

Gianluigi A Botton

List of Publications by Year in Descending Order

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

356
papers

20,923
citations

56
h-index

139
g-index

370
ext. papers

23,981
ext. citations

6.3
avg, IF

6.73
L-index

#	Paper	IF	Citations
356	Correlating the mechanical strength of positive electrode material particles to their capacity retention. <i>Cell Reports Physical Science</i> , 2022 , 3, 100714	6.1	3
355	Advances in ultrahigh-energy resolution EELS: phonons, infrared plasmons and strongly coupled modes.. <i>Microscopy (Oxford, England)</i> , 2022 , 71, i174-i199	1.3	1
354	Deciphering the Interaction of Single-Phase LaSrFeCrO with CO/CO Environments for Application in Reversible Solid Oxide Cells.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	1
353	Mechanism of Action of the Tungsten Dopant in LiNiO ₂ Positive Electrode Materials. <i>Advanced Energy Materials</i> , 2022 , 12, 2103067	21.8	6
352	The effects of bending on plasmonic modes in nanowires and planar structures. <i>Nanophotonics</i> , 2022 , 11, 305-314	6.3	0
351	High-Voltage Induced Surface and Intragranular Structural Evolution of Ni-Rich Layered Cathode.. <i>Small</i> , 2022 , e2200627	11	2
350	Electron ptychography dose reduction using Moiré sampling on periodic structures. <i>Ultramicroscopy</i> , 2022 , 239, 113559	3.1	
349	Crystal lattice image reconstruction from Moiré sampling scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2021 , 233, 113426	3.1	
348	Morphology alteration of nickel microstructures for glycerol electrooxidation. <i>Journal of Catalysis</i> , 2021 , 404, 348-361	7.3	0
347	Ionomer content optimization in nickel-iron-based anodes with and without ceria for anion exchange membrane water electrolysis. <i>Journal of Power Sources</i> , 2021 , 514, 230563	8.9	4
346	Influence of Pd and Au on electrochemical valorization of glycerol over Ni-rich surfaces. <i>Journal of Catalysis</i> , 2021 , 396, 1-13	7.3	4
345	Revealing the Structure Evolution of Heterogeneous Pd Catalyst in Suzuki Reaction via the Identical Location Transmission Electron Microscopy. <i>ACS Nano</i> , 2021 , 15, 8621-8637	16.7	4
344	Highly Active Nickel-Iron Nanoparticles With and Without Ceria for the Oxygen Evolution Reaction. <i>Electrocatalysis</i> , 2021 , 12, 605-618	2.7	3
343	Sub-4 nm Nanodiamonds from Graphene-Oxide and Nitrated Polycyclic Aromatic Hydrocarbons at 423 K. <i>ACS Nano</i> , 2021 ,	16.7	2
342	Self-Constructed Multiple Plasmonic Hotspots on an Individual Fractal to Amplify Broadband Hot Electron Generation. <i>ACS Nano</i> , 2021 , 15, 10553-10564	16.7	19
341	Comparison Between Moiré Sampling Scanning Transmission Electron Microscopy Geometrical Phase Analysis Strain Characterization Method and Dark-Field Electron Holography. <i>Microscopy and Microanalysis</i> , 2021 , 27, 1982-1984	0.5	
340	EELSpecNet: Deep Convolutional Neural Network Solution for Electron Energy Loss Spectroscopy Deconvolution. <i>Microscopy and Microanalysis</i> , 2021 , 27, 1626-1627	0.5	0

339	Selective area grown AlInGaN nanowire arrays with core-shell structures for photovoltaics on silicon. <i>Nanoscale</i> , 2021 , 13, 8163-8173	7.7	1
338	Unveiling the role of surface, size, shape and defects of iron oxide nanoparticles for theranostic applications. <i>Nanoscale</i> , 2021 , 13, 14552-14571	7.7	7
337	Crystal Lattices Reconstruction from Moiré Aliased Scanning Transmission Electron Microscopy Electron Micrograph. <i>Microscopy and Microanalysis</i> , 2021 , 27, 1986-1988	0.5	
336	Near-Infrared Cathodoluminescence Polarimetry of a Plasmonic Vertical Split Ring Resonator. <i>Microscopy and Microanalysis</i> , 2021 , 27, 706-708	0.5	
335	A nanoscale investigation on the influence of anodization parameters during plasma electrolytic oxidation of titanium by high-resolution electron energy loss spectroscopy. <i>Applied Surface Science</i> , 2021 , 570, 151133	6.7	2
334	Electron energy-loss spectroscopy of surface plasmon activity in wrinkled gold structures. <i>Journal of Chemical Physics</i> , 2020 , 153, 224703	3.9	2
333	Strong Phonon-Plasmon Coupling Between Nanoscale Antennas. <i>Microscopy and Microanalysis</i> , 2020 , 26, 1498-1500	0.5	
332	Atomic Scale Structure and Chemistry Study of Franckeite - A Natural van-der-Waals Heterostructure - Using Scanning Transmission Electron Microscopy and Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2020 , 26, 1642-1643	0.5	1
331	Strain-free ultrathin AlN epilayers grown directly on sapphire by high-temperature molecular beam epitaxy. <i>Applied Physics Letters</i> , 2020 , 116, 152102	3.4	6
330	Ternary Sn-Ti-O Electrocatalyst Boosts the Stability and Energy Efficiency of CO Reduction. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 12860-12867	16.4	37
329	Resonant Optical Antennas with Atomic-Sized Tips and Tunable Gaps Achieved by Mechanical Actuation and Electrical Control. <i>Nano Letters</i> , 2020 , 20, 4346-4353	11.5	6
328	Ternary Sn-Ti-O Electrocatalyst Boosts the Stability and Energy Efficiency of CO ₂ Reduction. <i>Angewandte Chemie</i> , 2020 , 132, 12960-12967	3.6	6
327	Size-Mediated Recurring Spinel Sub-nanodomains in Li- and Mn-Rich Layered Cathode Materials. <i>Angewandte Chemie</i> , 2020 , 132, 14419-14426	3.6	7
326	Size-Mediated Recurring Spinel Sub-nanodomains in Li- and Mn-Rich Layered Cathode Materials. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 14313-14320	16.4	32
325	Nanoscale Structural and Emission Properties within Russian Doll Type InGaN/AlGaIn Quantum Wells. <i>Advanced Optical Materials</i> , 2020 , 8, 2000481	8.1	1
324	Modification of Nickel Surfaces by Bismuth: Effect on Electrochemical Activity and Selectivity toward Glycerol. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 15095-15107	9.5	20
323	A Low-Cost Instrument for Dry Particle Fusion Coating of Advanced Electrode Material Particles at the Laboratory Scale. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 110509	3.9	10
322	Remarkably Stable Nickel Hydroxide Nanoparticles for Miniaturized Electrochemical Energy Storage. <i>ACS Applied Energy Materials</i> , 2020 , 3, 7294-7305	6.1	4

321	GaN nanowires as a reusable photoredox catalyst for radical coupling of carbonyl under blacklight irradiation. <i>Chemical Science</i> , 2020 , 11, 7864-7870	9.4	12
320	Highly efficient binary copper-iron catalyst for photoelectrochemical carbon dioxide reduction toward methane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 1330-1338	11.5	47
319	The performance evaluation of direct detection electron energy-loss spectroscopy at 200 kV and 80 kV accelerating voltages. <i>Ultramicroscopy</i> , 2020 , 212, 112942	3.1	6
318	Uncovering the nature of electroactive sites in nano architected dendritic Bi for highly efficient CO ₂ electroreduction to formate. <i>Applied Catalysis B: Environmental</i> , 2020 , 274, 119031	21.8	29
317	Dual-Site-Mediated Hydrogenation Catalysis on Pd/NiO: Selective Biomass Transformation and Maintenance of Catalytic Activity at Low Pd Loading. <i>ACS Catalysis</i> , 2020 , 10, 5483-5492	13.1	19
316	Hierarchical Plasmon Resonances in Fractal Structures. <i>ACS Photonics</i> , 2020 , 7, 1246-1254	6.3	5
315	Probing the performance of structurally controlled platinum-cobalt bimetallic catalysts for selective hydrogenation of cinnamaldehyde. <i>Journal of Catalysis</i> , 2020 , 388, 164-170	7.3	13
314	2D Antimony-Arsenic Alloys. <i>Small</i> , 2020 , 16, e1906540	11	4
313	Sampling optimization of Moiré geometrical phase analysis for strain characterization in scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2020 , 209, 112858	3.1	8
312	Pnictogens Allotropy and Phase Transformation during van der Waals Growth. <i>Nano Letters</i> , 2020 , 20, 8258-8266	11.5	2
311	Amorphous Ni-Based Nanoparticles for Alkaline Oxygen Evolution. <i>ACS Applied Nano Materials</i> , 2020 , 3, 10522-10530	5.6	4
310	Engineering the Low Coordinated Pt Single Atom to Achieve the Superior Electrocatalytic Performance toward Oxygen Reduction. <i>Small</i> , 2020 , 16, e2003096	11	36
309	InGaN/Si Double-Junction Photocathode for Unassisted Solar Water Splitting. <i>ACS Energy Letters</i> , 2020 , 5, 3741-3751	20.1	17
308	Selective Electrooxidation of Glycerol to Formic Acid over Carbon Supported Ni _{1-x} M _x (M = Bi, Pd, and Au) Nanocatalysts and Coelectrolysis of CO ₂ . <i>ACS Applied Energy Materials</i> , 2020 , 3, 8725-8738	6.1	20
307	Core-Shell Nanocuboid Dimers with Nanometric Gaps. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 18690-18697	13.8	2
306	Reaktitelbild: Ternary Sn-Ti-O Electrocatalyst Boosts the Stability and Energy Efficiency of CO ₂ Reduction (Angew. Chem. 31/2020). <i>Angewandte Chemie</i> , 2020 , 132, 13224-13224	3.6	
305	The Performance of Electron Counting Direct Detection in Electron Energy Loss Spectroscopy. <i>Microscopy and Microanalysis</i> , 2019 , 25, 586-587	0.5	2
304	Pt/Pd Single-Atom Alloys as Highly Active Electrochemical Catalysts and the Origin of Enhanced Activity. <i>ACS Catalysis</i> , 2019 , 9, 9350-9358	13.1	61

303	Carving Plasmon Modes in Silver Sierpiński Fractals. <i>ACS Photonics</i> , 2019 , 6, 2974-2984	6.3	7
302	Unassisted solar water splitting with 9.8% efficiency and over 100 h stability based on Si solar cells and photoelectrodes catalyzed by bifunctional NiMo/Ni. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 2200-2209	13.9	39
301	Review Multifunctional Separators: A Promising Approach for Improving the Durability and Performance of Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A5369-A5377	3.9	15
300	Revealing the Effects of Trace Oxygen Vacancies on Improper Ferroelectric Manganite with In Situ Biasing. <i>Advanced Electronic Materials</i> , 2019 , 5, 1800827	6.4	7
299	Electrochemical Valorization of Glycerol on Ni-Rich Bimetallic NiPd Nanoparticles: Insight into Product Selectivity Using in Situ Polarization Modulation Infrared-Reflection Absorption Spectroscopy. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 14425-14434	8.3	25
298	Synthesis of Single Crystal LiNi _{0.88} Co _{0.09} Al _{0.03} O ₂ with a Two-Step Lithiation Method. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A1956-A1963	3.9	67
297	Electrochemical promotion of Bi-metallic NiPd core double-shell nanoparticles for complete methane oxidation. <i>Journal of Catalysis</i> , 2019 , 374, 127-135	7.3	8
296	Structural origin of the high-performance light-emitting InGaN/AlGaN quantum disks. <i>Nanoscale</i> , 2019 , 11, 8994-8999	7.7	9
295	Ultralow Loading and High-Performing Pt Catalyst for a Polymer Electrolyte Membrane Fuel Cell Anode Achieved by Atomic Layer Deposition. <i>ACS Catalysis</i> , 2019 , 9, 5365-5374	13.1	21
294	Europium-doped ZnO nanosponges Controlling optical properties and photocatalytic activity. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 3909-3919	7.1	20
293	Towards calibration-invariant spectroscopy using deep learning. <i>Scientific Reports</i> , 2019 , 9, 2126	4.9	31
292	Electroreduction of CO ₂ to formate on amine modified Pb electrodes. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 11272-11281	13	32
291	Surface Plasmon Resonance Mode Behaviour in Sierpinski Fractal Triangles and New Plasmonic Materials. <i>Microscopy and Microanalysis</i> , 2019 , 25, 636-637	0.5	
290	Large Field of View Strain Characterization in a Scanning Transmission Electron Microscope Using a Designed Coherent Sampler. <i>Microscopy and Microanalysis</i> , 2019 , 25, 86-87	0.5	
289	Efficient Nitrogen Fixation Catalyzed by Gallium Nitride Nanowire Using Nitrogen and Water. <i>IScience</i> , 2019 , 17, 208-216	6.1	10
288	Deposition and morphological evolution of nanostructured palladium during potential cycling: a liquid-cell TEM study. <i>Chemical Communications</i> , 2019 , 55, 9204-9207	5.8	4
287	A GaN:Sn nanoarchitecture integrated on a silicon platform for converting CO ₂ to HCOOH by photoelectrocatalysis. <i>Energy and Environmental Science</i> , 2019 , 12, 2842-2848	35.4	38
286	The in situ Studies on the Anomalous Domain Switching Caused by Trace Amount of Oxygen Vacancies. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1888-1889	0.5	

285	Atomic layer deposited Pt-Ru dual-metal dimers and identifying their active sites for hydrogen evolution reaction. <i>Nature Communications</i> , 2019 , 10, 4936	17.4	186
284	Analytical Electron Microscopy. <i>Springer Handbooks</i> , 2019 , 345-453	1.3	4
283	Preformed Au colloidal nanoparticles immobilised on NiO as highly efficient heterogeneous catalysts for reduction of 4-nitrophenol to 4-aminophenol. <i>Journal of Environmental Chemical Engineering</i> , 2019 , 7, 103381	6.8	9
282	Cobalt-Free Nickel-Rich Positive Electrode Materials with a Core-Shell Structure. <i>Chemistry of Materials</i> , 2019 , 31, 10150-10160	9.6	34
281	Vertically Aligned Ni Nanowires as a Platform for Kinetically Limited Water-Splitting Electrocatalysis. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 1082-1093	3.8	5
280	Liquid Cell Transmission Electron Microscopy Sheds Light on The Mechanism of Palladium Electrodeposition. <i>Langmuir</i> , 2019 , 35, 862-869	4	17
279	Unraveling the Rapid Performance Decay of Layered High-Energy Cathodes: From Nanoscale Degradation to Drastic Bulk Evolution. <i>ACS Nano</i> , 2018 , 12, 2708-2718	16.7	35
278	A dominant electron trap in molecular beam epitaxial InAlN lattice-matched to GaN. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 14LT01	3	1
277	Phosphorus oxide gate dielectric for black phosphorus field effect transistors. <i>Applied Physics Letters</i> , 2018 , 112, 173101	3.4	14
276	Nanoscale mechanism of the stabilization of nanoporous gold by alloyed platinum. <i>Nanoscale</i> , 2018 , 10, 4904-4912	7.7	14
275	2D strain mapping using scanning transmission electron microscopy Moiré interferometry and geometrical phase analysis. <i>Ultramicroscopy</i> , 2018 , 187, 1-12	3.1	23
274	Effect of water vapour partial pressure on the chromia (Cr ₂ O ₃)-based scale stability. <i>Canadian Metallurgical Quarterly</i> , 2018 , 57, 89-98	0.9	4
273	Correlative electron energy loss spectroscopy and cathodoluminescence spectroscopy on three-dimensional plasmonic split ring resonators. <i>Microscopy (Oxford, England)</i> , 2018 , 67, i40-i51	1.3	4
272	Self-Assembled Functional DNA Superstructures as High-Density and Versatile Recognition Elements for Printed Paper Sensors. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 12440-12443	16.4	46
271	Understanding the Chemical and Relevant Phase Evolutions of Lithium-Based Electrode Materials Using Atomic-Resolution Electron Energy Loss Spectroscopy. <i>Microscopy and Microanalysis</i> , 2018 , 24, 1520-1521	0.5	
270	Silicon effects on the wet oxidation of type 310 stainless steel. <i>Corrosion Science</i> , 2018 , 143, 376-389	6.8	3
269	Atomic-resolution Imaging and Spectroscopy of Iron Oxide Epitaxial Thin Films. <i>Microscopy and Microanalysis</i> , 2018 , 24, 1614-1615	0.5	
268	Advances in nanoscale characterization of refined nanoporous gold. <i>Electrochimica Acta</i> , 2018 , 283, 611-618	6.18	6

267	Intracellular Biodegradation of Ag Nanoparticles, Storage in Ferritin, and Protection by a Au Shell for Enhanced Photothermal Therapy. <i>ACS Nano</i> , 2018 , 12, 6523-6535	16.7	67
266	Synthesis of high-oxidation Y-Ba-Cu-O phases in superoxygenated thin films. <i>Physical Review Materials</i> , 2018 , 2,	3.2	3
265	Advantages of Direct Detection and Electron Counting for High-Energy Resolution and Monochromated Electron Energy Loss Spectroscopy Data Acquisition. <i>Microscopy and Microanalysis</i> , 2018 , 24, 474-475	0.5	
264	Impact of a Titanium-Based Surface Coating Applied to Li[Ni _{0.5} Mn _{0.3} Co _{0.2}]O ₂ on Lithium-Ion Cell Performance. <i>ACS Applied Energy Materials</i> , 2018 , 1, 7052-7064	6.1	26
263	Copper adparticle enabled selective electrosynthesis of n-propanol. <i>Nature Communications</i> , 2018 , 9, 4614	17.4	86
262	High Efficiency Si Photocathode Protected by Multifunctional GaN Nanostructures. <i>Nano Letters</i> , 2018 , 18, 6530-6537	11.5	56
261	Investigating the Removal of Layered Double Hydroxides in [Ni _{0.80} Co _{0.15}] _{0.95-x} Al _{0.05+x} (OH) ₂ (x = 0, 0.05) Prepared by Coprecipitation. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A2781-A2791	3.9	12
260	Elucidating the Li-Ion Battery Performance Benefits Enabled by Multifunctional Separators. <i>ACS Applied Energy Materials</i> , 2018 , 1, 1878-1882	6.1	8
259	Magneto-Thermal Metrics Can Mirror the Long-Term Intracellular Fate of Magneto-Plasmonic Nanohybrids and Reveal the Remarkable Shielding Effect of Gold. <i>Advanced Functional Materials</i> , 2017 , 27, 1605997	15.6	35
258	Real-space mapping of electronic orbitals. <i>Ultramicroscopy</i> , 2017 , 177, 26-29	3.1	8
257	The Impact of Electrolyte Additives and Upper Cut-off Voltage on the Formation of a Rocksalt Surface Layer in LiNi _{0.8} Mn _{0.1} Co _{0.1} O ₂ Electrodes. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A655-A665	3.9	116
256	Nanoscale analysis of structural and chemical changes in aged hybrid Pt/NbO _x /C fuel cell catalysts. <i>Journal of Power Sources</i> , 2017 , 356, 140-152	8.9	8
255	AlN/h-BN Heterostructures for Mg Dopant-Free Deep Ultraviolet Photonics. <i>Nano Letters</i> , 2017 , 17, 3738-3743	11.3	59
254	Characterization of Localized Filament Corrosion Products at the Anodic Head on a Model Mg-Zn-Zr Alloy Surface. <i>Corrosion</i> , 2017 , 73, 518-525	1.8	6
253	Interface Segregation and Nitrogen Measurement in Fe-Mn-N Steel by Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2017 , 23, 385-395	0.5	7
252	Epitaxially stabilized thin films of FFeO (001) grown on YSZ (100). <i>Scientific Reports</i> , 2017 , 7, 3712	4.9	22
251	Plasmonic Coupling of Multipolar Edge Modes and the Formation of Gap Modes. <i>ACS Photonics</i> , 2017 , 4, 1558-1565	6.3	22
250	In Liquid Observation and Quantification of Nucleation and Growth of Gold Nanostructures Using in Situ Transmission Electron Microscopy. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 7435-7441	3.8	11

249	Targeting low-cost type-II heterostructures: Synthesis, structure and photoreactivity. <i>Journal of Alloys and Compounds</i> , 2017 , 698, 944-956	5.7	17
248	Bulk Immiscibility at the Edge of the Nanoscale. <i>ACS Nano</i> , 2017 , 11, 10984-10991	16.7	6
247	Nanoscale Manipulation of Spinel Lithium Nickel Manganese Oxide Surface by Multisite Ti Occupation as High-Performance Cathode. <i>Advanced Materials</i> , 2017 , 29, 1703764	24	91
246	PtRu Alloy Nanoparticles I. Physicochemical Characterizations of Structures Formed as a Function of the Type of Deposition and Their Evolutions on Annealing. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 23104-23119	3.8	7
245	Efficient Graphene Production by Combined Bipolar Electrochemical Intercalation and High-Shear Exfoliation. <i>ACS Omega</i> , 2017 , 2, 6492-6499	3.9	11
244	Diols Production From Glycerol Over Pt-Based Catalysts: On the Role Played by the Acid Sites of the Support. <i>Catalysis Letters</i> , 2017 , 147, 2523-2533	2.8	8
243	Selective electroreduction of CO ₂ to formate on 3D [100] Pb dendrites with nanometer-sized needle-like tips. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 20747-20756	13	45
242	The 3D Nanoscale Evolution of Platinum-Niobium Oxide Fuel Cell Catalysts via Identical Location Electron Tomography. <i>Particle and Particle Systems Characterization</i> , 2017 , 34, 1700051	3.1	7
241	Mixed-quantum-dot solar cells. <i>Nature Communications</i> , 2017 , 8, 1325	17.4	113
240	Self-Similarity of Plasmon Edge Modes on Koch Fractal Antennas. <i>ACS Nano</i> , 2017 , 11, 11240-11249	16.7	27
239	Selective area epitaxy of AlGaIn nanowire arrays across nearly the entire compositional range for deep ultraviolet photonics. <i>Optics Express</i> , 2017 , 25, 30494-30502	3.3	35
238	Comparison of Single Crystal and Polycrystalline LiNi _{0.5} Mn _{0.3} Co _{0.2} O ₂ Positive Electrode Materials for High Voltage Li-Ion Cells. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A1534-A1544	3.9	187
237	Investigation of pristine Li _{1.2} Ni _{0.13} Mn _{0.56} Co _{0.13} O ₂ by advanced TEM 2016 , 864-865		
236	Quantifying the hole distribution in cuprates: Atomic-resolution near-edge fine-structures of the superconductor Sr ₃ Ca ₁₁ Cu ₂₄ O ₄₁ 2016 , 970-971		
235	Can transverse plasmonic fields be revealed by differential phase contrast? 2016 , 1154-1156		
234	Absorption-induced enhancement of X-ray contrast by soft X-ray emissions 2016 , 821-822		
233	Understanding the degradation of Pt nanoparticles in a fuel cell electrode via identical location electron tomography 2016 , 31-32		
232	Multivariate-aided mapping of solute partitioning in a rare-earth magnesium alloy 2016 , 49-50		

231	Molecular beam epitaxial growth and characterization of Al(Ga)N nanowire deep ultraviolet light emitting diodes and lasers. <i>Journal Physics D: Applied Physics</i> , 2016 , 49, 364006	3	38
230	Spatially resolved surface valence gradient and structural transformation of lithium transition metal oxides in lithium-ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 29064-29075	3.6	38
229	Effect of Silicon Carbide Nanoparticles on the Grain Boundary Segregation and Thermoelectric Properties of Bismuth Doped Mg ₂ Si _{0.7} Ge _{0.3} . <i>Journal of Electronic Materials</i> , 2016 , 45, 6052-6058	1.9	15
228	Nano- and Microstructure Engineering: An Effective Method for Creating High Efficiency Magnesium Silicide Based Thermoelectrics. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 34431-34437	9.5	52
227	Temperature-dependent high energy-resolution EELS of ferroelectric and paraelectric BaTiO ₃ phases. <i>Physical Review B</i> , 2016 , 93,	3.3	13
226	Multivariate-aided mapping of rare-earth partitioning in a wrought magnesium alloy. <i>Scripta Materialia</i> , 2016 , 124, 174-178	5.6	17
225	The Effect of Interdiffusion on the Properties of Lithium-Rich Core-Shell Cathodes. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A2841-A2848	3.9	10
224	Real-space mapping of electronic orbitals 2016 , 839-840		1
223	Correlative Nanoscale Luminescence and Elemental Mapping in InGaN/(Al)GaN Dot-in-a-wire Heterostructures 2016 , 815-816		
222	High energy-resolution EELS of ferroelectric and paraelectric BaTiO ₃ phases 2016 , 935-936		
221	Carrier Localization at Atomic-Scale Compositional Fluctuations in Single AlGa _N Nanowires with Nano-Cathodoluminescence 2016 , 624-625		
220	Full-Color Single Nanowire Pixels for Projection Displays. <i>Nano Letters</i> , 2016 , 16, 4608-15	11.5	106
219	Photochemical Carbon Dioxide Reduction on Mg-Doped Ga(In)N Nanowire Arrays under Visible Light Irradiation. <i>ACS Energy Letters</i> , 2016 , 1, 246-252	20.1	41
218	Cu ₂ Be and Cu Nanocrystals as Local Sources of Copper in Thermally Activated In Situ Cation Exchange. <i>ACS Nano</i> , 2016 , 10, 2406-14	16.7	20
217	Biomimetic design of monolithic fuel cell electrodes with hierarchical structures. <i>Nano Energy</i> , 2016 , 20, 57-67	17.1	8
216	Real-space localization and quantification of hole distribution in chain-ladder Sr ₃ Ca ₁₁ Cu ₂₄ O ₄₁ superconductor. <i>Science Advances</i> , 2016 , 2, e1501652	14.3	14
215	Electron Energy-Loss Spectroscopy of Multipolar Edge and Cavity Modes in Silver Nanosquares. <i>ACS Photonics</i> , 2016 , 3, 428-433	6.3	38
214	Heterogeneous diamond phases in compressed graphite studied by electron energy-loss spectroscopy. <i>Diamond and Related Materials</i> , 2016 , 64, 190-196	3.5	7

213	Evaluating focused ion beam and ultramicrotome sample preparation for analytical microscopies of the cathode layer of a polymer electrolyte membrane fuel cell. <i>Journal of Power Sources</i> , 2016 , 312, 23-35	8.9	19
212	Elucidating the Nature of the Active Phase in Copper/Ceria Catalysts for CO Oxidation. <i>ACS Catalysis</i> , 2016 , 6, 1675-1679	13.1	97
211	Solute Segregation During Ferrite Growth: Solute/Interphase and Substitutional/Interstitial Interactions. <i>Jom</i> , 2016 , 68, 1329-1334	2.1	18
210	Three-dimensional investigation of cycling-induced microstructural changes in lithium-ion battery cathodes using focused ion beam/scanning electron microscopy. <i>Journal of Power Sources</i> , 2016 , 306, 300-308	8.9	46
209	Toroidal dipole plasmon resonance modes in upright split ring resonators 2016 , 1146-1147		1
208	Some applications of analytical electron microscopy and high-resolution spectroscopy in the study of functional materials 2016 , 911-912		
207	High resolution STEM and EELS investigation of N-doped carbon allotropes decorated with noble metal atom catalysts 2016 , 806-807		
206	Atomic-Scale Compositional Fluctuations in Ternary III-Nitride Nanowires 2016 , 550-551		
205	Platinum single-atom and cluster catalysis of the hydrogen evolution reaction. <i>Nature Communications</i> , 2016 , 7, 13638	17.4	1085
204	An In _{0.5} Ga _{0.5} N nanowire photoanode for harvesting deep visible light photons. <i>APL Materials</i> , 2016 , 4, 076106	5.7	13
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