Raymond R Unocic

List of Publications by Year
in descending order

156 papers	11,870 citations	28190 55 h-index	28224 105 g-index
164 all docs	164 docs citations	164 times ranked	17528 citing authors

#	Article	IF	Citations
1	Water desalination using nanoporous single-layer graphene. Nature Nanotechnology, 2015, 10, 459-464.	15.6	1,372
2	Atomic Defects in Monolayer Titanium Carbide (Ti₃C₂T_{<i>x</i>}) MXene. ACS Nano, 2016, 10, 9193-9200.	7.3	785
3	Dopamine as a Carbon Source: The Controlled Synthesis of Hollow Carbon Spheres and Yolkâ€Structured Carbon Nanocomposites. Angewandte Chemie - International Edition, 2011, 50, 6799-6802.	7.2	674
4	Large-scale delamination of multi-layers transition metal carbides and carbonitrides â€œMXenesâ€. Dalton Transactions, 2015, 44, 9353-9358.	1.6	662
5	Mesoporous TiO₂â€“B Microspheres with Superior Rate Performance for Lithium Ion Batteries. Advanced Materials, 2011, 23, 3450-3454.	11.1	361
6	Mechanochemicalâ€Assisted Synthesis of Highâ€Entropy Metal Nitride via a Soft Urea Strategy. Advanced Materials, 2018, 30, e1707512.	11.1	325
7	Microtwinning and other shearing mechanisms at intermediate temperatures in Ni-based superalloys. Progress in Materials Science, 2009, 54, 839-873.	16.0	305
8	Direct exfoliation of natural graphite into micrometre size few layers graphene sheets using ionic liquids. Chemical Communications, 2010, 46, 4487.	2.2	295
9	Deep Learning of Atomically Resolved Scanning Transmission Electron Microscopy Images: Chemical Identification and Tracking Local Transformations. ACS Nano, 2017, 11, 12742-12752.	7.3	282
10	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
11	Aqueous proton transfer across single-layer graphene. Nature Communications, 2015, 6, 6539.	5.8	214
12	Evolutionary selection growth of two-dimensional materials on polycrystalline substrates. Nature Materials, 2018, 17, 318-322.	13.3	204
13	Synthesis of Hexagonal Boron Nitride Monolayer: Control of Nucleation and Crystal Morphology. Chemistry of Materials, 2015, 27, 8041-8047.	3.2	202
14	Characterization of sodium ion electrochemical reaction with tin anodes: Experiment and theory. Journal of Power Sources, 2013, 234, 48-59.	4.0	186
15	Nanoscale Imaging of Fundamental Li Battery Chemistry: Solid-Electrolyte Interphase Formation and Preferential Growth of Lithium Metal Nanoclusters. Nano Letters, 2015, 15, 2011-2018.	4.5	185
16	Size-Dependent Disorderâ€“Order Transformation in the Synthesis of Monodisperse Intermetallic PdCu Nanocatalysts. ACS Nano, 2016, 10, 6345-6353.	7.3	185
17	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
18	Dislocation decorrelation and relationship to deformation microtwins during creep of a Î³â€² precipitate strengthened Ni-based superalloy. Acta Materialia, 2011, 59, 7325-7339.	3.8	150

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19	Mechanochemical Synthesis of High Entropy Oxide Materials under Ambient Conditions: Dispersion of Catalysts via Entropy Maximization. , 2019, 1, 83-88.		143
20	Solid electrolyte coated high voltage layeredâ€“layered lithium-rich composite cathode: Li1.2Mn0.525Ni0.175Co0.1O2. Journal of Materials Chemistry A, 2013, 1, 5587.	5.2	137
21	In situ atomistic insight into the growth mechanisms of single layer 2D transition metal carbides. Nature Communications, 2018, 9, 2266.	5.8	125
22	Mo3Sb7 as a very fast anode material for lithium-ion and sodium-ion batteries. Journal of Materials Chemistry A, 2013, 1, 11163.	5.2	121
23	Atomistic-Scale Simulations of Defect Formation in Graphene under Noble Gas Ion Irradiation. ACS Nano, 2016, 10, 8376-8384.	7.3	113
24	Process efficiency measurements in the laser engineered net shaping process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2004, 35, 143-152.	1.0	112
25	Predictive multiphase evolution in Al-containing high-entropy alloys. Nature Communications, 2018, 9, 4520.	5.8	107
26	Ruthenium-Alloy Electrocatalysts with Tunable Hydrogen Oxidation Kinetics in Alkaline Electrolyte. Journal of Physical Chemistry C, 2015, 119, 13481-13487.	1.5	104
27	A Novel Electrolyte Salt Additive for Lithiumâ€Ion Batteries with Voltages Greater than 4.7 V. Advanced Energy Materials, 2017, 7, 1601397.	10.2	103
28	Fabrication and design aspects of high-temperature compact diffusion bonded heat exchangers. Nuclear Engineering and Design, 2012, 249, 49-56.	0.8	100
29	In situ edge engineering in two-dimensional transition metal dichalcogenides. Nature Communications, 2018, 9, 2051.	5.8	100
30	Characterization of Metamorphic GaAsP/Si Materials and Devices for Photovoltaic Applications. IEEE Transactions on Electron Devices, 2010, 57, 3361-3369.	1.6	99
31	Directing Matter: Toward Atomic-Scale 3D Nanofabrication. ACS Nano, 2016, 10, 5600-5618.	7.3	99
32	Facet-Dependent Deposition of Highly Strained Alloyed Shells on Intermetallic Nanoparticles for Enhanced Electrocatalysis. Nano Letters, 2017, 17, 5526-5532.	4.5	92
33	Lowâ€Temperature CO Oxidation over a Ternary Oxide Catalyst with High Resistance to Hydrocarbon Inhibition. Angewandte Chemie - International Edition, 2015, 54, 13263-13267.	7.2	87
34	Suppression of Defects and Deep Levels Using Isoelectronic Tungsten Substitution in Monolayer MoSe₂. Advanced Functional Materials, 2017, 27, 1603850.	7.8	84
35	Direct Visualization of Solid Electrolyte Interphase Formation in Lithium-Ion Batteries with <i>In Situ</i> Electrochemical Transmission Electron Microscopy. Microscopy and Microanalysis, 2014, 20, 1029-1037.	0.2	83
36	Defect-Mediated Phase Transformation in Anisotropic Two-Dimensional PdSe₂ Crystals for Seamless Electrical Contacts. Journal of the American Chemical Society, 2019, 141, 8928-8936.	6.6	81

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37	Decoding crystallography from high-resolution electron imaging and diffraction datasets with deep learning. Science Advances, 2019, 5, eaaw1949.	4.7	81
38	Quantitative Electrochemical Measurements Using <i>In Situ</i> ec-S/TEM Devices. Microscopy and Microanalysis, 2014, 20, 452-461.	0.2	80
39	Selective Aerobic Oxidation of Alcohols over Atomicallyâ€Dispersed Nonâ€Precious Metal Catalysts. ChemSusChem, 2017, 10, 359-362.	3.6	79
40	Conductive surface modification of LiFePO4 with nitrogen-doped carbon layers for lithium-ion batteries. Journal of Materials Chemistry, 2012, 22, 4611.	6.7	76
41	Creep deformation mechanism mapping in nickel base disk superalloys. Materials at High Temperatures, 2016, 33, 372-383.	0.5	74
42	Atomicâ€Level Sculpting of Crystalline Oxides: Toward Bulk Nanofabrication with Single Atomic Plane Precision. Small, 2015, 11, 5895-5900.	5.2	73
43	Atom-by-atom fabrication with electron beams. Nature Reviews Materials, 2019, 4, 497-507.	23.3	73
44	Fabrication and characterization of Liâ€"Mnâ€"Niâ€"O sputtered thin film high voltage cathodes for Li-ion batteries. Journal of Power Sources, 2012, 211, 108-118.	4.0	71
45	Spontaneous and reversible hollowing of alloy anode nanocrystals for stable battery cycling. Nature Nanotechnology, 2020, 15, 475-481.	15.6	68
46	Anatase assemblies from algae: coupling biological self-assembly of 3-D nanoparticle structures with synthetic reaction chemistry. Chemical Communications, 2004, , 796.	2.2	67
47	Merging Biological Self-Assembly with Synthetic Chemical Tailoring: The Potential for 3-D Genetically Engineered Micro/Nano-Devices (3-D GEMS). International Journal of Applied Ceramic Technology, 2005, 2, 317-326.	1.1	67
48	Avoiding Fracture in a Conversion Battery Material through Reaction with Larger Ions. Joule, 2018, 2, 1783-1799.	11.7	65
49	Probing the Mechanism of Sodium Ion Insertion into Copper Antimony Cu₂Sb Anodes. Journal of Physical Chemistry C, 2014, 118, 7856-7864.	1.5	64
50	Atomically Dispersed Co and Cu on N-Doped Carbon for Reactions Involving Câ€"H Activation. ACS Catalysis, 2018, 8, 3875-3884.	5.5	63
51	Probing the Local Site Disorder and Distortion in Pyrochlore High-Entropy Oxides. Journal of the American Chemical Society, 2021, 143, 4193-4204.	6.6	60
52	Unraveling manganese dissolution/deposition mechanisms on the negative electrode in lithium ion batteries. Physical Chemistry Chemical Physics, 2014, 16, 10398.	1.3	59
53	High performance Cr, N-codoped mesoporous TiO₂microspheres for lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 1818-1824.	5.2	58
54	Microtwinning during intermediate temperature creep of polycrystalline Ni-based superalloys: mechanisms and modelling. Philosophical Magazine, 2006, 86, 4823-4840.	0.7	57

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55	Influence of Periodic Nitrogen Functionality on the Selective Oxidation of Alcohols. Chemistry - an Asian Journal, 2012, 7, 387-393.	1.7	57
56	Direct measurement of the chemical reactivity of silicon electrodes with LiPF6-based battery electrolytes. Chemical Communications, 2014, 50, 3081.	2.2	56
57	Anisotropic Etching of Hexagonal Boron Nitride and Graphene: Question of Edge Terminations. Nano Letters, 2017, 17, 7306-7314.	4.5	54
58	Distinct nanoscale reaction pathways in a sulfide material for sodium and lithium batteries. Journal of Materials Chemistry A, 2017, 5, 11701-11709.	5.2	51
59	High cyclability of ionic liquid-produced TiO2 nanotube arrays as an anode material for lithium-ion batteries. Journal of Power Sources, 2012, 218, 88-92.	4.0	50
60	Unlocking the Catalytic Potential of TiO₂-Supported Pt Single Atoms for the Reverse Waterâ€“Gas Shift Reaction by Altering Their Chemical Environment. Jacs Au, 2021, 1, 977-986.	3.6	46
61	<i>In-Situ</i> Electrochemical Transmission Electron Microscopy for Battery Research. Microscopy and Microanalysis, 2014, 20, 484-492.	0.2	45
62	Effect of lattice mismatch and shell thickness on strain in core@shell nanocrystals. Nanoscale Advances, 2020, 2, 1105-1114.	2.2	45
63	Platinum and Palladium Overlayers Dramatically Enhance the Activity of Ruthenium Nanotubes for Alkaline Hydrogen Oxidation. ACS Catalysis, 2015, 5, 7015-7023.	5.5	44
64	Isotope-Engineering the Thermal Conductivity of Two-Dimensional MoS₂. ACS Nano, 2019, 13, 2481-2489.	7.3	42
65	The intermediate temperature deformation of Ni-based superalloys: Importance of reordering. Jom, 2009, 61, 42-48.	0.9	41
66	Quantitative Description of Crystal Nucleation and Growth from in Situ Liquid Scanning Transmission Electron Microscopy. ACS Nano, 2015, 9, 11784-11791.	7.3	41
67	The Influence of Local Distortions on Proton Mobility in Acceptor Doped Perovskites. Chemistry of Materials, 2018, 30, 4919-4925.	3.2	40
68	Atomic defects, functional groups and properties in MXenes. Chinese Chemical Letters, 2021, 32, 339-344.	4.8	40
69	Intrinsic Defects in MoS₂ Grown by Pulsed Laser Deposition: From Monolayers to Bilayers. ACS Nano, 2021, 15, 2858-2868.	7.3	40
70	Broadening the Gas Separation Utility of Monolayer Nanoporous Graphene Membranes by an Ionic Liquid Gating. Nano Letters, 2020, 20, 7995-8000.	4.5	39
71	Lattice Strain Measurement of Core@Shell Electrocatalysts with 4D Scanning Transmission Electron Microscopy Nanobeam Electron Diffraction. ACS Catalysis, 2020, 10, 5529-5541.	5.5	39
72	Achieving Highly Durable Random Alloy Nanocatalysts through Intermetallic Cores. ACS Nano, 2019, 13, 4008-4017.	7.3	37

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73	Low cycle fatigue of a Ni-based superalloy: Non-planar deformation. Scripta Materialia, 2010, 62, 790-793.	2.6	34
74	Gas evolution from cathode materials: A pathway to solvent decomposition concomitant to SEI formation. Journal of Power Sources, 2013, 239, 341-346.	4.0	34
75	Supportless, Bismuth-Modified Palladium Nanotubes with Improved Activity and Stability for Formic Acid Oxidation. ACS Catalysis, 2015, 5, 5154-5163.	5.5	34
76	Dynamic restructuring of supported metal nanoparticles and its implications for structure insensitive catalysis. Nature Communications, 2021, 12, 7096.	5.8	33
77	Bis(fluoromalonato)borate (BFMB) anion based ionic liquid as an additive for lithium-ion battery electrolytes. Journal of Materials Chemistry A, 2014, 2, 7606-7614.	5.2	31
78	Synthesis of Ni-Rich Thin-Film Cathode as Model System for Lithium Ion Batteries. ACS Applied Energy Materials, 2019, 2, 1405-1412.	2.5	31
79	Role of Surface Functionality in the Electrochemical Performance of Silicon Nanowire Anodes for Rechargeable Lithium Batteries. ACS Applied Materials & Interfaces, 2014, 6, 7607-7614.	4.0	30
80	Superior electrocatalytic hydrogen evolution at engineered non-stoichiometric two-dimensional transition metal dichalcogenide edges. Journal of Materials Chemistry A, 2019, 7, 18357-18364.	5.2	30
81	Surfactant-Mediated Growth and Patterning of Atomically Thin Transition Metal Dichalcogenides. ACS Nano, 2020, 14, 6570-6581.	7.3	30
82	Direct-write liquid phase transformations with a scanning transmission electron microscope. Nanoscale, 2016, 8, 15581-15588.	2.8	29
83	Atomic Insight into Thermolysisâ€Driven Growth of 2D MoS₂. Advanced Functional Materials, 2019, 29, 1902149.	7.8	28
84	Pt-Ligand single-atom catalysts: tuning activity by oxide support defect density. Catalysis Science and Technology, 2020, 10, 3353-3365.	2.1	28
85	A Discovery of Strong Metalâ€“Support Bonding in Nanoengineered Auâ€“Fe₃O₄ Dumbbell-like Nanoparticles by in Situ Transmission Electron Microscopy. Nano Letters, 2017, 17, 4576-4582.	4.5	27
86	Disorder-to-Order Transition Mediated by Size Refocusing: A Route toward Monodisperse Intermetallic Nanoparticles. Nano Letters, 2019, 19, 6418-6423.	4.5	26
87	Probing battery chemistry with liquid cell electron energy loss spectroscopy. Chemical Communications, 2015, 51, 16377-16380.	2.2	25
88	Precision controlled atomic resolution scanning transmission electron microscopy using spiral scan pathways. Scientific Reports, 2017, 7, 43585.	1.6	23
89	Predicting synthesizable multi-functional edge reconstructions in two-dimensional transition metal dichalcogenides. Npj Computational Materials, 2020, 6, .	3.5	23
90	Influence of Dioxygen on the Promotional Effect of Bi during Pt-Catalyzed Oxidation of 1,6-Hexanediol. ACS Catalysis, 2016, 6, 4206-4217.	5.5	21

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91	Composition control in the direct laser-deposition process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2003, 34, 439-445.	1.0	20
92	Current Density Distribution in Electrochemical Cells with Small Cell Heights and Coplanar Thin Electrodes as Used in ec-S/TEM Cell Geometries. Journal of the Electrochemical Society, 2019, 166, H126-H134.	1.3	20
93	<i>In situ</i> electrochemical scanning/transmission electron microscopy of electrodeâ€"electrolyte interfaces. MRS Bulletin, 2020, 45, 738-745.	1.7	19
94	Enhancing Hydrogen Evolution Activity of Monolayer Molybdenum Disulfide via a Molecular Proton Mediator. ACS Catalysis, 2021, 11, 12159-12169.	5.5	19
95	Nickel particleâ€"enabled width-controlled growth of bilayer molybdenum disulfide nanoribbons. Science Advances, 2021, 7, eabk1892.	4.7	19
96	Mesoporous TiO2 spheres with a nitridated conducting layer for lithium-ion batteries. Journal of Materials Science, 2013, 48, 5125-5131.	1.7	18
97	Impact of Membraneâ€Induced Particle Immobilization on Seeded Growth Monitored by In Situ Liquid Scanning Transmission Electron Microscopy. Small, 2016, 12, 2701-2706.	5.2	18
98	Multi-purposed Ar gas cluster ion beam processing for graphene engineering. Carbon, 2018, 131, 142-148.	5.4	18
99	Influence of Nonstoichiometry on Proton Conductivity in Thin-Film Yttrium-Doped Barium Zirconate. ACS Applied Materials & Interfaces, 2018, 10, 4816-4823.	4.0	18
100	NiAl Oxidation Reaction Processes Studied In Situ Using MEMS-Based Closed-Cell Gas Reaction Transmission Electron Microscopy. Oxidation of Metals, 2017, 88, 495-508.	1.0	17
101	Vapor Synthesis and Thermal Modification of Supportless Platinumâ€"Ruthenium Nanotubes and Application as Methanol Electrooxidation Catalysts. ACS Applied Materials & Interfaces, 2015, 7, 10115-10124.	4.0	16
102	Ruthenium as a CO-tolerant hydrogen oxidation catalyst for solid acid fuel cells. Journal of Materials Chemistry A, 2015, 3, 3984-3987.	5.2	15
103	Building Random Alloy Surfaces from Intermetallic Seeds: A General Route to Strain-Engineered Electrocatalysts with High Durability. ACS Applied Nano Materials, 2019, 2, 4538-4546.	2.4	15
104	Reduction of Propionic Acid over a Pd-Promoted ReO_{<i>x</i>}/SiO₂ Catalyst Probed by X-ray Absorption Spectroscopy and Transient Kinetic Analysis. ACS Sustainable Chemistry and Engineering, 2018, 6, 12353-12366.	3.2	14
105	Interpreting Electrochemical and Chemical Sodiation Mechanisms and Kinetics in Tin Antimony Battery Anodes Using <i>in Situ</i> Transmission Electron Microscopy and Computational Methods. ACS Applied Energy Materials, 2019, 2, 3578-3586.	2.5	14
106	Fluid-Guided CVD Growth for Large-Scale Monolayer Two-Dimensional Materials. ACS Applied Materials & Interfaces, 2020, 12, 26342-26349.	4.0	14
107	Selective Antisite Defect Formation in WS₂ Monolayers via Reactive Growth on Dilute Wâ€Au Alloy Substrates. Advanced Materials, 2022, 34, e2106674.	11.1	14
108	<i>In-situ</i> TEM Characterization of Electrochemical Processes in Energy Storage Systems. Microscopy and Microanalysis, 2011, 17, 1564-1565.	0.2	13

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109	A Topotactic Synthetic Methodology for Highly Fluorineâ€Doped Mesoporous Metal Oxides. Angewandte Chemie - International Edition, 2012, 51, 2888-2893.	7.2	13
110	An Atomistic Carbide-Derived Carbon Model Generated Using ReaxFF-Based Quenched Molecular Dynamics. Journal of Carbon Research, 2017, 3, 32.	1.4	13
111	Reduction and Agglomeration of Supported Metal Clusters Induced by High-Flux X-ray Absorption Spectroscopy Measurements. Journal of Physical Chemistry C, 2021, 125, 11048-11057.	1.5	13
112	The Effect of Carbonate and pH on Hydrogen Oxidation and Oxygen Reduction on Pt-Based Electrocatalysts in Alkaline Media. Journal of the Electrochemical Society, 2016, 163, F291-F295.	1.3	11
113	Competitive Ion Diffusion within Grain Boundary and Grain Interiors in Polycrystalline Electrodes with the Inclusion of Stress Field. Journal of the Electrochemical Society, 2017, 164, A2830-A2839.	1.3	11
114	Investigating local oxidation processes in Fe thin films in a water vapor environment by in situ liquid cell TEM. Ultramicroscopy, 2020, 209, 112842.	0.8	11
115	Sodium Manganese Oxide Thin Films as Cathodes for Na-Ion Batteries. ECS Transactions, 2014, 58, 47-57.	0.3	10
116	A facile strategy for the growth of high-quality tungsten disulfide crystals mediated by oxygen-deficient oxide precursors. Nanoscale, 2022, 14, 9485-9497.	2.8	9
117	In-situ liquid and gas transmission electron microscopy of nano-scale materials. Microscopy and Microanalysis, 2012, 18, 1158-1159.	0.2	8
118	Defect chemistry of phospho-olivine nanoparticles synthesized by a microwave-assisted solvothermal process. Journal of Solid State Chemistry, 2013, 205, 197-204.	1.4	8
119	Lowâ€Temperature CO Oxidation over a Ternary Oxide Catalyst with High Resistance to Hydrocarbon Inhibition. Angewandte Chemie, 2015, 127, 13461-13465.	1.6	8
120	Building with ions: towards direct write of platinum nanostructures using in situ liquid cell helium ion microscopy. Nanoscale, 2017, 9, 12949-12956.	2.8	8
121	Statistical learning of governing equations of dynamics from in-situ electron microscopy imaging data. Materials and Design, 2020, 195, 108973.	3.3	8
122	Cadmium Selective Etching in CdTe Solar Cells Produces Detrimental Narrow-Gap Te in Grain Boundaries. ACS Applied Energy Materials, 2020, 3, 1749-1758.	2.5	6
123	Atomic Edge-Guided Polyethylene Crystallization on Monolayer Two-Dimensional Materials. Macromolecules, 2022, 55, 559-567.	2.2	6
124	Ammonia-Assisted Light Alkane Anti-coke Reforming on Isolated ReO_{<i>x</i>} Sites in Zeolite. ACS Catalysis, 2022, 12, 3165-3172.	5.5	6
125	Laser-Assisted Synthesis of Monolayer 2D MoSe₂ Crystals with Tunable Vacancy Concentrations: Implications for Gas and Biosensing. ACS Applied Nano Materials, 2022, 5, 9129-9139.	2.4	6
126	Nanoscale oxidation behavior of carbon fibers revealed with in situ gas cell STEM. Scripta Materialia, 2021, 199, 113820.	2.6	5

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127	In Situ TEM Investigation of Lithium Intercalation in Ti₃C₂T_X MXenes for Energy Storage Applications. Microscopy and Microanalysis, 2021, 27, 2736-2737.	0.2	5
128	Nanoscale mapping of the electron density at Al grain boundaries and correlation with grain-boundary energy. Physical Review Materials, 2019, 3, .	0.9	4
129	Formation of a Metallic Amorphous Layer During the Sliding Wear of Ti/TiN Nanolaminates. Tribology Letters, 2014, 55, 219-226.	1.2	3
130	The Creep Deformation Mechanisms of Nickel Base Superalloy RenÃ© 104. Microscopy and Microanalysis, 2005, 11, .	0.2	2
131	Coupling EELS/EFTEM Imaging with Environmental Fluid Cell Microscopy. Microscopy and Microanalysis, 2012, 18, 1104-1105.	0.2	2
132	Patterning: Atomicâ€Level Sculpting of Crystalline Oxides: Toward Bulk Nanofabrication with Single Atomic Plane Precision (Small 44/2015). Small, 2015, 11, 5854-5854.	5.2	2
133	In situ Electrochemical TEM for Quantitative Nanoscale Imaging Dynamics of Solid Electrolyte Interphase and Lithium Electrodeposition. Microscopy and Microanalysis, 2015, 21, 2437-2438.	0.2	2
134	Applications of Liquid Cell-TEM in Corrosion Research. , 2022, , 121-150.		2
135	In-Situ Study of Microstructure Evolution of Spinodal Decomposition in an Al-Rich High-Entropy Alloy. Frontiers in Materials, 2022, 9, .	1.2	2
136	Tuning Electrodeposition Parameters for Tailored Nanoparticle Size, Shape, and Morphology: An In Situ ec-STEM Investigation. Microscopy and Microanalysis, 2014, 20, 1506-1507.	0.2	1
137	In operando Transmission Electron Microscopy Imaging of SEI Formation and Structure in Li-Ion and Li-Metal Batteries. Microscopy and Microanalysis, 2014, 20, 1538-1539.	0.2	1
138	Novel Method for Precision Controlled Heating of TEM Thin Sections to Study Reaction Processes. Microscopy and Microanalysis, 2014, 20, 1628-1629.	0.2	1
139	Application of Electrochemical Liquid Cells for Electrical Energy Storage and Conversion Studies. , 0, , 237-257.		1
140	Effect of Synthesis Methods on the Structure and Defects of Two-Dimensional MXenes. , 2019, , 111-123.		1
141	HAADF Imaging and MD Simulations of Microtwining Partial Dislocations in Nickel Based Superalloy Rene 104,. Microscopy and Microanalysis, 2008, 14, 938-939.	0.2	0
142	The Importance of High-Resolution Scanning Transmission Electron Microscopy For Fine-Scale Dislocation Analysis. Microscopy and Microanalysis, 2010, 16, 1798-1799.	0.2	0
143	TEM and In-situ Liquid Cell Characterization of Copper Nanowire Growth Mechanisms. Microscopy and Microanalysis, 2011, 17, 462-463.	0.2	0
144	In situ Liquid S/TEM: Practical Aspects, Challenges, and Opportunities. Microscopy and Microanalysis, 2015, 21, 2295-2296.	0.2	0

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145	The Effect of Carbonate and pH on Hydrogen Oxidation and Oxygen Reduction on Pt-Based Electrocatalysts in Alkaline Media. ECS Transactions, 2015, 69, 995-1005.	0.3	0
146	Building with Ions: Development of In-situ Liquid Cell Microscopy for the Helium Ion Microscope.. Microscopy and Microanalysis, 2016, 22, 754-755.	0.2	0
147	Inverse Problem Solution for Quantitative Investigations of Nanocrystals Formation and Growth. Microscopy and Microanalysis, 2016, 22, 794-795.	0.2	0
148	In situ Nanoscale Imaging and Spectroscopy of Energy Storage Materials. Microscopy and Microanalysis, 2017, 23, 1964-1965.	0.2	0
149	Pioneering the Use of Neural Network Architectures and Feature Engineering for Real-Time Augmented Microscopy and Analysis. Microscopy and Microanalysis, 2018, 24, 514-515.	0.2	0
150	Multi-modal characterization approach to understand proton transport mechanisms in solid oxide fuel cells. Microscopy and Microanalysis, 2019, 25, 2048-2049.	0.2	0
151	Designing Atomic Edge Structures in 2D Transition Metal Dichalcogenides for Improved Catalytic Activity. Microscopy and Microanalysis, 2021, 27, 964-965.	0.2	0
152	Practical Aspects of Performing Quantitive EELS Measurements of Gas Compositions in Closed-Cell Gas Reaction S/TEM. Microscopy and Microanalysis, 2021, 27, 796-798.	0.2	0
153	Atomic-scale Feedback-controlled Electron Beam Fabrication of 2D Materials. Microscopy and Microanalysis, 2021, 27, 3072-3073.	0.2	0
154	In Situ TEM Investigation of the Spontaneous Hollowing of Alloy Anode Nanocrystals. Microscopy and Microanalysis, 2021, 27, 1972-1973.	0.2	0
155	Characterization of Pre- and Post-Service Grain Boundary Phases in a Cast Austenitic Steel. , 2011, , .		0
156	Nanoscale Oxidation Behavior of Carbon Fibers Revealed with <i>in situ</i> Gas Cell STEM. SSRN Electronic Journal, 0, , .	0.4	0