Sarah Haigh

List of Publications by Year
in descending order

263 papers	16,450 citations	28242 55 h-index	17090 122 g-index
280 all docs	280 docs citations	280 times ranked	23422 citing authors

#	Article	IF	Citations
1	Vertical field-effect transistor based on grapheneâ€“WS2 heterostructures for flexible and transparent electronics. Nature Nanotechnology, 2013, 8, 100-103.	15.6	1,543
2	Light-emitting diodes by band-structure engineering in van der Waals heterostructures. Nature Materials, 2015, 14, 301-306.	13.3	1,397
3	Tunable sieving of ions using graphene oxide membranes. Nature Nanotechnology, 2017, 12, 546-550.	15.6	1,364
4	Cross-sectional imaging of individual layers and buried interfaces of graphene-based heterostructures and superlattices. Nature Materials, 2012, 11, 764-767.	13.3	796
5	Production of few-layer phosphorene by liquid exfoliation of black phosphorus. Chemical Communications, 2014, 50, 13338-13341.	2.2	667
6	Molecular transport through capillaries made with atomic-scale precision. Nature, 2016, 538, 222-225.	13.7	483
7	Electronic Properties of Graphene Encapsulated with Different Two-Dimensional Atomic Crystals. Nano Letters, 2014, 14, 3270-3276.	4.5	433
8	Quality Heterostructures from Two-Dimensional Crystals Unstable in Air by Their Assembly in Inert Atmosphere. Nano Letters, 2015, 15, 4914-4921.	4.5	358
9	Desalination and Nanofiltration through Functionalized Laminar MoS₂ Membranes. ACS Nano, 2017, 11, 11082-11090.	7.3	275
10	Grain-Boundary-Enhanced Carrier Collection in CdTe Solar Cells. Physical Review Letters, 2014, 112, 156103.	2.9	258
11	Atomic reconstruction in twisted bilayers of transition metal dichalcogenides. Nature Nanotechnology, 2020, 15, 592-597.	15.6	245
12	WSe₂ Light-Emitting Tunneling Transistors with Enhanced Brightness at Room Temperature. Nano Letters, 2015, 15, 8223-8228.	4.5	231
13	Galvanic replacement reaction: recent developments for engineering metal nanostructures towards catalytic applications. Chemical Communications, 2017, 53, 7135-7148.	2.2	222
14	Tin(II) Sulfide (SnS) Nanosheets by Liquid-Phase Exfoliation of Herzenbergite: IVâ€“VI Main Group Two-Dimensional Atomic Crystals. Journal of the American Chemical Society, 2015, 137, 12689-12696.	6.6	220
15	Nanostructured Aptamer-Functionalized Black Phosphorus Sensing Platform for Label-Free Detection of Myoglobin, a Cardiovascular Disease Biomarker. ACS Applied Materials & Interfaces, 2016, 8, 22860-22868.	4.0	208
16	Electrochemical properties of CVD grown pristine graphene: monolayer- vs. quasi-graphene. Nanoscale, 2014, 6, 1607-1621.	2.8	177
17	Capillary condensation under atomic-scale confinement. Nature, 2020, 588, 250-253.	13.7	168
18	Heterostructures Produced from Nanosheet-Based Inks. Nano Letters, 2014, 14, 3987-3992.	4.5	165

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19	Mechanisms of Liquid-Phase Exfoliation for the Production of Graphene. ACS Nano, 2020, 14, 10976-10985.	7.3	157
20	Caesium incorporation and retention in illite interlayers. Applied Clay Science, 2015, 108, 128-134.	2.6	155
21	Ballistic molecular transport through two-dimensional channels. Nature, 2018, 558, 420-424.	13.7	139
22	Van der Waals pressure and its effect on trapped interlayer molecules. Nature Communications, 2016, 7, 12168.	5.8	137
23	Synthesis of Lateral Size-Controlled Monolayer 1H-MoS₂@Oleylamine as Supercapacitor Electrodes.. Chemistry of Materials, 2016, 28, 657-664.	3.2	134
24	Synthesis and Structural Characterization of Branched Palladium Nanostructures. Advanced Materials, 2009, 21, 2288-2293.	11.1	124
25	Correlative Tomography. Scientific Reports, 2014, 4, 4711.	1.6	124
26	Correlating Catalytic Activity of Agâ€“Au Nanoparticles with 3D Compositional Variations. Nano Letters, 2014, 14, 1921-1926.	4.5	119
27	Investigation of dealloying of S phase (Al 2 CuMg) in AA 2024-T3 aluminium alloy using high resolution 2D and 3D electron imaging. Corrosion Science, 2016, 103, 157-164.	3.0	119
28	Interfacial ferroelectricity in marginally twisted 2D semiconductors. Nature Nanotechnology, 2022, 17, 390-395.	15.6	115
29	Biosynthesis and Characterization of Copper Nanoparticles Using Shewanella oneidensis: Application for Click Chemistry. Small, 2018, 14, 1703145.	5.2	112
30	Mechanistic study of non-thermal plasma assisted CO2 hydrogenation over Ru supported on MgAl layered double hydroxide. Applied Catalysis B: Environmental, 2020, 268, 118752.	10.8	101
31	Nanometer Resolution Elemental Mapping in Graphene-Based TEM Liquid Cells. Nano Letters, 2018, 18, 1168-1174.	4.5	99
32	Atomic-Scale Insights into the Oxidation of Aluminum. ACS Applied Materials & Interfaces, 2018, 10, 2230-2235.	4.0	95
33	The benefits of very low earth orbit for earth observation missions. Progress in Aerospace Sciences, 2020, 117, 100619.	6.3	95
34	Exfoliation of natural van der Waals heterostructures to a single unit cell thickness. Nature Communications, 2017, 8, 14410.	5.8	93
35	Micromagnetometry of two-dimensional ferromagnets. Nature Electronics, 2019, 2, 457-463.	13.1	93
36	Controlling Reaction Selectivity over Hybrid Plasmonic Nanocatalysts. Nano Letters, 2018, 18, 7289-7297.	4.5	92

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37	Nearâ€Unity Quantum Yields from Chloride Treated CdTe Colloidal Quantum Dots. Small, 2015, 11, 1548-1554.	5.2	86
38	In Situ Synthesis of PbS Nanocrystals in Polymer Thin Films from Lead(II) Xanthate and Dithiocarbamate Complexes: Evidence for Size and Morphology Control. Chemistry of Materials, 2015, 27, 2127-2136.	3.2	84
39	Compositional variations for small-scale gamma prime (Î³â€²) precipitates formed at different cooling rates in an advanced Ni-based superalloy. Acta Materialia, 2015, 85, 199-206.	3.8	81
40	Thin Films of Molybdenum Disulfide Doped with Chromium by Aerosol-Assisted Chemical Vapor Deposition (AACVD). Chemistry of Materials, 2015, 27, 1367-1374.	3.2	78
41	Surface Properties of Nanocrystalline PbS Films Deposited at the Waterâ€“Oil Interface: A Study of Atmospheric Aging. Langmuir, 2015, 31, 1445-1453.	1.6	74
42	STEM-EDX tomography of bimetallic nanoparticles: A methodological investigation. Ultramicroscopy, 2016, 162, 61-73.	0.8	74
43	Self-assembly of a layered two-dimensional molecularly woven fabric. Nature, 2020, 588, 429-435.	13.7	74
44	Magnetoresistance of vertical Co-graphene-NiFe junctions controlled by charge transfer and proximity-induced spin splitting in graphene. 2D Materials, 2017, 4, 031004.	2.0	73
45	New routes to copper sulfide nanostructures and thin films. Journal of Materials Chemistry, 2011, 21, 17888.	6.7	70
46	The Effects of Extensive Glomerular Filtration of Thin Graphene Oxide Sheets on Kidney Physiology. ACS Nano, 2016, 10, 10753-10767.	7.3	70
47	An investigation of diffusion-mediated cyclic coarsening and reversal coarsening in an advanced Ni-based superalloy. Acta Materialia, 2016, 110, 295-305.	3.8	69
48	Reversible Loss of Bernal Stacking during the Deformation of Few-Layer Graphene in Nanocomposites. ACS Nano, 2013, 7, 7287-7294.	7.3	68
49	X-ray Energy-Dispersive Spectrometry During In Situ Liquid Cell Studies Using an Analytical Electron Microscope. Microscopy and Microanalysis, 2014, 20, 323-329.	0.2	66
50	Atomically Dispersed Copper Sites in a Metalâ€“Organic Framework for Reduction of Nitrogen Dioxide. Journal of the American Chemical Society, 2021, 143, 10977-10985.	6.6	66
51	Real-time imaging and elemental mapping of AgAu nanoparticle transformations. Nanoscale, 2014, 6, 13598-13605.	2.8	64
52	Asymmetric MoS₂/Graphene/Metal Sandwiches: Preparation, Characterization, and Application. Advanced Materials, 2016, 28, 8256-8264.	11.1	64
53	Atomic Defects and Doping of Monolayer NbSe₂. ACS Nano, 2017, 11, 2894-2904.	7.3	63
54	Solution processing of two-dimensional black phosphorus. Chemical Communications, 2017, 53, 1445-1458.	2.2	63

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55	Indirect to Direct Gap Crossover in Two-Dimensional InSe Revealed by Angle-Resolved Photoemission Spectroscopy. ACS Nano, 2019, 13, 2136-2142.	7.3	63
56	In-situ observation and atomic resolution imaging of the ion irradiation induced amorphisation of graphene. Scientific Reports, 2014, 4, 6334.	1.6	62
57	Raman Fingerprints of Graphene Produced by Anodic Electrochemical Exfoliation. Nano Letters, 2020, 20, 3411-3419.	4.5	59
58	Enhanced organophilic separations with mixed matrix membranes of polymers of intrinsic microporosity and graphene-like fillers. Journal of Membrane Science, 2017, 526, 437-449.	4.1	57
59	Real-time imaging and local elemental analysis of nanostructures in liquids. Chemical Communications, 2014, 50, 10019-10022.	2.2	56
60	Comparison of solar cells sensitised by CdTe/CdSe and CdSe/CdTe core/shell colloidal quantum dots with and without a CdS outer layer. Thin Solid Films, 2014, 560, 65-70.	0.8	55
61	Segregation of In to Dislocations in InGaN. Nano Letters, 2015, 15, 923-930.	4.5	54
62	Stacking Order in Graphite Films Controlled by van der Waals Technology. Nano Letters, 2019, 19, 8526-8532.	4.5	54
63	Observing Imperfection in Atomic Interfaces for van der Waals Heterostructures. Nano Letters, 2017, 17, 5222-5228.	4.5	53
64	Infrared-to-violet tunable optical activity in atomic films of GaSe, InSe, and their heterostructures. 2D Materials, 2018, 5, 041009.	2.0	52
65	Laser-writable high-k dielectric for van der Waals nanoelectronics. Science Advances, 2019, 5, eaau0906.	4.7	51
66	Splenic Capture and In Vivo Intracellular Biodegradation of Biological-Grade Graphene Oxide Sheets. ACS Nano, 2020, 14, 10168-10186.	7.3	51
67	Purification of Propylene and Ethylene by a Robust Metalâ€“Organic Framework Mediated by Hostâ€“Guest Interactions. Angewandte Chemie - International Edition, 2021, 60, 15541-15547.	7.2	51
68	Dielectric nanosheets made by liquid-phase exfoliation in water and their use in graphene-based electronics. 2D Materials, 2014, 1, 011012.	2.0	49
69	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. Journal of Nuclear Materials, 2014, 454, 387-397.	1.3	49
70	Large magnetoelectric coupling in multiferroic oxide heterostructures assembled via epitaxial lift-off. Nature Communications, 2020, 11, 3190.	5.8	48
71	Self-catalytic membrane photo-reactor made of carbon nitride nanosheets. Journal of Materials Chemistry A, 2016, 4, 11666-11671.	5.2	47
72	Anomalous twin boundaries in two dimensional materials. Nature Communications, 2018, 9, 3597.	5.8	46

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73	MXene Tunable Lamellae Architectures for Supercapacitor Electrodes. ACS Applied Energy Materials, 2020, 3, 411-422.	2.5	46
74	Pillared Mo₂TiC₂ MXene for high-power and long-life lithium and sodium-ion batteries. Nanoscale Advances, 2021, 3, 3145-3158.	2.2	46
75	The synthesis of metallic and semiconducting nanoparticles from reactive melts of precursors. Journal of Materials Chemistry A, 2014, 2, 570-580.	5.2	45
76	Measurement of size-dependent composition variations for gamma prime (Î³â€²) precipitates in an advanced nickel-based superalloy. Ultramicroscopy, 2014, 144, 1-8.	0.8	45
77	Transport of hydrogen isotopes through interlayer spacing in van der Waals crystals. Nature Nanotechnology, 2018, 13, 468-472.	15.6	45
78	Atomically thin micas as proton-conducting membranes. Nature Nanotechnology, 2019, 14, 962-966.	15.6	45
79	RF Helicon-based Inductive Plasma Thruster (IPT) Design for an Atmosphere-Breathing Electric Propulsion system (ABEP). Acta Astronautica, 2020, 176, 476-483.	1.7	45
80	Scalable Patterning of Encapsulated Black Phosphorus. Nano Letters, 2018, 18, 5373-5381.	4.5	43
81	Nonreciprocal superconducting NbSe2 antenna. Nature Communications, 2020, 11, 5634.	5.8	43
82	Controlling Size, Morphology, and Surface Composition of AgAu Nanodendrites in 15 s for Improved Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Interfaces, 2015, 7, 25624-25632.	4.0	42
83	Sequential bottom-up and top-down processing for the synthesis of transition metal dichalcogenide nanosheets: the case of rhenium disulfide (ReS₂). Chemical Communications, 2016, 52, 7878-7881.	2.2	42
84	A review of gas-surface interaction models for orbital aerodynamics applications. Progress in Aerospace Sciences, 2020, 119, 100675.	6.3	41
85	MoS₂ nanosheet production by the direct exfoliation of molybdenite minerals from several type-localities. RSC Advances, 2014, 4, 35609-35613.	1.7	40
86	Metal-organic framework templated electrodeposition of functional gold nanostructures. Electrochimica Acta, 2016, 222, 361-369.	2.6	40
87	Ion exchange in atomically thin clays and micas. Nature Materials, 2021, 20, 1677-1682.	13.3	40
88	Au@HgxCd1-xTe core@shell nanorods by sequential aqueous cation exchange for near-infrared photodetectors. Nano Energy, 2019, 57, 57-65.	8.2	38
89	Direct synthesis of MoS₂ or MoO₃via thermolysis of a dialkyl dithiocarbamato molybdenum(<scp>iv</scp>) complex. Chemical Communications, 2019, 55, 99-102.	2.2	38
90	The application of in situ analytical transmission electron microscopy to the study of preferential intergranular oxidation in Alloy 600. Ultramicroscopy, 2017, 176, 46-51.	0.8	37

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91	Oleylamine Aging of PtNi Nanoparticles Giving Enhanced Functionality for the Oxygen Reduction Reaction. Nano Letters, 2021, 21, 3989-3996.	4.5	37
92	Quantitative Energy-Dispersive X-Ray Analysis of Catalyst Nanoparticles Using a Partial Cross Section Approach. Microscopy and Microanalysis, 2016, 22, 71-81.	0.2	36
93	Heterostructures formed through abraded van der Waals materials. Nature Communications, 2020, 11, 3047.	5.8	36
94	High-performance polymer electrolyte membranes incorporated with 2D silica nanosheets in high-temperature proton exchange membrane fuel cells. Journal of Energy Chemistry, 2022, 64, 323-334.	7.1	36
95	Goldâ€“Rhodium Nanoflowers for the Plasmon-Enhanced Hydrogen Evolution Reaction under Visible Light. ACS Catalysis, 2021, 11, 13543-13555.	5.5	36
96	Formation and Healing of Defects in Atomically Thin GaSe and InSe. ACS Nano, 2019, 13, 5112-5123.	7.3	35
97	Iron, Nitrogen Coâ€Doped Carbon Spheres as Low Cost, Scalable Electrocatalysts for the Oxygen Reduction Reaction. Advanced Functional Materials, 2021, 31, 2102974.	7.8	35
98	Synthesis and characterization of composite membranes made of graphene and polymers of intrinsic microporosity. Carbon, 2016, 102, 357-366.	5.4	34
99	CVDgraphenevs. highly ordered pyrolytic graphite for use in electroanalytical sensing. Analyst, The, 2012, 137, 833-839.	1.7	33
100	Dynamic microstructural evolution of graphite under displacing irradiation. Carbon, 2014, 68, 273-284.	5.4	33
101	Multiscale correlative tomography: an investigation of creep cavitation in 316 stainless steel. Scientific Reports, 2017, 7, 7332.	1.6	33
102	Ultra-thin van der Waals crystals as semiconductor quantum wells. Nature Communications, 2020, 11, 125.	5.8	33
103	Intake design for an Atmosphere-Breathing Electric Propulsion System (ABEP). Acta Astronautica, 2021, 187, 225-235.	1.7	33
104	A Conspicuous Clay Ovoid in Nakhla: Evidence for Subsurface Hydrothermal Alteration on Mars with Implications for Astrobiology. Astrobiology, 2014, 14, 651-693.	1.5	32
105	Two-Dimensional Covalent Crystals by Chemical Conversion of Thin van der Waals Materials. Nano Letters, 2019, 19, 6475-6481.	4.5	32
106	Non-rigid registration and non-local principle component analysis to improve electron microscopy spectrum images. Nanotechnology, 2016, 27, 364001.	1.3	30
107	Porous Silica-Pillared MXenes with Controllable Interlayer Distances for Long-Life Na-Ion Batteries. Langmuir, 2020, 36, 4370-4382.	1.6	30
108	Comparing Xe⁺pFIB and Ga⁺FIB for TEM sample preparation of Al alloys: Minimising FIBâ€induced artefacts. Journal of Microscopy, 2021, 282, 101-112.	0.8	29

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109	Sâ€“Te Interdiffusion within Grains and Grain Boundaries in CdTe Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 1636-1643.	1.5	28
110	Single-Source Precursor for Tungsten Dichalcogenide Thin Films: Mo_{1â€“x}W_xS₂ (0 â‰¤ x â‰¤ 1) Alloys by Aerosol-Assisted Chemical Vapor Deposition. Chemistry of Materials, 2017, 29, 3858-3862.	3.2	28
111	Black phosphorus with near-superhydrophobic properties and long-term stability in aqueous media. Chemical Communications, 2018, 54, 3831-3834.	2.2	28
112	Surfactant-free Synthesis of Spiky Hollow Agâ€“Au Nanostars with Chemically Exposed Surfaces for Enhanced Catalysis and Single-Particle SERS. Jacs Au, 2022, 2, 178-187.	3.6	28
113	Chemical interactions in Ti doped MgB2superconducting bulk samples and wires. Superconductor Science and Technology, 2005, 18, 1190-1196.	1.8	27
114	Total Ionizing Dose Effects on hBN Encapsulated Graphene Devices. IEEE Transactions on Nuclear Science, 2014, 61, 2868-2873.	1.2	27
115	Controlled Folding of Graphene: GraFold Printing. Nano Letters, 2015, 15, 857-863.	4.5	27
116	Role of 2D and 3D defects on the reduction of LaNiO3 nanoparticles for catalysis. Scientific Reports, 2017, 7, 10080.	1.6	27
117	In-orbit aerodynamic coefficient measurements using SOAR (Satellite for Orbital Aerodynamics) Tj ETQq1 1 0.784314 rgBT /Overlock	1.7	27
118	Atomic Structure Imaging Beyond Conventional Resolution Limits in the Transmission Electron Microscope. Physical Review Letters, 2009, 103, 126101.	2.9	26
119	Formation of barrier-type anodic films on ZE41 magnesium alloy in a fluoride/glycerol electrolyte. Electrochimica Acta, 2014, 138, 124-131.	2.6	26
120	Nano-particle precipitation in mechanically alloyed and annealed precursor powders of legacy PM2000 ODS alloy. Journal of Nuclear Materials, 2015, 464, 200-209.	1.3	24
121	Multiscale 3D analysis of creep cavities in AISI type 316 stainless steel. Materials Science and Technology, 2015, 31, 522-534.	0.8	24
122	Chemical vapor deposition of tin sulfide from diorganotin(IV) dixanthates. Journal of Materials Science, 2019, 54, 2315-2323.	1.7	24
123	Stability and stoichiometry of L12 Al3(Sc,Zr) dispersoids in Al-(Si)-Sc-Zr alloys. Acta Materialia, 2021, 216, 117117.	3.8	24
124	Dual Functionalization of Liquidâ€Exfoliated Semiconducting 2Hâ€MoS₂ with Lanthanide Complexes Bearing Magnetic and Luminescence Properties. Advanced Functional Materials, 2017, 27, 1703646.	7.8	23
125	Synthesis of Bi_{2â^’2x}Sb_{2x}S₃ (0 â‰¤ x â‰¤ 1) solid solutions from solventless thermolysis of metal xanthate precursors. Journal of Materials Chemistry C, 2018, 6, 12652-12659.	2.7	23
126	Enhanced Superconductivity in Few-Layer TaS₂ due to Healing by Oxygenation. Nano Letters, 2020, 20, 3808-3818.	4.5	23

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127	Solution-Processed HfO_x for Half-Volt Operation of InGaZnO Thin-Film Transistors. ACS Applied Electronic Materials, 2019, 1, 1581-1589.	2.0	22
128	Synthesis of new M-layer solid-solution 312 MAX phases (Ta_{1â^'x}Ti_x)₃AlC₂ (x = 0.4, 0.62,) Tj ETQq1 1 0.0 0 rgBT /Overlock	0.7	22
129	An in situ and ex situ TEM study into the oxidation of titanium (IV) sulphide. Npj 2D Materials and Applications, 2017, 1, .	3.9	21
130	Imaging the Active Surfaces of Cerium Dioxide Nanoparticles. ChemPhysChem, 2011, 12, 2397-2399.	1.0	20
131	Hydrogen evolution and capacitance behavior of Au/Pd nanoparticle-decorated graphene heterostructures. Applied Materials Today, 2017, 8, 125-131.	2.3	20
132	Confinement Effects and Charge Dynamics in Zn₃N₂ Colloidal Quantum Dots: Implications for QD-LED Displays. ACS Applied Nano Materials, 2019, 2, 7214-7219.	2.4	20
133	Design-controlled synthesis of IrO₂ sub-monolayers on Au nanoflowers: marrying plasmonic and electrocatalytic properties. Nanoscale, 2020, 12, 12281-12291.	2.8	20
134	A structured catalyst support combining electrochemically exfoliated graphene oxide and carbon black for enhanced performance and durability in low-temperature hydrogen fuel cells. Energy, 2021, 226, 120318.	4.5	20
135	Unraveling the H₂ Promotional Effect on Palladium-Catalyzed CO Oxidation Using a Combination of Temporally and Spatially Resolved Investigations. ACS Catalysis, 2018, 8, 8255-8262.	5.5	19
136	The influence of precursor on rhenium incorporation into Re-doped MoS₂ (Mo_{1â^'x}Re_xS₂) thin films by aerosol-assisted chemical vapour deposition (AACVD). Journal of Materials Chemistry C, 2017, 5, 9044-9052.	2.7	18
137	Imaging Three-Dimensional Elemental Inhomogeneity in Ptâ€“Ni Nanoparticles Using Spectroscopic Single Particle Reconstruction. Nano Letters, 2019, 19, 732-738.	4.5	18
138	Self-Limiting Growth of Two-Dimensional Palladium between Graphene Oxide Layers. Nano Letters, 2019, 19, 4678-4683.	4.5	18
139	In Situ TEM Imaging of Solutionâ€Phase Chemical Reactions Using 2Dâ€Heterostructure Mixing Cells. Advanced Materials, 2021, 33, e2100668.	11.1	18
140	Optimal tilt magnitude determination for aberration-corrected super resolution exit wave function reconstruction. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 3755-3771.	1.6	17
141	Atomic resolution electrostatic potential mapping of graphene sheets by off-axis electron holography. Journal of Applied Physics, 2014, 115, .	1.1	17
142	Ultrastructure and Crystallography of Nanoscale Calcite Building Blocks in Rhabdosphaera clavigera Coccolith Spines. Crystal Growth and Design, 2014, 14, 1710-1718.	1.4	17
143	Surface Segregated AgAu Tadpoleâ€Shaped Nanoparticles Synthesized Via a Single Step Combined Galvanic and Citrate Reduction Reaction. Chemistry - A European Journal, 2015, 21, 12314-12320.	1.7	17
144	Convergent beam electron holography for analysis of van der Waals heterostructures. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7473-7478.	3.3	17

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145	Synthesis of copper catalysts for click chemistry from distillery wastewater using magnetically recoverable bionanoparticles. Green Chemistry, 2019, 21, 4020-4024.	4.6	17
146	Characterising porosity in platinum nanoparticles. Nanoscale, 2019, 11, 17791-17799.	2.8	17
147	Photocatalytic hydrogen production by biomimetic indium sulfide using Mimosa pudica leaves as template. International Journal of Hydrogen Energy, 2019, 44, 2770-2783.	3.8	17
148	Dislocation core structures in (0001) InGaN. Journal of Applied Physics, 2016, 119, .	1.1	16
149	Synthetic 2-D lead tin sulfide nanosheets with tuneable optoelectronic properties from a potentially scalable reaction pathway. Chemical Science, 2019, 10, 1035-1045.	3.7	16
150	Electrically pumped WSe2-based light-emitting van der Waals heterostructures embedded in monolithic dielectric microcavities. 2D Materials, 2020, 7, 031006.	2.0	16
151	High-Resolution TEM and the Application of Direct and Indirect Aberration Correction. Microscopy and Microanalysis, 2008, 14, 60-67.	0.2	15
152	In Situ Industrial Bimetallic Catalyst Characterization using Scanning Transmission Electron Microscopy and Xâ€ray Absorption Spectroscopy at One Atmosphere and Elevated Temperature. ChemPhysChem, 2017, 18, 2151-2156.	1.0	15
153	Magnetoresistance in Co-hBN-NiFe Tunnel Junctions Enhanced by Resonant Tunneling through Single Defects in Ultrathin hBN Barriers. Nano Letters, 2018, 18, 6954-6960.	4.5	15
154	Beyond surface redox and oxygen mobility at pd-polar ceria (100) interface: Underlying principle for strong metal-support interactions in green catalysis. Applied Catalysis B: Environmental, 2020, 270, 118843.	10.8	15
155	Correlation of the ratio of metallic to oxide species with activity of PdPt catalysts for methane oxidation. Catalysis Science and Technology, 2020, 10, 1408-1421.	2.1	15
156	Gas permeation through graphdiyne-based nanoporous membranes. Nature Communications, 2022, 13, .	5.8	15
157	Recording low and high spatial frequencies in exit wave reconstructions. Ultramicroscopy, 2013, 133, 26-34.	0.8	14
158	High magnetic relaxivity in a fluorescent CdSe/CdS/ZnS quantum dot functionalized with MRI contrast molecules. Chemical Communications, 2017, 53, 10500-10503.	2.2	14
159	Diatom Frustules as a Biomineralized Scaffold for the Growth of Molybdenum Disulfide Nanosheets. Chemistry of Materials, 2016, 28, 5582-5586.	3.2	13
160	Liquid Exfoliation of Ni₂P₂S₆: Structural Characterization, Size-Dependent Properties, and Degradation. Chemistry of Materials, 2019, 31, 9127-9139.	3.2	13
161	Rapid and Low-Temperature Molecular Precursor Approach toward Ternary Layered Metal Chalcogenides and Oxides: Mo_{1â€“x}W_xS₂ and Mo_{1â€“x}W_xO₃ Alloys (0 â‰¤ x â‰¤ 1). Chemistry of Materials, 2020, 32, 7895-7907.	3.2	13
162	Atomic Resolution Imaging of CrBr3 Using Adhesion-Enhanced Grids. Nano Letters, 2020, 20, 6582-6589.	4.5	13

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163	An in-situ method for protecting internal cracks/pores from ion beam damage and reducing curtaining for TEM sample preparation using FIB. Ultramicroscopy, 2020, 219, 113135.	0.8	13
164	Automated Single-Particle Reconstruction of Heterogeneous Inorganic Nanoparticles. Microscopy and Microanalysis, 2020, 26, 1168-1175.	0.2	13
165	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. Journal of Physics: Conference Series, 2014, 522, 012025.	0.3	12
166	Transmission electron microscopy without aberrations: Applications to materials science. Current Applied Physics, 2008, 8, 425-428.	1.1	11
167	Bilayer graphene formed by passage of current through graphite: evidence for a three-dimensional structure. Nanotechnology, 2014, 25, 465601.	1.3	11
168	Preparation of low-dimensional carbon material-based metal nanocomposites using a polarizable organic/water interface. Journal of Materials Research, 2015, 30, 2679-2687.	1.2	11
169	Compositional quantification of PtCo acid-leached fuel cell catalysts using EDX partial cross sections. Materials Science and Technology, 2016, 32, 248-253.	0.8	11
170	Development and analysis of novel mission scenarios based on Atmosphere-Breathing Electric Propulsion (ABEP). CEAS Space Journal, 2022, 14, 689-706.	1.1	11
171	Precise control of interface anisotropy during deposition of Co/Pd multilayers. Journal of Applied Physics, 2014, 116, .	1.1	10
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