Nigel D Browning

List of Publications by Year in descending order

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288 papers

16,270 citations

14614 66 h-index 120 g-index

308 all docs 308 docs citations

308 times ranked 20307 citing authors

#	Article	IF	CITATIONS
1	Sub-Sampled Imaging for STEM: Maximising Image Speed, Resolution and Precision Through Reconstruction Parameter Refinement. Ultramicroscopy, 2022, 233, 113451.	0.8	15
2	Enhanced Longâ€Term Cathode Stability by Tuning Interfacial Nanocomposite for Intermediate Temperature Solid Oxide Fuel Cells. Advanced Materials Interfaces, 2022, 9, .	1.9	3
3	Photocatalytic Overall Water Splitting Under Visible Light Enabled by a Particulate Conjugated Polymer Loaded with Palladium and Iridium**. Angewandte Chemie, 2022, 134, .	1.6	7
4	Photocatalytic Overall Water Splitting Under Visible Light Enabled by a Particulate Conjugated Polymer Loaded with Palladium and Iridium**. Angewandte Chemie - International Edition, 2022, 61, .	7.2	40
5	A Pyrene-4,5,9,10-Tetraone-Based Covalent Organic Framework Delivers High Specific Capacity as a Li-lon Positive Electrode. Journal of the American Chemical Society, 2022, 144, 9434-9442.	6.6	77
6	Accelerated Synthesis and Discovery of Covalent Organic Framework Photocatalysts for Hydrogen Peroxide Production. Journal of the American Chemical Society, 2022, 144, 9902-9909.	6.6	154
7	Controlling radiolysis chemistry on the nanoscale in liquid cell scanning transmission electron microscopy. Physical Chemistry Chemical Physics, 2021, 23, 17766-17773.	1.3	15
8	Enhanced Interface-Driven Perpendicular Magnetic Anisotropy by Symmetry Control in Oxide Superlattices. Physical Review Applied, 2021, 15, .	1.5	16
9	The Complex Role of Aluminium Contamination in Nickelâ€Rich Layered Oxide Cathodes for Lithiumâ€lon Batteries. Batteries and Supercaps, 2021, 4, 1813-1820.	2.4	7
10	Integrated Covalent Organic Framework/Carbon Nanotube Composite as Liâ€lon Positive Electrode with Ultraâ€High Rate Performance. Advanced Energy Materials, 2021, 11, 2101880.	10.2	73
11	The Complex Role of Aluminium Contamination in Nickelâ€Rich Layered Oxide Cathodes for Lithiumâ€lon Batteries. Batteries and Supercaps, 2021, 4, 1783-1784.	2.4	0
12	High temporal-resolution scanning transmission electron microscopy using sparse-serpentine scan pathways. Scientific Reports, 2021, 11, 22722.	1.6	8
13	Event detection for undersampled electron microscopy experiments: A control chart case study. Quality Engineering, 2020, 32, 244-254.	0.7	2
14	Minimising damage in high resolution scanning transmission electron microscope images of nanoscale structures and processes. Nanoscale, 2020, 12, 21248-21254.	2.8	32
15	<i>In situ</i> electrochemical scanning/transmission electron microscopy of electrode–electrolyte interfaces. MRS Bulletin, 2020, 45, 738-745.	1.7	19
16	The Potential Benefits of Compressed Sensing and Machine Learning for Advanced Imaging and Spectroscopy in the Electron Microscope. Microscopy and Microanalysis, 2020, 26, 2458-2460.	0.2	2
17	Quantifying the Effects of Beam Overlap on Radiation Damage via Radiolysis Products in the <i>In-situ</i> Liquid (S)TEM Cell. Microscopy and Microanalysis, 2020, 26, 2572-2574.	0.2	2
18	Making Compressive Sensing Accessible in Scientific Imaging. Microscopy and Microanalysis, 2019, 25, 1684-1685.	0.2	0

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19	Design and synthesis of highly active MoVTeNb-oxides for ethane oxidative dehydrogenation. Nature Communications, 2019, 10, 4012.	5.8	59
20	Observing the colloidal stability of iron oxide nanoparticles <i>in situ </i> Nanoscale, 2019, 11, 13098-13107.	2.8	30
21	Selective Methane Oxidation to Methanol on Cu-Oxo Dimers Stabilized by Zirconia Nodes of an NU-1000 Metal–Organic Framework. Journal of the American Chemical Society, 2019, 141, 9292-9304.	6.6	131
22	A Bismuth Metal–Organic Framework as a Contrast Agent for X-ray Computed Tomography. ACS Applied Bio Materials, 2019, 2, 1197-1203.	2.3	68
23	Liquid Cell Transmission Electron Microscopy Sheds Light on The Mechanism of Palladium Electrodeposition. Langmuir, 2019, 35, 862-869.	1.6	23
24	Magnetism and transport in transparent high-mobility <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BaSnO</mml:mi><mml:mn>3<td>mml::0::91 > < /</td><td>mmılımsub><!--</td--></td></mml:mn></mml:msub></mml:math>	mml: :0::9 1 > < /	mm ılı msub> </td
25	ASCI: providing a forum for imaging scientists. Advanced Structural and Chemical Imaging, 2018, 4, 4.	4.0	0
26	Quantitative Mapping of Nanoscale Chemical Dynamics in Subâ€Sampled Operando (S)TEM Images using Spatioâ€Temporal Analytics. ChemCatChem, 2018, 10, 3115-3120.	1.8	1
27	DRILL Interface Makes Ion Soft Landing Broadly Accessible for Energy Science and Applications. Batteries and Supercaps, 2018, 1, 97-101.	2.4	13
28	Subsampled STEM-ptychography. Applied Physics Letters, 2018, 113, .	1.5	31
29	Directional Statistics of Preferential Orientations of Two Shapes in Their Aggregate and Its Application to Nanoparticle Aggregation. Technometrics, 2018, 60, 332-344.	1.3	5
30	Implementing Sparse Sub-Sampling Methods for Low-Dose/High Speed STEM. Microscopy and Microanalysis, 2018, 24, 1952-1953.	0.2	2
31	The Merits of In situ Environmental STEM for the Study of Complex Oxide Catalysts at Work. Microscopy and Microanalysis, 2018, 24, 238-239.	0.2	2
32	Nanoparticle Immobilization for Controllable Experiments in Liquid-Cell Transmission Electron Microscopy. ACS Applied Materials & Samp; Interfaces, 2018, 10, 22801-22808.	4.0	18
33	Bottom-up construction of a superstructure in a porous uranium-organic crystal. Science, 2017, 356, 624-627.	6.0	286
34	Adsorption of a Catalytically Accessible Polyoxometalate in a Mesoporous Channel-type Metal–Organic Framework. Chemistry of Materials, 2017, 29, 5174-5181.	3.2	143
35	The Role of Gas in Determining Image Quality and Resolution During Inâ€Situ Scanning Transmission Electron Microscopy Experiments. ChemCatChem, 2017, 9, 3478-3485.	1.8	9
36	Direct Visualization of Aggregate Morphology and Dynamics in a Model Soil Organic–Mineral System. Environmental Science and Technology Letters, 2017, 4, 186-191.	3.9	18

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37	Singleâ€Site Osmium Catalysts on MgO: Reactivity and Catalysis of CO Oxidation. Chemistry - A European Journal, 2017, 23, 2532-2536.	1.7	18
38	Imaging Electrochemical Processes in Li Batteries by Operando STEM. Microscopy and Microanalysis, 2017, 23, 1970-1971.	0.2	1
39	Reliable Event Detection for Incomplete and Streaming (S)TEM Images. Microscopy and Microanalysis, 2017, 23, 158-159.	0.2	0
40	Formation of Oxygen Radical Sites on MoVNbTeOx by Cooperative Electron Redistribution. Journal of the American Chemical Society, 2017, 139, 12342-12345.	6.6	41
41	Implementing Sub-sampling Methods for Low-Dose (Scanning) Transmission Electron Microscopy (S/TEM). Microscopy and Microanalysis, 2017, 23, 82-83.	0.2	2
42	Quantifying Feature Uncertainty in Sub-sampled Low-dose (S)TEM Images. Microscopy and Microanalysis, 2017, 23, 160-161.	0.2	0
43	Bridging Zirconia Nodes within a Metal–Organic Framework via Catalytic Ni-Hydroxo Clusters to Form Heterobimetallic Nanowires. Journal of the American Chemical Society, 2017, 139, 10410-10418.	6.6	74
44	Microstructure investigations of Yb- and Bi-doped Mg2Si prepared from metal hydrides for thermoelectric applications. Journal of Solid State Chemistry, 2017, 245, 152-159.	1.4	20
45	Resolution Versus Error for Computational Electron Microscopy. Microscopy and Microanalysis, 2017, 23, 88-89.	0.2	0
46	Phase Imaging: A Compressive Sensing Approach. Microscopy and Microanalysis, 2017, 23, 94-95.	0.2	1
47	Acquisition of STEM Images by Adaptive Compressive Sensing. Microscopy and Microanalysis, 2017, 23, 96-97.	0.2	2
48	Controlling the Reaction Process in Operando STEM by Pixel Sub-Sampling. Microscopy and Microanalysis, 2017, 23, 98-99.	0.2	1
49	Compressive Classification for TEM-EELS. Microscopy and Microanalysis, 2017, 23, 108-109.	0.2	1
50	Digital Super-Resolution in EELS. Microscopy and Microanalysis, 2017, 23, 146-147.	0.2	0
51	Less is More: Bigger Data from Compressive Measurements. Microscopy and Microanalysis, 2017, 23, 166-167.	0.2	1
52	Manipulation and Immobilization of Nanostructures for In-situ STEM. Microscopy and Microanalysis, 2017, 23, 942-943.	0.2	1
53	Probing Dynamic Phase Transformations of Hydrated Iron Oxide Nanoparticles within situScanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2017, 23, 858-859.	0.2	0
54	Cryo-STEM Tomography with Inpainting. Microscopy and Microanalysis, 2017, 23, 806-807.	0.2	0

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55	The Effect of Gas on Image Quality and Resolution in In situ Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2017, 23, 916-917.	0.2	2
56	Compressive STEM-EELS. Microscopy and Microanalysis, 2016, 22, 560-561.	0.2	8
57	Molecular Storage of Mg Ions with Vanadium Oxide Nanoclusters. Advanced Functional Materials, 2016, 26, 3446-3453.	7.8	65
58	Atomicâ€Scale Determination of Active Facets on the MoVTeNb Oxide M1 Phase and Their Intrinsic Catalytic Activity for Ethane Oxidative Dehydrogenation. Angewandte Chemie - International Edition, 2016, 55, 8873-8877.	7.2	59
59	Practical Implementation of Compressive Sensing for High Resolution STEM. Microscopy and Microanalysis, 2016, 22, 558-559.	0.2	9
60	Fabrication of electrocatalytic Ta nanoparticles by reactive sputtering and ion soft landing. Journal of Chemical Physics, 2016, 145, 174701.	1.2	14
61	Tuning interfacial exchange interactions via electronic reconstruction in transition-metal oxide heterostructures. Applied Physics Letters, 2016, 109, .	1.5	19
62	Revealing the Working Active Sites of M1 phase for Ethane Oxidation. Microscopy and Microanalysis, 2016, 22, 790-791.	0.2	1
63	Dose-rate controlled energy dispersive x-ray spectroscopic mapping of the metallic components in a biohybrid nanosystem. Semiconductor Science and Technology, 2016, 31, 084002.	1.0	0
64	Chemical Stabilization and Electrochemical Destabilization of the Iron Keggin Ion in Water. Inorganic Chemistry, 2016, 55, 11078-11088.	1.9	39
65	Rational design of efficient electrode–electrolyte interfaces for solid-state energy storage using ion soft landing. Nature Communications, 2016, 7, 11399.	5.8	86
66	The Impact of Li Grain Size on Coulombic Efficiency in Li Batteries. Scientific Reports, 2016, 6, 34267.	1.6	67
67	Compressive Sensing in Microscopy: a Tutorial. Microscopy and Microanalysis, 2016, 22, 2084-2085.	0.2	3
68	The Mechanisms for Preferential Attachment of Nanoparticles in Liquid Determined Using Liquid Cell Electron Microscopy, Machine Learning, and Molecular Dynamics. Microscopy and Microanalysis, 2016, 22, 812-813.	0.2	1
69	Understanding the Effect of Additives in Li-ion and Li-Sulfur Batteries by Operando ec- (S)TEM. Microscopy and Microanalysis, 2016, 22, 22-23.	0.2	5
70	Tracking Rh Atoms in Zeolite HY: First Steps of Metal Cluster Formation and Influence of Metal Nuclearity on Catalysis of Ethylene Hydrogenation and Ethylene Dimerization. Journal of Physical Chemistry Letters, 2016, 7, 2537-2543.	2.1	44
71	Understanding the Role of Solvation Forces on the Preferential Attachment of Nanoparticles in Liquid. ACS Nano, 2016, 10, 181-187.	7.3	51
72	Rhodium pair-sites on magnesium oxide: Synthesis, characterization, and catalysis of ethylene hydrogenation. Journal of Catalysis, 2016, 338, 12-20.	3.1	24

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73	Gaining Control over Radiolytic Synthesis of Uniform Sub-3-nanometer Palladium Nanoparticles: Use of Aromatic Liquids in the Electron Microscope. Langmuir, 2016, 32, 1468-1477.	1.6	47
74	Investigation of the Mechanism of Mg Insertion in Birnessite in Nonaqueous and Aqueous Rechargeable Mg-Ion Batteries. Chemistry of Materials, 2016, 28, 534-542.	3.2	287
75	TEM Video Compressive Sensing. Microscopy and Microanalysis, 2015, 21, 1583-1584.	0.2	4
76	Applying compressive sensing to TEM video: a substantial frame rate increase on any camera. Advanced Structural and Chemical Imaging, $2015, 1, .$	4.0	55
77	Interface Promoted Reversible Mg Insertion in Nanostructured Tin–Antimony Alloys. Advanced Materials, 2015, 27, 6598-6605.	11.1	88
78	Distribution of Metal Cations in Niâ€Moâ€W Sulfide Catalysts. ChemCatChem, 2015, 7, 3692-3704.	1.8	17
79	Ex Situ and In Situ (S)TEM of Iron Oxide Nanoparticles Synthesized by Decomposition of an Organometallic Precursor. Microscopy and Microanalysis, 2015, 21, 965-966.	0.2	1
80	Applications of Bicrystallography: Revealing Generic Similarities in Coincidence Site Lattice Boundaries of all Holohedral Cubic Materials and Facilitating the Design of 3D Printed Models of such Grain Boundaries. Microscopy and Microanalysis, 2015, 21, 1453-1454.	0.2	0
81	Observing the Growth of Metal–Organic Frameworks by <i>in Situ</i> Liquid Cell Transmission Electron Microscopy. Journal of the American Chemical Society, 2015, 137, 7322-7328.	6.6	207
82	Synthesis of phase-pure and monodisperse iron oxide nanoparticles by thermal decomposition. Nanoscale, 2015, 7, 11142-11154.	2.8	252
83	Microdomain Formation, Oxidation, and Cation Ordering in LaCa 2 Fe 3 O 8+ y. Journal of the American Ceramic Society, 2015, 98, 2248-2254.	1.9	6
84	Migration of Single Iridium Atoms and Tri-iridium Clusters on MgO Surfaces: Aberration-Corrected STEM Imaging and Ab Initio Calculations. Journal of Physical Chemistry Letters, 2015, 6, 4675-4679.	2.1	12
85	Structural and Chemical Evolution of Li- and Mn-Rich Layered Cathode Material. Chemistry of Materials, 2015, 27, 1381-1390.	3.2	311
86	Realizing the Full Potential of Insertion Anodes for Mg-Ion Batteries Through the Nanostructuring of Sn. Nano Letters, 2015, 15, 1177-1182.	4.5	87
87	Advantages of MgAlO _{<i>x</i>} over î³-Al ₂ O ₃ as a Support Material for Potassium-Based High-Temperature Lean NO _{<i>x</i>} Traps. ACS Catalysis, 2015, 5, 4680-4689.	5.5	15
88	Imaging individual lanthanum atoms in zeolite Y by scanning transmission electron microscopy: Evidence of lanthanum pair sites. Microporous and Mesoporous Materials, 2015, 213, 95-99.	2.2	9
89	Using molecular dynamics to quantify the electrical double layer and examine the potential for its direct observation in the in-situ TEM. Advanced Structural and Chemical Imaging, 2015, 1, .	4.0	32
90	Agglomerative Sintering of an Atomically Dispersed Ir ₁ /Zeolite Y Catalyst: Compelling Evidence Against Ostwald Ripening but for Bimolecular and Autocatalytic Agglomeration Catalyst Sintering Steps. ACS Catalysis, 2015, 5, 3514-3527.	5.5	66

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91	Tip-Enhanced Raman Nanographs: Mapping Topography and Local Electric Fields. Nano Letters, 2015, 15, 2385-2390.	4.5	26
92	High Energy Density Lithium–Sulfur Batteries: Challenges of Thick Sulfur Cathodes. Advanced Energy Materials, 2015, 5, 1402290.	10.2	483
93	Minimum Cost Multi-Way Data Association for Optimizing Multitarget Tracking of Interacting Objects. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2015, 37, 611-624.	9.7	60
94	Ex-situ and In-situ Analysis of MoVTeNb Oxide by Aberration-Corrected Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2014, 20, 108-109.	0.2	0
95	Electric field enhancement in a self-assembled 2D array of silver nanospheres. Journal of Chemical Physics, 2014, 141, 214308.	1.2	20
96	The potential for Bayesian compressive sensing to significantly reduce electron dose in high-resolution STEM images. Microscopy (Oxford, England), 2014, 63, 41-51.	0.7	140
97	Symmetries of migrationâ€related segments of all [001] coincidence site lattice tilt boundaries in (001) projection for all holohedral cubic materials. Crystal Research and Technology, 2014, 49, 708-720.	0.6	5
98	Complete Water Splitting with Multi-Component Catalysts: Proposed Mechanism of Charge Transport in NiOx Loaded SrTiO3 Photocatalyst for Complete Water Splitting. Springer Theses, 2014, , 53-66.	0.0	1
99	<i>In-Situ</i> Electrochemical Transmission Electron Microscopy for Battery Research. Microscopy and Microanalysis, 2014, 20, 484-492.	0.2	45
100	The Hydrogen Evolution Reaction: Water Reduction Photocatalysisâ€"Improved Niobate Nanoscroll Photocatalysts for Partial Water Splitting. Springer Theses, 2014, , 9-25.	0.0	2
101	The Oxygen Evolution Reaction: Water Oxidation Photocatalysisâ€"Photocatalytic Water Oxidation with Suspended alpha-Fe2O3 Particlesâ€"Effects of Nanoscaling. Springer Theses, 2014, , 27-37.	0.0	0
102	In Situ Observation of Directed Nanoparticle Aggregation During the Synthesis of Ordered Nanoporous Metal in Soft Templates. Chemistry of Materials, 2014, 26, 1426-1433.	3.2	14
103	Direct visualization of initial SEI morphology and growth kinetics during lithium deposition by in situ electrochemical transmission electron microscopy. Chemical Communications, 2014, 50, 2104.	2.2	172
104	Direct Observation of Aggregative Nanoparticle Growth: Kinetic Modeling of the Size Distribution and Growth Rate. Nano Letters, 2014, 14, 373-378.	4.5	172
105	Dynamics of Soft Nanomaterials Captured by Transmission Electron Microscopy in Liquid Water. Journal of the American Chemical Society, 2014, 136, 1162-1165.	6.6	96
106	The Importance of Nanometric Passivating Films on Cathodes for Li–Air Batteries. ACS Nano, 2014, 8, 12483-12493.	7.3	131
107	Structure of catalyst particles from in-situ electron microscopy: a web themed issue. Chemical Communications, 2014, 50, 12417-12419.	2.2	5
108	Formation of Interfacial Layer and Long-Term Cyclability of Li–O ₂ Batteries. ACS Applied Materials & Samp; Interfaces, 2014, 6, 14141-14151.	4.0	44

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109	Iridium Complexes and Clusters in Dealuminated Zeolite HY: Distribution between Crystalline and Impurity Amorphous Regions. ACS Catalysis, 2014, 4, 2662-2666.	5. 5	12
110	A Singleâ€Site Platinum CO Oxidation Catalyst in Zeolite KLTL: Microscopic and Spectroscopic Determination of the Locations of the Platinum Atoms. Angewandte Chemie - International Edition, 2014, 53, 8904-8907.	7.2	263
111	Segregation of Mn2+Dopants as Interstitials in SrTiO3Grain Boundaries. Materials Research Letters, 2014, 2, 16-22.	4.1	16
112	Probing the Degradation Mechanisms in Electrolyte Solutions for Li-Ion Batteries by in Situ Transmission Electron Microscopy. Nano Letters, 2014, 14, 1293-1299.	4.5	137
113	In Situ Observation of Directed Nanoparticle Aggregation During the Synthesis of Ordered Nanoporous Metal in Soft Templates. Microscopy and Microanalysis, 2014, 20, 1600-1601.	0.2	1
114	Direct Observation of Li2O2 Nucleation and Growth with In-Situ Liquid ec-(S)TEM. Microscopy and Microanalysis, 2014, 20, 1608-1609.	0.2	0
115	Direct Observation of Aggregative Nanoparticle Growth: Kinetic Modeling of the Size Distribution and Growth Rate. Microscopy and Microanalysis, 2014, 20, 1612-1613.	0.2	0
116	In-Situ Liquid Transmission Electron Microscopy (TEM) for the analysis of Metal Organic Frameworks (MOFs). Microscopy and Microanalysis, 2014, 20, 1614-1615.	0.2	2
117	Direct Observation of Electrolyte Degradation Mechanisms in Li-lon Batteries. Microscopy and Microanalysis, 2014, 20, 1624-1625.	0.2	0
118	Implementing in situ Experiments in Liquids in the (Scanning) Transmission Electron Microscope ((S)TEM) and Dynamic TEM (DTEM). Microscopy and Microanalysis, 2014, 20, 1648-1649.	0.2	1
119	Quantitative Z-contrast Imaging in Scanning Transmission Electron Microscopy of Zeolite-supported Metal Clusters and Single-metal-atom Complexes With Single-Atom Sensitivity. Microscopy and Microanalysis, 2014, 20, 148-149.	0.2	1
120	Mesoscale Origin of the Enhanced Cycling-Stability of the Si-Conductive Polymer Anode for Li-ion Batteries. Scientific Reports, 2014, 4, 3684.	1.6	43
121	Overall Photocatalytic Water Splitting with Suspended NiO-SrTiO3 Nanocrystals. Springer Theses, 2014, , 39-51.	0.0	0
122	Quantitative <i>Z</i> à€Contrast Imaging of Supported Metal Complexes and Clusters—A Gateway to Understanding Catalysis on the Atomic Scale. ChemCatChem, 2013, 5, 2673-2683.	1.8	14
123	Foreword. Ultramicroscopy, 2013, 127, 1.	0.8	0
124	Probing the Failure Mechanism of SnO ₂ Nanowires for Sodium-Ion Batteries. Nano Letters, 2013, 13, 5203-5211.	4.5	270
125	Demonstration of an Electrochemical Liquid Cell for Operando Transmission Electron Microscopy Observation of the Lithiation/Delithiation Behavior of Si Nanowire Battery Anodes. Nano Letters, 2013, 13, 6106-6112.	4.5	265
126	Enabling direct nanoscale observations of biological reactions with dynamic TEM. Microscopy (Oxford, England), 2013, 62, 147-156.	0.7	29

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127	Quantifying the low-energy limit and spectral resolution in valence electron energy loss spectroscopy. Ultramicroscopy, 2013, 124, 130-138.	0.8	13
128	Experimental procedures to mitigate electron beam induced artifacts during in situ fluid imaging of nanomaterials. Ultramicroscopy, 2013, 127, 53-63.	0.8	176
129	General schema for [001] tilt grain boundaries in dense packing cubic crystals. Acta Materialia, 2013, 61, 3392-3398.	3.8	10
130	Simulating realistic imaging conditions for in situ liquid microscopy. Ultramicroscopy, 2013, 135, 36-42.	0.8	20
131	Phase transition singled out. Nature Chemistry, 2013, 5, 363-364.	6.6	6
132	Antisite defects in La0.7Sr0.3MnO3 and La0.7Sr0.3FeO3. Applied Physics Letters, 2013, 102, 151911.	1.5	6
133	Formation of the Spinel Phase in the Layered Composite Cathode Used in Li-Ion Batteries. ACS Nano, 2013, 7, 760-767.	7.3	772
134	Nanoscale Phase Separation, Cation Ordering, and Surface Chemistry in Pristine Li _{1.2} Ni _{0.2} Mn _{0.6} O ₂ for Li-lon Batteries. Chemistry of Materials, 2013, 25, 2319-2326.	3.2	173
135	Zeolite-supported bimetallic catalyst: controlling selectivity of rhodium complexes by nearby iridium complexes. Catalysis Science and Technology, 2013, 3, 2199.	2.1	11
136	Cation uniformity and magnetic properties of La0.7Sr0.3Mn0.5Fe0.5O3 thin films. Journal of Magnetism and Magnetic Materials, 2013, 325, 69-74.	1.0	5
137	Catalytic Consequences of Particle Size and Chloride Promotion in the Ring-Opening of Cyclopentane on Pt/Al ₂ O ₃ . ACS Catalysis, 2013, 3, 328-338.	5.5	19
138	Synthesis and characterization of P-doped amorphous and nanocrystalline Si. Polyhedron, 2013, 58, 156-161.	1.0	11
139	Ultralow Contact Resistance at an Epitaxial Metal/Oxide Heterojunction Through Interstitial Site Doping. Advanced Materials, 2013, 25, 4001-4005.	11.1	24
140	A (S)TEM Gas Cell Holder with Localized Laser Heating for <i>In Situ</i> Experiments. Microscopy and Microanalysis, 2013, 19, 470-478.	0.2	33
141	Threeâ€Dimensional Structural Analysis of MgOâ€Supported Osmium Clusters by Electron Microscopy with Singleâ€Atom Sensitivity. Angewandte Chemie - International Edition, 2013, 52, 5262-5265.	7.2	17
142	Strain relaxation defects in perovskite oxide superlattices. Journal of Materials Research, 2012, 27, 1436-1444.	1.2	6
143	Tuning magnetic and transport properties through strain engineering in La0.7Sr0.3MnO3/La0.5Sr0.5TiO3 superlattices. Journal of Applied Physics, 2012, 111, 084906.	1.1	15
144	Yttria-stabilized zirconia crystallization in Al ₂ O ₃ /YSZ multilayers. Journal of Materials Research, 2012, 27, 939-943.	1.2	5

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145	Atomic-Scale Imaging and Spectroscopy for <i>In Situ</i> Liquid Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2012, 18, 621-627.	0.2	125
146	Nanoscale Strontium Titanate Photocatalysts for Overall Water Splitting. ACS Nano, 2012, 6, 7420-7426.	7.3	236
147	Synthesis and characterization of Mg2Si/Si nanocomposites prepared from MgH2 and silicon, and their thermoelectric properties. Journal of Materials Chemistry, 2012, 22, 24805.	6.7	54
148	Photocatalytic Water Splitting with Suspended Calcium Niobium Oxides: Why Nanoscale is Better than Bulk – A Kinetic Analysis. Journal of Physical Chemistry C, 2012, 116, 3161-3170.	1.5	88
149	Selective Hydrodeoxygenation of Guaiacol Catalyzed by Platinum Supported on Magnesium Oxide. Catalysis Letters, 2012, 142, 1190-1196.	1.4	108
150	Sinter-Resistant Catalysts: Supported Iridium Nanoclusters with Intrinsically Limited Sizes. Catalysis Letters, 2012, 142, 1445-1451.	1.4	22
151	Atomically Resolved Site-Isolated Catalyst on MgO: Mononuclear Osmium Dicarbonyls formed from Os ₃ (CO) ₁₂ . Journal of Physical Chemistry Letters, 2012, 3, 1865-1871.	2.1	21
152	Direct <i>iin Situ</i> Observation of Nanoparticle Synthesis in a Liquid Crystal Surfactant Template. ACS Nano, 2012, 6, 3589-3596.	7.3	93
153	Direct <i>iin Situ</i> Determination of the Mechanisms Controlling Nanoparticle Nucleation and Growth. ACS Nano, 2012, 6, 8599-8610.	7.3	378
154	Mononuclear Zeolite-Supported Iridium: Kinetic, Spectroscopic, Electron Microscopic, and Size-Selective Poisoning Evidence for an Atomically Dispersed True Catalyst at 22 ŰC. ACS Catalysis, 2012, 2, 1947-1957.	5.5	47
155	Site-Isolated Molecular Iridium Complex Catalyst Supported in the 1-Dimensional Channels of Zeolite HSSZ-53: Characterization by Spectroscopy and Aberration-Corrected Scanning Transmission Electron Microscopy. ACS Catalysis, 2012, 2, 1002-1012.	5.5	21
156	Visualizing macromolecular complexes with in situ liquid scanning transmission electron microscopy. Micron, 2012, 43, 1085-1090.	1.1	89
157	Overall photocatalytic water splitting with NiOx–SrTiO3 – a revised mechanism. Energy and Environmental Science, 2012, 5, 9543.	15.6	199
158	Conflicting Roles of Nickel in Controlling Cathode Performance in Lithium Ion Batteries. Nano Letters, 2012, 12, 5186-5191.	4.5	231
159	Hydrogen Activation and Metal Hydride Formation Trigger Cluster Formation from Supported Iridium Complexes. Journal of the American Chemical Society, 2012, 134, 5022-5025.	6.6	52
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