

Sarah Haigh

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.

262
papers

11,904
citations

49
h-index

104
g-index

280
ext. papers

14,230
ext. citations

8.2
avg, IF

6.3
L-index

#	Paper	IF	Citations
262	Reply to: Random interstratification in hydrated graphene oxide membranes and implications for seawater desalination.. <i>Nature Nanotechnology</i> , 2022 ,	28.7	2
261	High-performance polymer electrolyte membranes incorporated with 2D silica nanosheets in high-temperature proton exchange membrane fuel cells. <i>Journal of Energy Chemistry</i> , 2022 , 64, 323-334 ¹²		12
260	Telluride Nanocrystals with Adjustable Amorphous Shell Thickness and Core-Shell Structure Modulation by Aqueous Cation Exchange.. <i>Inorganic Chemistry</i> , 2022 ,	5.1	2
259	Low-Temperature Exsolution of Ni-Ru Bimetallic Nanoparticles from A-Site Deficient Double Perovskites.. <i>Small</i> , 2022 , e2107020	11	1
258	Surfactant-free Synthesis of Spiky Hollow Ag-Au Nanostars with Chemically Exposed Surfaces for Enhanced Catalysis and Single-Particle SERS.. <i>Jacs Au</i> , 2022 , 2, 178-187		6
257	The modified liquid liquid interface: An electrochemical route for the electrode-less synthesis of MoS ₂ metal composite thin films. <i>Electrochimica Acta</i> , 2022 , 424, 140609	6.7	1
256	Oleylamine Aging of PtNi Nanoparticles Giving Enhanced Functionality for the Oxygen Reduction Reaction. <i>Nano Letters</i> , 2021 , 21, 3989-3996	11.5	17
255	In Situ TEM Imaging of Solution-Phase Chemical Reactions Using 2D-Heterostructure Mixing Cells. <i>Advanced Materials</i> , 2021 , 33, e2100668	24	1
254	Synthesis of molybdenum-doped rhenium disulfide alloy using aerosol-assisted chemical vapour deposition. <i>Materials Science in Semiconductor Processing</i> , 2021 , 127, 105718	4.3	1
253	Magic under the microscope. <i>Nature Materials</i> , 2021 , 20, 908-909	27	
252	Purification of Propylene and Ethylene by a Robust Metal-Organic Framework Mediated by Host-Guest Interactions. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 15541-15547	16.4	17
251	Automating 3D Imaging of Inorganic Nanoparticles. <i>Microscopy and Microanalysis</i> , 2021 , 27, 2864-2866	0.5	0
250	Comparing Xe pFIB and Ga FIB for TEM sample preparation of Al alloys: Minimising FIB-induced artefacts. <i>Journal of Microscopy</i> , 2021 , 282, 101-112	1.9	11
249	Magnetic-Field-Induced Re-entrance of Superconductivity in TaPdS Nanostrips. <i>Nano Letters</i> , 2021 , 21, 288-297	11.5	0
248	In-orbit aerodynamic coefficient measurements using SOAR (Satellite for Orbital Aerodynamics Research). <i>Acta Astronautica</i> , 2021 , 180, 85-99	2.9	10
247	Hydrocarbon contamination in angström-scale channels. <i>Nanoscale</i> , 2021 , 13, 9553-9560	7.7	2
246	Synthesis of IR-emitting HgTe quantum dots using an ionic liquid-based tellurium precursor. <i>Nanoscale Advances</i> , 2021 , 3, 4062-4064	5.1	

245	Nanometre imaging of FeGeTe ferromagnetic domain walls. <i>Nanotechnology</i> , 2021 , 32, 205703	3.4	0
244	HOLOGRAPHIC CONVERGENT ELECTRON BEAM DIFFRACTION (CBED) IMAGING OF TWO-DIMENSIONAL CRYSTALS. <i>Surface Review and Letters</i> , 2021 , 28, 2140001	1.1	
243	Iron-silica interaction during reduction of precipitated silica-promoted iron oxides using in situ XRD and TEM. <i>Applied Catalysis A: General</i> , 2021 , 613, 118031	5.1	1
242	Atomically Dispersed Copper Sites in a Metal-Organic Framework for Reduction of Nitrogen Dioxide. <i>Journal of the American Chemical Society</i> , 2021 , 143, 10977-10985	16.4	15
241	A structured catalyst support combining electrochemically exfoliated graphene oxide and carbon black for enhanced performance and durability in low-temperature hydrogen fuel cells. <i>Energy</i> , 2021 , 226, 120318	7.9	9
240	Controlling Interfacial Reduction Kinetics and Suppressing Electrochemical Oscillations in Li ₄ Ti ₅ O ₁₂ Thin-Film Anodes. <i>Advanced Functional Materials</i> , 2021 , 31, 2105354	15.6	2
239	Ion exchange in atomically thin clays and micas. <i>Nature Materials</i> , 2021 , 20, 1677-1682	27	7
238	Stability and stoichiometry of L12 Al ₃ (Sc,Zr) dispersoids in Al-(Si)-Sc-Zr alloys. <i>Acta Materialia</i> , 2021 , 216, 117117	8.4	4
237	High-Performance Nanostructured MoS ₂ Electrodes with Spontaneous Ultralow Gold Loading for Hydrogen Evolution. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 20940-20951	3.8	2
236	Intake design for an Atmosphere-Breathing Electric Propulsion System (ABEP). <i>Acta Astronautica</i> , 2021 , 187, 225-235	2.9	9
235	Synthesis of new M-layer solid-solution 312 MAX phases (Ta _{1-x} Ti _x) ₃ AlC ₂ (x = 0.4, 0.62, 0.75, 0.91 or 0.95), and their corresponding MXenes. <i>RSC Advances</i> , 2021 , 11, 3110-3114	3.7	6
234	Pillared MoTiC MXene for high-power and long-life lithium and sodium-ion batteries. <i>Nanoscale Advances</i> , 2021 , 3, 3145-3158	5.1	6
233	Self-assembly of a layered two-dimensional molecularly woven fabric. <i>Nature</i> , 2020 , 588, 429-435	50.4	23
232	Capillary condensation under atomic-scale confinement. <i>Nature</i> , 2020 , 588, 250-253	50.4	59
231	Harnessing the Electron Beam to Study Reactions in Graphene Liquid Cells and Degradation in Sensitive 2D Materials. <i>Microscopy and Microanalysis</i> , 2020 , 26, 538-541	0.5	
230	Nonreciprocal superconducting NbSe antenna. <i>Nature Communications</i> , 2020 , 11, 5634	17.4	8
229	An in-situ method for protecting internal cracks/pores from ion beam damage and reducing curtaining for TEM sample preparation using FIB. <i>Ultramicroscopy</i> , 2020 , 219, 113135	3.1	4
228	Design-controlled synthesis of IrO sub-monolayers on Au nanoflowers: marrying plasmonic and electrocatalytic properties. <i>Nanoscale</i> , 2020 , 12, 12281-12291	7.7	14

227	Gas-Phase Deposition of Gold Nanoclusters to Produce Heterogeneous Glycerol Oxidation Catalysts. <i>ACS Applied Nano Materials</i> , 2020 , 3, 4997-5001	5.6	3
226	Convergent beam electron diffraction of multilayer Van der Waals structures. <i>Ultramicroscopy</i> , 2020 , 212, 112976	3.1	5
225	Photo- and Electroluminescence from Zn-Doped InN Semiconductor Nanocrystals. <i>Advanced Optical Materials</i> , 2020 , 8, 2000604	8.1	2
224	Heterostructures formed through abraded van der Waals materials. <i>Nature Communications</i> , 2020 , 11, 3047	17.4	14
223	Large magnetoelectric coupling in multiferroic oxide heterostructures assembled via epitaxial lift-off. <i>Nature Communications</i> , 2020 , 11, 3190	17.4	15
222	Raman Fingerprints of Graphene Produced by Anodic Electrochemical Exfoliation. <i>Nano Letters</i> , 2020 , 20, 3411-3419	11.5	25
221	Electrically pumped WSe ₂ -based light-emitting van der Waals heterostructures embedded in monolithic dielectric microcavities. <i>2D Materials</i> , 2020 , 7, 031006	5.9	8
220	Beyond surface redox and oxygen mobility at pd-polar ceria (100) interface: Underlying principle for strong metal-support interactions in green catalysis. <i>Applied Catalysis B: Environmental</i> , 2020 , 270, 118843	21.8	9
219	Mechanisms of Liquid-Phase Exfoliation for the Production of Graphene. <i>ACS Nano</i> , 2020 , 14, 10976-10985.7	35.7	59
218	RF Helicon-based Inductive Plasma Thruster (IPT) Design for an Atmosphere-Breathing Electric Propulsion system (ABEP). <i>Acta Astronautica</i> , 2020 , 176, 476-483	2.9	21
217	Holographic reconstruction of the interlayer distance of bilayer two-dimensional crystal samples from their convergent beam electron diffraction patterns. <i>Ultramicroscopy</i> , 2020 , 219, 113020	3.1	1
216	Mechanistic study of non-thermal plasma assisted CO ₂ hydrogenation over Ru supported on MgAl layered double hydroxide. <i>Applied Catalysis B: Environmental</i> , 2020 , 268, 118752	21.8	46
215	Ultra-thin van der Waals crystals as semiconductor quantum wells. <i>Nature Communications</i> , 2020 , 11, 125	17.4	22
214	Porous Silica-Pillared MXenes with Controllable Interlayer Distances for Long-Life Na-Ion Batteries. <i>Langmuir</i> , 2020 , 36, 4370-4382	4	18
213	Automated Single-Particle Reconstruction of Heterogeneous Inorganic Nanoparticles. <i>Microscopy and Microanalysis</i> , 2020 , 26, 1168-1175	0.5	4
212	Atomic reconstruction in twisted bilayers of transition metal dichalcogenides. <i>Nature Nanotechnology</i> , 2020 , 15, 592-597	28.7	110
211	Correlation of the ratio of metallic to oxide species with activity of PdPt catalysts for methane oxidation. <i>Catalysis Science and Technology</i> , 2020 , 10, 1408-1421	5.5	12
210	Direct measurement of TEM lamella thickness in FIB-SEM. <i>Journal of Microscopy</i> , 2020 , 279, 168-176	1.9	5

209	MXene Tunable Lamellae Architectures for Supercapacitor Electrodes. <i>ACS Applied Energy Materials</i> , 2020 , 3, 411-422	6.1	21
208	The benefits of very low earth orbit for earth observation missions. <i>Progress in Aerospace Sciences</i> , 2020 , 117, 100619	8.8	29
207	Splenic Capture and Intracellular Biodegradation of Biological-Grade Graphene Oxide Sheets. <i>ACS Nano</i> , 2020 , 14, 10168-10186	16.7	30
206	A review of gas-surface interaction models for orbital aerodynamics applications. <i>Progress in Aerospace Sciences</i> , 2020 , 119, 100675	8.8	14
205	Rapid and Low-Temperature Molecular Precursor Approach toward Ternary Layered Metal Chalcogenides and Oxides: Mo W S and Mo W O Alloys (0 III). <i>Chemistry of Materials</i> , 2020 , 32, 7895-7907	9.6	7
204	Twist and Bend in Van Der Waals Materials and 2D Stacked Heterostructures. <i>Microscopy and Microanalysis</i> , 2020 , 26, 856-858	0.5	
203	Atomic Resolution Imaging of CrBr Using Adhesion-Enhanced Grids. <i>Nano Letters</i> , 2020 , 20, 6582-6589	11.5	8
202	Electrocatalytic Behavior of PtCu Clusters Produced by Nanoparticle Beam Deposition. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 23683-23689	3.8	5
201	Guest Editor Foreword, Special Issue Introduction and Scientific Highlights. <i>Journal of Microscopy</i> , 2020 , 279, 141-142	1.9	
200	Performance of a NiFeO@Co Core-Shell Fischer-Tropsch Catalyst: Effect of Low Temperature Reduction. <i>ACS Omega</i> , 2020 , 5, 32975-32983	3.9	2
199	Enhanced Superconductivity in Few-Layer TaS due to Healing by Oxygenation. <i>Nano Letters</i> , 2020 , 20, 3808-3818	11.5	10
198	Atomically thin micas as proton-conducting membranes. <i>Nature Nanotechnology</i> , 2019 , 14, 962-966	28.7	26
197	Synthetic 2-D lead tin sulfide nanosheets with tuneable optoelectronic properties from a potentially scalable reaction pathway. <i>Chemical Science</i> , 2019 , 10, 1035-1045	9.4	7
196	Imaging Three-Dimensional Elemental Inhomogeneity in Pt-Ni Nanoparticles Using Spectroscopic Single Particle Reconstruction. <i>Nano Letters</i> , 2019 , 19, 732-738	11.5	14
195	Indirect to Direct Gap Crossover in Two-Dimensional InSe Revealed by Angle-Resolved Photoemission Spectroscopy. <i>ACS Nano</i> , 2019 , 13, 2136-2142	16.7	40
194	Laser-writable high-k dielectric for van der Waals nanoelectronics. <i>Science Advances</i> , 2019 , 5, eaau0906	14.3	35
193	Self-Limiting Growth of Two-Dimensional Palladium between Graphene Oxide Layers. <i>Nano Letters</i> , 2019 , 19, 4678-4683	11.5	7
192	Formation and Healing of Defects in Atomically Thin GaSe and InSe. <i>ACS Nano</i> , 2019 , 13, 5112-5123	16.7	23

191	Nanometre electron beam sculpting of suspended graphene and hexagonal boron nitride heterostructures. <i>2D Materials</i> , 2019 , 6, 025032	5.9	4
190	Two-Dimensional Covalent Crystals by Chemical Conversion of Thin van der Waals Materials. <i>Nano Letters</i> , 2019 , 19, 6475-6481	11.5	26
189	Liquid-Phase STEM-EDS in Graphene and Silicon Nitride Cells. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1500-1501	0.5	0
188	Two Methods for Measuring Lamellae Thicknesses In situ for Improved FIB Specimen Preparation. <i>Microscopy and Microanalysis</i> , 2019 , 25, 858-859	0.5	
187	Three-Dimensional Imaging of Nanoparticle Chemistry Using Spectroscopic Single Particle Reconstruction. <i>Microscopy and Microanalysis</i> , 2019 , 25, 400-401	0.5	
186	Morphological and compositional changes of MFe ₂ O ₄ @Co ₃ O ₄ (M = Ni, Zn) core-shell nanoparticles after mild reduction. <i>Materials Characterization</i> , 2019 , 155, 109806	3.9	2
185	Synthesis of copper catalysts for click chemistry from distillery wastewater using magnetically recoverable bionanoparticles. <i>Green Chemistry</i> , 2019 , 21, 4020-4024	10	10
184	Solution-Processed HfO _x for Half-Volt Operation of InGaZnO Thin-Film Transistors. <i>ACS Applied Electronic Materials</i> , 2019 , 1, 1581-1589	4	14
183	Liquid Exfoliation of Ni ₂ P ₂ S ₆ : Structural Characterization, Size-Dependent Properties, and Degradation. <i>Chemistry of Materials</i> , 2019 , 31, 9127-9139	9.6	5
182	Stacking Order in Graphite Films Controlled by van der Waals Technology. <i>Nano Letters</i> , 2019 , 19, 8526-8532	11.3	26
181	Confinement Effects and Charge Dynamics in ZnN Colloidal Quantum Dots: Implications for QD-LED Displays. <i>ACS Applied Nano Materials</i> , 2019 , 2, 7214-7219	5.6	13
180	Exploring Nanoscale Precursor Reactions in Alloy 600 in H ₂ /N ₂ /H ₂ O Vapor Using In Situ Analytical Transmission Electron Microscopy. <i>Minerals, Metals and Materials Series</i> , 2019 , 399-407	0.3	
179	Micromagnetometry of two-dimensional ferromagnets. <i>Nature Electronics</i> , 2019 , 2, 457-463	28.4	46
178	Characterising porosity in platinum nanoparticles. <i>Nanoscale</i> , 2019 , 11, 17791-17799	7.7	15
177	Photocatalytic hydrogen production by biomimetic indium sulfide using Mimosa pudica leaves as template. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 2770-2783	6.7	9
176	Convergent and divergent beam electron holography and reconstruction of adsorbates on free-standing two-dimensional crystals. <i>Frontiers of Physics</i> , 2019 , 14, 1	3.7	6
175	Au@HgxCd _{1-x} Te core@shell nanorods by sequential aqueous cation exchange for near-infrared photodetectors. <i>Nano Energy</i> , 2019 , 57, 57-65	17.1	23
174	Chemical vapor deposition of tin sulfide from diorganotin(IV) dixanthates. <i>Journal of Materials Science</i> , 2019 , 54, 2315-2323	4.3	16

173	Fate of Lu(III) sorbed on 2-line ferrihydrite at pH 5.7 and aged for 12 years at room temperature. II: insights from STEM-EDXS and DFT calculations. <i>Environmental Science and Pollution Research</i> , 2019 , 26, 5282-5293	5.1	4
172	Biosynthesis and Characterization of Copper Nanoparticles Using <i>Shewanella oneidensis</i> : Application for Click Chemistry. <i>Small</i> , 2018 , 14, 1703145	11	87
171	Nanometer Resolution Elemental Mapping in Graphene-Based TEM Liquid Cells. <i>Nano Letters</i> , 2018 , 18, 1168-1174	11.5	67
170	Atomic-Scale Insights into the Oxidation of Aluminum. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 2230-2235	9.5	47
169	Black phosphorus with near-superhydrophobic properties and long-term stability in aqueous media. <i>Chemical Communications</i> , 2018 , 54, 3831-3834	5.8	22
168	Transport of hydrogen isotopes through interlayer spacing in van der Waals crystals. <i>Nature Nanotechnology</i> , 2018 , 13, 468-472	28.7	26
167	Core-shell-shell cyto-compatible polymer dot-based particles with near-infrared emission and enhanced dispersion stability. <i>Chemical Communications</i> , 2018 , 54, 9364-9367	5.8	3
166	Scalable Patterning of Encapsulated Black Phosphorus. <i>Nano Letters</i> , 2018 , 18, 5373-5381	11.5	30
165	Unraveling the H Promotional Effect on Palladium-Catalyzed CO Oxidation Using a Combination of Temporally and Spatially Resolved Investigations. <i>ACS Catalysis</i> , 2018 , 8, 8255-8262	13.1	9
164	Ballistic molecular transport through two-dimensional channels. <i>Nature</i> , 2018 , 558, 420-424	50.4	73
163	Exploring Nanoscale Precursor Reactions in Alloy 600 in H ₂ /N ₂ /H ₂ O Vapor Using In Situ Analytical Transmission Electron Microscopy. <i>Minerals, Metals and Materials Series</i> , 2018 , 399-407	0.3	
162	Co-precipitation on the Basal and Prismatic Planes in Mg ₂ Si Alloy Subjected to Over-Ageing. <i>Minerals, Metals and Materials Series</i> , 2018 , 379-383	0.3	
161	Direct synthesis of MoS ₂ or MoO ₃ via thermolysis of a dialkyl dithiocarbamate molybdenum(IV) complex. <i>Chemical Communications</i> , 2018 , 55, 99-102	5.8	21
160	Synthesis of Bi _{2-x} Sb _{2x} S ₃ (0 ≤ x ≤ 1) solid solutions from solventless thermolysis of metal xanthate precursors. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 12652-12659	7.1	19
159	Controlling Reaction Selectivity over Hybrid Plasmonic Nanocatalysts. <i>Nano Letters</i> , 2018 , 18, 7289-7297	11.5	57
158	Magnetoresistance in Co-hBN-NiFe Tunnel Junctions Enhanced by Resonant Tunneling through Single Defects in Ultrathin hBN Barriers. <i>Nano Letters</i> , 2018 , 18, 6954-6960	11.5	11
157	Anomalous twin boundaries in two dimensional materials. <i>Nature Communications</i> , 2018 , 9, 3597	17.4	30
156	Infrared-to-violet tunable optical activity in atomic films of GaSe, InSe, and their heterostructures. <i>2D Materials</i> , 2018 , 5, 041009	5.9	39

155	Convergent beam electron holography for analysis of van der Waals heterostructures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 7473-7478	11.5	12
154	The application of in situ analytical transmission electron microscopy to the study of preferential intergranular oxidation in Alloy 600. <i>Ultramicroscopy</i> , 2017 , 176, 46-51	3.1	31
153	Atomic Defects and Doping of Monolayer NbSe. <i>ACS Nano</i> , 2017 , 11, 2894-2904	16.7	46
152	Exfoliation of natural van der Waals heterostructures to a single unit cell thickness. <i>Nature Communications</i> , 2017 , 8, 14410	17.4	66
151	Single-Source Precursor for Tungsten Dichalcogenide Thin Films: Mo _{1-x} W _x S ₂ (0 ≤ x ≤ 1) Alloys by Aerosol-Assisted Chemical Vapor Deposition. <i>Chemistry of Materials</i> , 2017 , 29, 3858-3862	9.6	19
150	Elemental distribution within the long-period stacking ordered structure in a Mg-Gd-Zn-Mn alloy. <i>Materials Characterization</i> , 2017 , 129, 247-251	3.9	2
149	Cu segregation on the interface between Al ₂ O ₃ substrate and Al-1.4Cu alloy. <i>Materials Characterization</i> , 2017 , 129, 300-304	3.9	5
148	Galvanic replacement reaction: recent developments for engineering metal nanostructures towards catalytic applications. <i>Chemical Communications</i> , 2017 , 53, 7135-7148	5.8	142
147	In Situ Industrial Bimetallic Catalyst Characterization using Scanning Transmission Electron Microscopy and X-ray Absorption Spectroscopy at One Atmosphere and Elevated Temperature. <i>ChemPhysChem</i> , 2017 , 18, 2151-2156	3.2	10
146	Magnetoresistance of vertical Co-graphene-NiFe junctions controlled by charge transfer and proximity-induced spin splitting in graphene. <i>2D Materials</i> , 2017 , 4, 031004	5.9	52
145	Tunable sieving of ions using graphene oxide membranes. <i>Nature Nanotechnology</i> , 2017 , 12, 546-550	28.7	960
144	Enhanced organophilic separations with mixed matrix membranes of polymers of intrinsic microporosity and graphene-like fillers. <i>Journal of Membrane Science</i> , 2017 , 526, 437-449	9.6	41
143	Solution processing of two-dimensional black phosphorus. <i>Chemical Communications</i> , 2017 , 53, 1445-1458	5.8	55
142	Role of 2D and 3D defects on the reduction of LaNiO nanoparticles for catalysis. <i>Scientific Reports</i> , 2017 , 7, 10080	4.9	21
141	Desalination and Nanofiltration through Functionalized Laminar MoS Membranes. <i>ACS Nano</i> , 2017 , 11, 11082-11090	16.7	197
140	The influence of precursor on rhenium incorporation into Re-doped MoS ₂ (Mo _{1-x} Re _x S ₂) thin films by aerosol-assisted chemical vapour deposition (AACVD). <i>Journal of Materials Chemistry C</i> , 2017 , 5, 9044-9052	7.1	13
139	Magnetic spectroscopy of nanoparticulate greigite, Fe ₃ S ₄ . <i>Mineralogical Magazine</i> , 2017 , 81, 857-872	1.7	4
138	Understanding 2D Crystal Vertical Heterostructures at the Atomic Scale Using Advanced Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1714-1715	0.5	

137	High magnetic relaxivity in a fluorescent CdSe/CdS/ZnS quantum dot functionalized with MRI contrast molecules. <i>Chemical Communications</i> , 2017 , 53, 10500-10503	5.8	13
136	Dual Functionalization of Liquid-Exfoliated Semiconducting 2H-MoS ₂ with Lanthanide Complexes Bearing Magnetic and Luminescence Properties. <i>Advanced Functional Materials</i> , 2017 , 27, 1703646	15.6	20
135	Analysis of grain size in FePt films fabricated using remote plasma deposition. <i>Journal of Magnetism and Magnetic Materials</i> , 2017 , 443, 67-72	2.8	
134	An in situ and ex situ TEM study into the oxidation of titanium (IV) sulphide. <i>Npj 2D Materials and Applications</i> , 2017 , 1,	8.8	15
133	Multiscale correlative tomography: an investigation of creep cavitation in 316 stainless steel. <i>Scientific Reports</i> , 2017 , 7, 7332	4.9	28
132	Hydrogen evolution and capacitance behavior of Au/Pd nanoparticle-decorated graphene heterostructures. <i>Applied Materials Today</i> , 2017 , 8, 125-131	6.6	17
131	Plasmon-induced nanoscale quantised conductance filaments. <i>Scientific Reports</i> , 2017 , 7, 2878	4.9	3
130	Automated quantification of morphology and chemistry from STEM data of individual nanoparticles. <i>Journal of Physics: Conference Series</i> , 2017 , 902, 012018	0.3	2
129	Observing Imperfection in Atomic Interfaces for van der Waals Heterostructures. <i>Nano Letters</i> , 2017 , 17, 5222-5228	11.5	39
128	Correlative In situ imaging and spectroscopy of a bimetallic PdCu catalyst using Synchrotron and Electron Optical Beam Lines 2016 , 17-18		
127	Quantitative compositional characterisation of fuel-cell catalysts using EDX ionisation cross sections 2016 , 111-112		
126	Asymmetric MoS ₂ /Graphene/Metal Sandwiches: Preparation, Characterization, and Application. <i>Advanced Materials</i> , 2016 , 28, 8256-8264	24	50
125	Metal-organic framework templated electrodeposition of functional gold nanostructures. <i>Electrochimica Acta</i> , 2016 , 222, 361-369	6.7	32
124	Van der Waals pressure and its effect on trapped interlayer molecules. <i>Nature Communications</i> , 2016 , 7, 12168	17.4	91
123	High resolution STEM imaging and analysis of 2D crystal heterostructure devices and nanoparticle catalysts 2016 , 773-774		
122	Energy Dispersive X-ray Tomography for 3D Elemental Mapping of Individual Nanoparticles. <i>Journal of Visualized Experiments</i> , 2016 ,	1.6	2
121	Bimetallic Au@Pd-Au Tadpole-Shaped Asymmetric Nanostructures by a Combination of Precursor Reduction and Ostwald Ripening. <i>ChemNanoMat</i> , 2016 , 2, 509-514	3.5	3
120	Investigation of dealloying of S phase (Al ₂ CuMg) in AA 2024-T3 aluminium alloy using high resolution 2D and 3D electron imaging. <i>Corrosion Science</i> , 2016 , 103, 157-164	6.8	90

119	Synthesis and characterization of composite membranes made of graphene and polymers of intrinsic microporosity. <i>Carbon</i> , 2016 , 102, 357-366	10.4	28
118	Synthesis of Lateral Size-Controlled Monolayer 1H-MoS ₂ @Oleylamine as Supercapacitor Electrodes.. <i>Chemistry of Materials</i> , 2016 , 28, 657-664	9.6	115
117	Radiation damage haloes in biotite investigated using high-resolution transmission electron microscopy. <i>American Mineralogist</i> , 2016 , 101, 105-110	2.9	2
116	Utilising correlative 3D imaging to understand creep cavitation in stainless steel 2016 , 17-18		
115	Principle component analysis applied to high resolution cross sectional STEM imaging: Quantitative analysis of 2D heterostructures 2016 , 539-540		
114	Combining Non-Rigid Registration with Non-Local Principle Component Analysis for Atomic Resolution EDS Mapping. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1406-1407	0.5	
113	Imaging the Hydrated Microbe-Metal Interface Using Nanoscale Spectrum Imaging. <i>Particle and Particle Systems Characterization</i> , 2016 , 33, 833-841	3.1	2
112	Radiation damage in biotite mica by accelerated μ particles: A synchrotron microfocus X-ray diffraction and X-ray absorption spectroscopy study. <i>American Mineralogist</i> , 2016 , 101, 928-942	2.9	4
111	Temperature Programmed Reduction of a PdCu Bimetallic Catalyst via Atmospheric Pressure in situ STEM-EDS and in situ X-Ray Adsorption Analysis. <i>Microscopy and Microanalysis</i> , 2016 , 22, 214-215	0.5	1
110	Energy Dispersive X-Ray Spectroscopy in Liquids: Inorganic and Biological Applications. <i>Microscopy and Microanalysis</i> , 2016 , 22, 72-73	0.5	1
109	The Effects of Extensive Glomerular Filtration of Thin Graphene Oxide Sheets on Kidney Physiology. <i>ACS Nano</i> , 2016 , 10, 10753-10767	16.7	54
108	Dislocation core structures in (0001) InGaN. <i>Journal of Applied Physics</i> , 2016 , 119, 105301	2.5	13
107	The Biosynthesis of Infrared-Emitting Quantum Dots in <i>Allium Fistulosum</i> . <i>Scientific Reports</i> , 2016 , 6, 20480	4.9	4
106	Quantitative Energy-Dispersive X-Ray Analysis of Catalyst Nanoparticles Using a Partial Cross Section Approach. <i>Microscopy and Microanalysis</i> , 2016 , 22, 71-81	0.5	25
105	Self-catalytic membrane photo-reactor made of carbon nitride nanosheets. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 11666-11671	13	38
104	Compositional quantification of PtCo acid-leached fuel cell catalysts using EDX partial cross sections. <i>Materials Science and Technology</i> , 2016 , 32, 248-253	1.5	7
103	Sequential bottom-up and top-down processing for the synthesis of transition metal dichalcogenide nanosheets: the case of rhenium disulfide (ReS ₂). <i>Chemical Communications</i> , 2016 , 52, 7878-81	5.8	36
102	X-Ray Absorption Correction for Quantitative Scanning Transmission Electron Microscopic Energy-Dispersive X-Ray Spectroscopy of Spherical Nanoparticles. <i>Microscopy and Microanalysis</i> , 2016 , 22, 440-7	0.5	5

101	STEM-EDX tomography of bimetallic nanoparticles: A methodological investigation. <i>Ultramicroscopy</i> , 2016 , 162, 61-73	3.1	64
100	An investigation of diffusion-mediated cyclic coarsening and reversal coarsening in an advanced Ni-based superalloy. <i>Acta Materialia</i> , 2016 , 110, 295-305	8.4	50
99	Molecular transport through capillaries made with atomic-scale precision. <i>Nature</i> , 2016 , 538, 222-225	50.4	325
98	Non-rigid registration and non-local principle component analysis to improve electron microscopy spectrum images. <i>Nanotechnology</i> , 2016 , 27, 364001	3.4	27
97	Diatom Frustules as a Biomineralized Scaffold for the Growth of Molybdenum Disulfide Nanosheets. <i>Chemistry of Materials</i> , 2016 , 28, 5582-5586	9.6	13
96	Nanostructured Aptamer-Functionalized Black Phosphorus Sensing Platform for Label-Free Detection of Myoglobin, a Cardiovascular Disease Biomarker. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 22860-8	9.5	164
95	Synthesis of biocompatible Au-ZnTe core-shell nanoparticles. <i>Journal of Materials Chemistry B</i> , 2015 , 3, 2826-2833	7.3	4
94	Behavior of Alloying Elements during Anodizing of Mg-Cu and Mg-W Alloys in a Fluoride/Glycerol Electrolyte. <i>Journal of the Electrochemical Society</i> , 2015 , 162, C487-C494	3.9	5
93	Quality Heterostructures from Two-Dimensional Crystals Unstable in Air by Their Assembly in Inert Atmosphere. <i>Nano Letters</i> , 2015 , 15, 4914-21	11.5	289
92	High-resolution imaging of biotite using focal series exit wavefunction restoration and the graphene mechanical exfoliation method. <i>Mineralogical Magazine</i> , 2015 , 79, 337-344	1.7	3
91	Caesium incorporation and retention in illite interlayers. <i>Applied Clay Science</i> , 2015 , 108, 128-134	5.2	124
90	Compositional variations for small-scale gamma prime (γ') precipitates formed at different cooling rates in an advanced Ni-based superalloy. <i>Acta Materialia</i> , 2015 , 85, 199-206	8.4	64
89	Nano-particle precipitation in mechanically alloyed and annealed precursor powders of legacy PM2000 ODS alloy. <i>Journal of Nuclear Materials</i> , 2015 , 464, 200-209	3.3	19
88	Tin(II) Sulfide (SnS) Nanosheets by Liquid-Phase Exfoliation of Herzenbergite: IV-VI Main Group Two-Dimensional Atomic Crystals. <i>Journal of the American Chemical Society</i> , 2015 , 137, 12689-96	16.4	187
87	Near-unity quantum yields from chloride treated CdTe colloidal quantum dots. <i>Small</i> , 2015 , 11, 1548-54	11	69
86	Multiscale 3D analysis of creep cavities in AISI type 316 stainless steel. <i>Materials Science and Technology</i> , 2015 , 31, 522-534	1.5	17
85	Preparation of low-dimensional carbon material-based metal nanocomposites using a polarizable organic/water interface. <i>Journal of Materials Research</i> , 2015 , 30, 2679-2687	2.5	9
84	Cross sectional STEM imaging and analysis of multilayered two dimensional crystal heterostructure devices. <i>Microscopy and Microanalysis</i> , 2015 , 21, 107-108	0.5	1

83	Revealing New Atomic-scale Information about Materials by Improving the Quality and Quantifiability of Aberration-corrected STEM Data. <i>Microscopy and Microanalysis</i> , 2015 , 21, 2409-2410	0.5	
82	Photoluminescence: Near-Unity Quantum Yields from Chloride Treated CdTe Colloidal Quantum Dots (Small 13/2015). <i>Small</i> , 2015 , 11, 1482-1482	11	
81	Advanced Analytical Electron Microscopy: New Perspectives on Real Materials. <i>Microscopy and Microanalysis</i> , 2015 , 21, 489-490	0.5	1
80	In situ Analytical TEM of Ilmenite Reduction in Hydrogen. <i>Microscopy and Microanalysis</i> , 2015 , 21, 565-566.5	2	
79	XEDS and EELS in the TEM at Atmospheric Pressure and High Temperature. <i>Microscopy and Microanalysis</i> , 2015 , 21, 247-248	0.5	8
78	Surface Segregated AgAu Tadpole-Shaped Nanoparticles Synthesized Via a Single Step Combined Galvanic and Citrate Reduction Reaction. <i>Chemistry - A European Journal</i> , 2015 , 21, 12314-20	4.8	15
77	WSeLight-Emitting Tunneling Transistors with Enhanced Brightness at Room Temperature. <i>Nano Letters</i> , 2015 , 15, 8223-8	11.5	183
76	Controlling Size, Morphology, and Surface Composition of AgAu Nanodendrites in 15 s for Improved Environmental Catalysis under Low Metal Loadings. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 25624-32	9.5	37
75	Surface properties of nanocrystalline PbS films deposited at the water-oil interface: a study of atmospheric aging. <i>Langmuir</i> , 2015 , 31, 1445-53	4	53
74	Controlled folding of graphene: GraFold printing. <i>Nano Letters</i> , 2015 , 15, 857-63	11.5	23
73	Thin Films of Molybdenum Disulfide Doped with Chromium by Aerosol-Assisted Chemical Vapor Deposition (AACVD). <i>Chemistry of Materials</i> , 2015 , 27, 1367-1374	9.6	62
72	In Situ Synthesis of PbS Nanocrystals in Polymer Thin Films from Lead(II) Xanthate and Dithiocarbamate Complexes: Evidence for Size and Morphology Control. <i>Chemistry of Materials</i> , 2015 , 27, 2127-2136	9.6	77
71	Segregation of In to dislocations in InGaN. <i>Nano Letters</i> , 2015 , 15, 923-30	11.5	49
70	Light-emitting diodes by band-structure engineering in van der Waals heterostructures. <i>Nature Materials</i> , 2015 , 14, 301-6	27	1116
69	Grain-boundary-enhanced carrier collection in CdTe solar cells. <i>Physical Review Letters</i> , 2014 , 112, 156103.4	210	
68	Electronic properties of graphene encapsulated with different two-dimensional atomic crystals. <i>Nano Letters</i> , 2014 , 14, 3270-6	11.5	345
67	Electrochemical properties of CVD grown pristine graphene: monolayer- vs. quasi-graphene. <i>Nanoscale</i> , 2014 , 6, 1607-21	7.7	157
66	Bilayer graphene formed by passage of current through graphite: evidence for a three-dimensional structure. <i>Nanotechnology</i> , 2014 , 25, 465601	3.4	10

65	Investigation of the GaN-on-GaAs interface for vertical power device applications. <i>Journal of Applied Physics</i> , 2014 , 116, 014502	2.5	7
64	Production of few-layer phosphorene by liquid exfoliation of black phosphorus. <i>Chemical Communications</i> , 2014 , 50, 13338-41	5.8	556
63	MoS ₂ nanosheet production by the direct exfoliation of molybdenite minerals from several type-localities. <i>RSC Advances</i> , 2014 , 4, 35609-35613	3.7	32
62	The synthesis of metallic and semiconducting nanoparticles from reactive melts of precursors. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 570-580	13	39
61	Compositional variations in In(0.5)Ga(0.5)N nanorods grown by molecular beam epitaxy. <i>Nanotechnology</i> , 2014 , 25, 215705	3.4	8
60	Real-time imaging and elemental mapping of AgAu nanoparticle transformations. <i>Nanoscale</i> , 2014 , 6, 13598-605	7.7	55
59	Real-time imaging and local elemental analysis of nanostructures in liquids. <i>Chemical Communications</i> , 2014 , 50, 10019-22	5.8	52
58	Ultrastructure and Crystallography of Nanoscale Calcite Building Blocks in Rhabdosphaera clavigera Coccolith Spines. <i>Crystal Growth and Design</i> , 2014 , 14, 1710-1718	3.5	16
57	Correlating catalytic activity of Ag-Au nanoparticles with 3D compositional variations. <i>Nano Letters</i> , 2014 , 14, 1921-6	11.5	113
56	A Facile Strategy to Support Palladium Nanoparticles on Carbon Nanotubes, Employing Polyvinylpyrrolidone as a Surface Modifier. <i>European Journal of Inorganic Chemistry</i> , 2014 , 2014, 1439-1443	2.3	7
55	Comparison of solar cells sensitised by CdTe/CdSe and CdSe/CdTe core/shell colloidal quantum dots with and without a CdS outer layer. <i>Thin Solid Films</i> , 2014 , 560, 65-70	2.2	51
54	Dynamic microstructural evolution of graphite under displacing irradiation. <i>Carbon</i> , 2014 , 68, 273-284	10.4	22
53	Measurement of size-dependent composition variations for gamma prime (γ') precipitates in an advanced nickel-based superalloy. <i>Ultramicroscopy</i> , 2014 , 144, 1-8	3.1	37
52	Heterostructures produced from nanosheet-based inks. <i>Nano Letters</i> , 2014 , 14, 3987-92	11.5	147
51	Formation of barrier-type anodic films on ZE41 magnesium alloy in a fluoride/glycerol electrolyte. <i>Electrochimica Acta</i> , 2014 , 138, 124-131	6.7	22
50	Kink Band Formation in Graphite under Ion Irradiation at 100 and 298 K. <i>Materials Transactions</i> , 2014 , 55, 447-450	1.3	5
49	Understanding the limitations of the Super-X energy dispersive x-ray spectrometer as a function of specimen tilt angle for tomographic data acquisition in the S/TEM. <i>Journal of Physics: Conference Series</i> , 2014 , 522, 012025	0.3	8
48	On the diffusion mechanisms of fine-scale γ' in an advanced Ni-based superalloy. <i>MATEC Web of Conferences</i> , 2014 , 14, 09002	0.3	1

47	Applications of Aberration Corrected TEM and Exit Wavefunction Reconstruction to Materials Science. <i>Microscopy and Microanalysis</i> , 2014 , 20, 930-931	0.5	
46	Atom-by-Atom STEM Investigation of Defect Engineering in Graphene. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1736-1737	0.5	2
45	X-ray energy-dispersive spectrometry during in situ liquid cell studies using an analytical electron microscope. <i>Microscopy and Microanalysis</i> , 2014 , 20, 323-9	0.5	56
44	Correlative tomography. <i>Scientific Reports</i> , 2014 , 4, 4711	4.9	97
43	In-situ observation and atomic resolution imaging of the ion irradiation induced amorphisation of graphene. <i>Scientific Reports</i> , 2014 , 4, 6334	4.9	49
42	Understanding Individual Defects in CdTe Solar Cells: From Atomic Structure to Electrical Activity. <i>Microscopy and Microanalysis</i> , 2014 , 20, 518-519	0.5	1
41	Dielectric nanosheets made by liquid-phase exfoliation in water and their use in graphene-based electronics. <i>2D Materials</i> , 2014 , 1, 011012	5.9	45
40	Iron redistribution in a zirconium alloy after neutron and proton irradiation studied by energy-dispersive X-ray spectroscopy (EDX) using an aberration-corrected (scanning) transmission electron microscope. <i>Journal of Nuclear Materials</i> , 2014 , 454, 387-397	3.3	42
39	Precise control of interface anisotropy during deposition of Co/Pd multilayers. <i>Journal of Applied Physics</i> , 2014 , 116, 203903	2.5	5
38	Si Interdiffusion within Grains and Grain Boundaries in CdTe Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2014 , 4, 1636-1643	3.7	23
37	Total Ionizing Dose Effects on hBN Encapsulated Graphene Devices. <i>IEEE Transactions on Nuclear Science</i> , 2014 , 61, 2868-2873	1.7	24
36	Atomic resolution electrostatic potential mapping of graphene sheets by off-axis electron holography. <i>Journal of Applied Physics</i> , 2014 , 115, 233709	2.5	16
35	A conspicuous clay ovoid in Nakhla: evidence for subsurface hydrothermal alteration on Mars with implications for astrobiology. <i>Astrobiology</i> , 2014 , 14, 651-93	3.7	27
34	New capabilities for π colouring in the chemistry of crystal defects atom-by-atom. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2014 , 70, 521-523	1.7	
33	Probing the core-shell-shell structure of CdSe/CdTe/CdS type II quantum dots for solar cell applications. <i>Journal of Physics: Conference Series</i> , 2014 , 522, 012069	0.3	3
32	Reversible loss of Bernal stacking during the deformation of few-layer graphene in nanocomposites. <i>ACS Nano</i> , 2013 , 7, 7287-94	16.7	61
31	Recording low and high spatial frequencies in exit wave reconstructions. <i>Ultramicroscopy</i> , 2013 , 133, 26-34	3.1	13
30	Vertical field-effect transistor based on graphene-WS ₂ heterostructures for flexible and transparent electronics. <i>Nature Nanotechnology</i> , 2013 , 8, 100-3	28.7	1342

29	Exit wave reconstruction from focal series of HRTEM images, single crystal XRD and total energy studies on SbxWO_{3+y} ($x \sim 0.11$). <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2012 , 227, 341-349 ¹		5
28	Cross-sectional imaging of individual layers and buried interfaces of graphene-based heterostructures and superlattices. <i>Nature Materials</i> , 2012 , 11, 764-7	27	664
27	Recent developments in transmission electron microscopy and their application for nanoparticle characterisation. <i>SPR Nanoscience</i> , 2012 , 89-101	3	1
26	CVD graphene vs. highly ordered pyrolytic graphite for use in electroanalytical sensing. <i>Analyst, The</i> , 2012 , 137, 833-9	5	32
25	High Resolution ExitWave Restoration. <i>Nanostructure Science and Technology</i> , 2012 , 41-72	0.9	2
24	Direct Measurement of the Crystallographically Sensitive Atomic Termination of Nanophase Cerium Dioxide. <i>Journal of Physics: Conference Series</i> , 2012 , 371, 012072	0.3	
23	New routes to copper sulfide nanostructures and thin films. <i>Journal of Materials Chemistry</i> , 2011 , 21, 17888		65
22	Optimized conditions for imaging the effects of bonding charge density in electron microscopy. <i>Ultramicroscopy</i> , 2011 , 111, 901-11	3.1	7
21	Imaging the active surfaces of cerium dioxide nanoparticles. <i>ChemPhysChem</i> , 2011 , 12, 2397-9	3.2	20
20	Inside Cover: Imaging the Active Surfaces of Cerium Dioxide Nanoparticles (ChemPhysChem 13/2011). <i>ChemPhysChem</i> , 2011 , 12, 2358-2358	3.2	
19	Aberration-Corrected Imaging in CTEM 2011 , 241-261		0
18	Finding phase information in the darkness. <i>Journal of Physics: Conference Series</i> , 2010 , 241, 012013	0.3	1
17	Exceeding conventional resolution limits in high-resolution transmission electron microscopy using tilted illumination and exit-wave restoration. <i>Microscopy and Microanalysis</i> , 2010 , 16, 409-15	0.5	6
16	Synthesis and Structural Characterization of Branched Palladium Nanostructures. <i>Advanced Materials</i> , 2009 , 21, 2288-2293	24	115
15	Aberration Correction and Exit Wave Reconstruction Using Tilt Azimuth Data. <i>Microscopy and Microanalysis</i> , 2009 , 15, 1472-1473	0.5	
14	Atomic structure imaging beyond conventional resolution limits in the transmission electron microscope. <i>Physical Review Letters</i> , 2009 , 103, 126101	7.4	17
13	Real-space Measurements of Bonding Charge Density in Aberration-corrected High Resolution Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2009 , 15, 1478-1479	0.5	
12	Optimal tilt magnitude determination for aberration-corrected super resolution exit wave function reconstruction. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2009 , 367, 3755-71	3	17

11	Chapter 8 Aberration-Corrected Imaging in Conventional Transmission Electron Microscopy and Scanning Transmission Electron Microscopy. <i>Advances in Imaging and Electron Physics</i> , 2008 , 283-325	0.2	3
10	High-resolution TEM and the application of direct and indirect aberration correction. <i>Microscopy and Microanalysis</i> , 2008 , 14, 60-7	0.5	15
9	Transmission electron microscopy without aberrations: Applications to materials science. <i>Current Applied Physics</i> , 2008 , 8, 425-428	2.6	9
8	Ultrahigh resolution imaging of local structural distortions in intergrowth tungsten bronzes. <i>Ultramicroscopy</i> , 2007 , 107, 501-6	3.1	6
7	High-Pressure High-Temperature Synthesis of Nanostructural Magnesium Diboride for Electromotors and Devices Working at Liquid Hydrogen Temperatures. <i>Advances in Science and Technology</i> , 2006 , 47, 25-30	0.1	5
6	Chemical interactions in Ti doped MgB ₂ superconducting bulk samples and wires. <i>Superconductor Science and Technology</i> , 2005 , 18, 1190-1196	3.1	24
5	Gold-Rhodium Nanoflowers for the Plasmon-Enhanced Hydrogen Evolution Reaction under Visible Light. <i>ACS Catalysis</i> , 13543-13555	13.1	7
4	Iron, Nitrogen Co-Doped Carbon Spheres as Low Cost, Scalable Electrocatalysts for the Oxygen Reduction Reaction. <i>Advanced Functional Materials</i> , 2102974	15.6	12
3	Interfacial ferroelectricity in marginally twisted 2D semiconductors		2
2	Development and analysis of novel mission scenarios based on Atmosphere-Breathing Electric Propulsion (ABEP). <i>CEAS Space Journal</i> , 1	1.2	1
1	Controlling and Monitoring Crack Propagation in Monolayer Graphene Single Crystals. <i>Advanced Functional Materials</i> , 2202373	15.6	