme Overall Water Splitting. *Journal of the American Chemical Society*, **2021**, 143, 10633-10641	16.4	29
245	Single atom visibility in STEM optical depth sectioning. *Applied Physics Letters*, **2016**, 109, 163102	3.4	29
244	Atomic resolution electron microscopy in a magnetic field free environment. *Nature Communications*, **2019**, 10, 2308	17.4	28
243	Grain boundary character dependence of oxygen grain boundary diffusion in Al2O3 bicrystals. *Scripta Materialia*, **2011**, 65, 544-547	5.6	27
242	Quantitative electric field mapping in thin specimens using a segmented detector: Revisiting the transfer function for differential phase contrast. *Ultramicroscopy*, **2017**, 182, 258-263	3.1	26
241	Atomic structure and strain field of threading dislocations in CeO2 thin films on yttria-stabilized ZrO2. *Applied Physics Letters*, **2011**, 98, 153104	3.4	26
240	Grain-boundary faceting at a = 3, [110]/{112} grain boundary in a cubic zirconia bicrystal. *Philosophical Magazine*, **2003**, 83, 2221-2246	1.6	26
239	Structure of [110] tilt grain boundaries in zirconia bicrystals. *Journal of Electron Microscopy*, **2001**, 50, 429-33		26
238	Ultrafast Encapsulation of Metal Nanoclusters into MFI Zeolite in the Course of Its Crystallization: Catalytic Application for Propane Dehydrogenation. *Angewandte Chemie - International Edition*, **2020**, 59, 19669-19674	16.4	24
237	Direct Determination of Atomic Structure and Magnetic Coupling of Magnetite Twin Boundaries. *ACS Nano*, **2018**, 12, 2662-2668	16.7	24
236	Probing the Internal Atomic Charge Density Distributions in Real Space. *ACS Nano*, **2018**, 12, 8875-8881	16.7	24
235	Dynamic observations of dislocation behavior in SrTiO3 by in situ nanoindentation in a transmission electron microscope. *Applied Physics Letters*, **2012**, 100, 181906	3.4	24
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233	Solar-Driven Water Splitting over a BaTaO2N Photoanode Enhanced by Annealing in Argon. *ACS Applied Energy Materials*, **2019**, 2, 5777-5784	6.1	23
232	Direct imaging of atomistic grain boundary migration. *Nature Materials*, **2021**, 20, 951-955	27	23
231	Highly Active GaN-Stabilized Ta3N5 Thin-Film Photoanode for Solar Water Oxidation. *Angewandte Chemie*, **2017**, 129, 4817-4821	3.6	22

230	A Novel Class of Multiferroic Material, Bi4Ti3O12–BiFeO3 with Localized Magnetic Ordering Evaluated from Their Single Crystals. *Advanced Electronic Materials*, **2017**, 3, 1600254	6.4	22
229	Electron microscopic observation of selective excitation of conformational change of a single organic molecule. *Journal of the American Chemical Society*, **2015**, 137, 3474-7	16.4	22
228	Stable Magnetic Skyrmion States at Room Temperature Confined to Corrals of Artificial Surface Pits Fabricated by a Focused Electron Beam. *Nano Letters*, **2018**, 18, 754-762	11.5	22
227	Towards zero bias photoelectrochemical water splitting: onset potential improvement on a Mg:GaN modified-Ta3N5 photoanode. *Journal of Materials Chemistry A*, **2018**, 6, 15265-15273	13	22
226	Interfacial structure in silicon nitride sintered with lanthanide oxide. *Journal of Materials Science*, **2006**, 41, 4405-4412	4.3	22
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224	A new method to detect and correct sample tilt in scanning transmission electron microscopy bright-field imaging. *Ultramicroscopy*, **2017**, 173, 76-83	3.1	21
223	Optically produced cross patterning based on local dislocations inside MgO single crystals. *Applied Physics Letters*, **2007**, 90, 163110	3.4	21
222	Thin film transfer for the fabrication of tantalum nitride photoelectrodes with controllable layered structures for water splitting. *Chemical Science*, **2016**, 7, 5821-5826	9.4	21
221	Atomic structure of a Σ [110]/(111) grain boundary in CeO2. *Applied Physics Letters*, **2012**, 100, 073109	3.4	20
220	Cation off-stoichiometric SrMnO3−δ thin film grown by pulsed laser deposition. *Journal of Materials Science*, **2011**, 46, 4354-4360	4.3	20
219	Partial dislocation configurations in a low-angle boundary in α-Al2O3. *Acta Materialia*, **2008**, 56, 2015-2021	8.4	20
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217	Direct visualization of lithium via annular bright field scanning transmission electron microscopy: a review. *Microscopy (Oxford, England)*, **2017**, 66, 3-14	1.3	20
216	Atomic-Scale Tracking of a Phase Transition from Spinel to Rocksalt in Lithium Manganese Oxide. *Chemistry of Materials*, **2017**, 29, 1006-1013	9.6	19
215	The effects of annealing barium niobium oxynitride in argon on photoelectrochemical water oxidation activity. *Journal of Materials Chemistry A*, **2019**, 7, 493-502	13	19
214	Atomic-scale segregation behavior of Pr at a ZnO [0001] Σ9 tilt grain boundary. *Physical Review B*, **2009**, 80,	3.3	19
213	First Principles Calculations of Vacancy Formation Energies in Σ13 Pyramidal Twin Grain Boundary of α-Al2O3. *Materials Transactions*, **2009**, 50, 1019-1022	1.3	19

212	Jointed magnetic skyrmion lattices at a small-angle grain boundary directly visualized by advanced electron microscopy. *Scientific Reports*, **2016**, 6, 35880	4.9	19
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210	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
209	A dislocation core in titanium dioxide and its electronic structure. *RSC Advances*, **2015**, 5, 18506-18510	3.7	18
208	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
207	Fabrication of electrically conductive nanowires using high-density dislocations in AlN thin films. *Journal of Applied Physics*, **2009**, 106, 124307	2.5	18
206	Atomic structures of a liquid-phase bonded metal/nitride heterointerface. *Scientific Reports*, **2016**, 6, 22936	4.9	17
205	Dislocation and oxygen-release driven delithiation in LiMnO. *Nature Communications*, **2020**, 11, 4452	17.4	17
204	Simultaneously Tuning the Defects and Surface Properties of TaN Nanoparticles by Mg-Zr Codoping for Significantly Accelerated Photocatalytic H Evolution. *Journal of the American Chemical Society*, **2021**, 143, 10059-10064	16.4	17
203	Direct Observation of Impurity Segregation at Dislocation Cores in an Ionic Crystal. *Nano Letters*, **2017**, 17, 2908-2912	11.5	16
202	Measuring nanometre-scale electric fields in scanning transmission electron microscopy using segmented detectors. *Ultramicroscopy*, **2017**, 182, 169-178	3.1	16
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200	Direct Measurement of Electronic Band Structures at Oxide Grain Boundaries. *Nano Letters*, **2020**, 20, 2530-2536	11.5	15
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198	Dopant-segregation-controlled ZnO single-grain-boundary varistors. *Applied Physics Letters*, **2005**, 86, 152112	3.4	15
197	Atomic Scale Origin of Enhanced Ionic Conductivity at Crystal Defects. *Nano Letters*, **2019**, 19, 2162-2168	11.5	15
196	Inversion domain boundaries in Mn and Al dual-doped ZnO: Atomic structure and electronic properties. *Journal of the American Ceramic Society*, **2017**, 100, 4252-4262	3.8	14
195	Enhancement of Charge Separation and Hydrogen Evolution on Particulate LaTiCuSO Photocathodes by Surface Modification. *Journal of Physical Chemistry Letters*, **2017**, 8, 375-379	6.4	14

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192	Dislocation structures and strain fields in [111] low-angle tilt grain boundaries in zirconia bicrystals. *Journal of Electron Microscopy*, **2010**, 59 Suppl 1, S117-21		14
191	Thin-film stabilization of LiNbO3-type ZnSnO3 and MgSnO3 by molecular-beam epitaxy. *APL Materials*, **2019**, 7, 022505	5.7	13
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189	Activation of a particulate Ta3N5 water-oxidation photoanode with a GaN hole-blocking layer. *Sustainable Energy and Fuels*, **2018**, 2, 73-78	5.8	13
188	Periodic nanowire array at the crystal interface. *ACS Nano*, **2013**, 7, 6297-302	16.7	13
187	Structure and Configuration of Boundary Dislocations on Low Angle Tilt Grain Boundaries in Alumina. *Materials Transactions*, **2009**, 50, 1008-1014	1.3	13
186	Interface engineering of TaN thin film photoanode for highly efficient photoelectrochemical water splitting.. *Nature Communications*, **2022**, 13, 729	17.4	13
185	Interfacial Atomic Structure of Twisted Few-Layer Graphene. *Scientific Reports*, **2016**, 6, 21273	4.9	13
184	Efficient photocatalytic hydrogen evolution on single-crystalline metal selenide particles with suitable cocatalysts. *Chemical Science*, **2020**, 11, 6436-6441	9.4	13
183	Three-Dimensional Imaging of a Single Dopant in a Crystal. *Physical Review Applied*, **2020**, 13,	4.3	12
182	Boundary-artifact-free determination of potential distribution from differential phase contrast signals. *Journal of Electron Microscopy*, **2017**, 66, 397-405		12
181	Mass transfer through a single grain boundary in alumina bicrystals under oxygen potential gradients. *Journal of Materials Science*, **2011**, 46, 4407-4412	4.3	12
180	High-resolution transmission electron microscopy (HRTEM) observation of dislocation structures in AlN thin films. *Journal of Materials Research*, **2008**, 23, 2188-2194	2.5	12
179	Relative Li-ion mobility mapping in Li0.33La0.56TiO3polycrystalline by electron backscatter diffraction and electrochemical strain microscopy. *Applied Physics Express*, **2017**, 10, 061102	2.4	11
178	Magnetic-structure imaging in polycrystalline materials by specimen-tilt series averaged DPC STEM. *Microscopy (Oxford, England)*, **2020**, 69, 312-320	1.3	11
177	Efficient Water Oxidation Using Ta N Thin Film Photoelectrodes Prepared on Insulating Transparent Substrates. *ChemSusChem*, **2020**, 13, 1974-1978	8.3	11

176	Probing the limits of the rigid-intensity-shift model in differential-phase-contrast scanning transmission electron microscopy. *Physical Review A*, **2018**, 97,	2.6	11
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174	Surface Protective and Catalytic Layer Consisting of RuO and Pt for Stable Production of Methylcyclohexane Using Solar Energy. *ACS Applied Materials & Interfaces*, **2018**, 10, 44396-44402	9.5	11
173	Accurate measurement of electric potentials in biased GaAs compound semiconductors by phase-shifting electron holography. *Microscopy (Oxford, England)*, **2019**, 68, 159-166	1.3	10
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