Sarah Haigh

List of Publications by Year in descending order

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263 papers 16,450 citations

28274 55 h-index 122 g-index

280 all docs

280 docs citations

times ranked

280

23422 citing authors

#	Article	IF	CITATIONS
1	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.	12.9	36
2	Reply to: Random interstratification in hydrated graphene oxide membranes and implications for seawater desalination. Nature Nanotechnology, 2022, 17, 134-135.	31.5	5
3	Elucidating heterogeneous iron biomineralization patterns in a denitrifying As(<scp>iii</scp>)-oxidizing bacterium: implications for arsenic immobilization. Environmental Science: Nano, 2022, 9, 1076-1090.	4.3	5
4	Telluride Nanocrystals with Adjustable Amorphous Shell Thickness and Core–Shell Structure Modulation by Aqueous Cation Exchange. Inorganic Chemistry, 2022, 61, 3989-3996.	4.0	7
5	Hydrotalcite Colloidal Stability and Interactions with Uranium(VI) at Neutral to Alkaline pH. Langmuir, 2022, 38, 2576-2589.	3.5	8
6	Lowâ€Temperature Exsolution of Ni–Ru Bimetallic Nanoparticles from Aâ€Site Deficient Double Perovskites. Small, 2022, 18, e2107020.	10.0	7
7	Interfacial ferroelectricity in marginally twisted 2D semiconductors. Nature Nanotechnology, 2022, 17, 390-395.	31.5	115
8	Development and analysis of novel mission scenarios based on Atmosphere-Breathing Electric Propulsion (ABEP). CEAS Space Journal, 2022, 14, 689-706.	2.3	11
9	Surfactant-free Synthesis of Spiky Hollow Ag–Au Nanostars with Chemically Exposed Surfaces for Enhanced Catalysis and Single-Particle SERS. Jacs Au, 2022, 2, 178-187.	7.9	28
10	Controlling and Monitoring Crack Propagation in Monolayer Graphene Single Crystals. Advanced Functional Materials, 2022, 32, .	14.9	4
11	The modified liquid liquid interface: An electrochemical route for the electrode-less synthesis of MoS2 metal composite thin films. Electrochimica Acta, 2022, 424, 140609.	5.2	3
12	Nanocubes of Mo ₆ S ₈ Chevrel phase as active electrode material for aqueous lithium-ion batteries. Nanoscale, 2022, 14, 10125-10135.	5.6	9
13	Gas permeation through graphdiyne-based nanoporous membranes. Nature Communications, 2022, 13, .	12.8	15
14	Comparing Xe ⁺ pFIB and Ga ⁺ FIB for TEM sample preparation of Al alloys: Minimising FIBâ€induced artefacts. Journal of Microscopy, 2021, 282, 101-112.	1.8	29
15	Magnetic-Field-Induced Re-entrance of Superconductivity in Ta2PdS5 Nanostrips. Nano Letters, 2021, 21, 288-297.	9.1	3
16	In-orbit aerodynamic coefficient measurements using SOAR (Satellite for Orbital Aerodynamics) Tj ETQq0 0 0 rg	BT <u>(O</u> verlo	ock <u>1</u> 0 Tf 50 14
17	Hydrocarbon contamination in angström-scale channels. Nanoscale, 2021, 13, 9553-9560.	5.6	7
18	Synthesis of IR-emitting HgTe quantum dots using an ionic liquid-based tellurium precursor. Nanoscale Advances, 2021, 3, 4062-4064.	4.6	0

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19	Nanometre imaging of Fe ₃ GeTe ₂ ferromagnetic domain walls. Nanotechnology, 2021, 32, 205703.	2.6	6
20	HOLOGRAPHIC CONVERGENT ELECTRON BEAM DIFFRACTION (CBED) IMAGING OF TWO-DIMENSIONAL CRYSTALS. Surface Review and Letters, 2021, 28, 2140001.	1.1	0
21	Iron-silica interaction during reduction of precipitated silica-promoted iron oxides using in situ XRD and TEM. Applied Catalysis A: General, 2021, 613, 118031.	4.3	6
22	Chlorosulfuric acid-assisted production of functional 2D materials. Npj 2D Materials and Applications, 2021, 5 , .	7.9	3
23	Oleylamine Aging of PtNi Nanoparticles Giving Enhanced Functionality for the Oxygen Reduction Reaction. Nano Letters, 2021, 21, 3989-3996.	9.1	37
24	In Situ TEM Imaging of Solutionâ€Phase Chemical Reactions Using 2Dâ€Heterostructure Mixing Cells. Advanced Materials, 2021, 33, e2100668.	21.0	18
25	Synthesis of molybdenum-doped rhenium disulfide alloy using aerosol-assisted chemical vapour deposition. Materials Science in Semiconductor Processing, 2021, 127, 105718.	4.0	4
26	Magic under the microscope. Nature Materials, 2021, 20, 908-909.	27.5	1
27	Purification of Propylene and Ethylene by a Robust Metal–Organic Framework Mediated by Host–Guest Interactions. Angewandte Chemie - International Edition, 2021, 60, 15541-15547.	13.8	51
28	Automating 3D Imaging of Inorganic Nanoparticles. Microscopy and Microanalysis, 2021, 27, 2864-2866.	0.4	1
29	Atomically Dispersed Copper Sites in a Metal–Organic Framework for Reduction of Nitrogen Dioxide. Journal of the American Chemical Society, 2021, 143, 10977-10985.	13.7	66
30	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.	8.8	20
31	Controlling Interfacial Reduction Kinetics and Suppressing Electrochemical Oscillations in Li ₄ Ti ₅ O ₁₂ Thinâ€Film Anodes. Advanced Functional Materials, 2021, 31, 2105354.	14.9	10
32	Iron, Nitrogen Coâ€Doped Carbon Spheres as Low Cost, Scalable Electrocatalysts for the Oxygen Reduction Reaction. Advanced Functional Materials, 2021, 31, 2102974.	14.9	35
33	Ion exchange in atomically thin clays and micas. Nature Materials, 2021, 20, 1677-1682.	27.5	40
34	Stability and stoichiometry of L12 Al3(Sc,Zr) dispersoids in Al-(Si)-Sc-Zr alloys. Acta Materialia, 2021, 216, 117117.	7.9	24
35	High-Performance Nanostructured MoS ₂ Electrodes with Spontaneous Ultralow Gold Loading for Hydrogen Evolution. Journal of Physical Chemistry C, 2021, 125, 20940-20951.	3.1	9
36	Intake design for an Atmosphere-Breathing Electric Propulsion System (ABEP). Acta Astronautica, 2021, 187, 225-235.	3.2	33

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37	Synthesis of new M-layer solid-solution 312 MAX phases (Ta _{1â°'<i>x</i>} Ti _{<i>x</i>}) ₃ AlC ₂ (<i>x</i> Ti ETQ	qal.d 0.78	4 3 14 rgBT
38	Pillared Mo ₂ TiC ₂ MXene for high-power and long-life lithium and sodium-ion batteries. Nanoscale Advances, 2021, 3, 3145-3158.	4.6	46
39	Gold–Rhodium Nanoflowers for the Plasmon-Enhanced Hydrogen Evolution Reaction under Visible Light. ACS Catalysis, 2021, 11, 13543-13555.	11.2	36
40	Direct measurement of TEM lamella thickness in FIBâ€SEM. Journal of Microscopy, 2020, 279, 168-176.	1.8	8
41	MXene Tunable Lamellae Architectures for Supercapacitor Electrodes. ACS Applied Energy Materials, 2020, 3, 411-422.	5.1	46
42	The benefits of very low earth orbit for earth observation missions. Progress in Aerospace Sciences, 2020, 117, 100619.	12.1	95
43	Splenic Capture and <i>In Vivo</i> Intracellular Biodegradation of Biological-Grade Graphene Oxide Sheets. ACS Nano, 2020, 14, 10168-10186.	14.6	51
44	A review of gas-surface interaction models for orbital aerodynamics applications. Progress in Aerospace Sciences, 2020, 119, 100675.	12.1	41
45	Rapid and Low-Temperature Molecular Precursor Approach toward Ternary Layered Metal Chalcogenides and Oxides: Mo _{1â€"<i>x< i>< sub>W_{<i>x< i></i>}S_{2< sub>and Mo_{1â€"<i>x< i>< sub>W_{3< sub>Alloys (0 ≤i>x< i> ≶). Chemistry of Materials. 2020. 32. 7895-7907.}</i>}}</i>}	6.7	13
46	Twist and Bend in Van Der Waals Materials and 2D Stacked Heterostructures. Microscopy and Microanalysis, 2020, 26, 856-858.	0.4	0
47	Atomic Resolution Imaging of CrBr3 Using Adhesion-Enhanced Grids. Nano Letters, 2020, 20, 6582-6589.	9.1	13
48	Electrocatalytic Behavior of PtCu Clusters Produced by Nanoparticle Beam Deposition. Journal of Physical Chemistry C, 2020, 124, 23683-23689.	3.1	9
49	Guest Editor's Foreword, Special Issue Introduction and Scientific Highlights. Journal of Microscopy, 2020, 279, 141-142.	1.8	O
50	Performance of a NiFe ₂ O ₄ @Co Core–Shell Fischer–Tropsch Catalyst: Effect of Low Temperature Reduction. ACS Omega, 2020, 5, 32975-32983.	3. 5	4
51	Self-assembly of a layered two-dimensional molecularly woven fabric. Nature, 2020, 588, 429-435.	27.8	74
52	Capillary condensation under atomic-scale confinement. Nature, 2020, 588, 250-253.	27.8	168
53	Harnessing the Electron Beam to Study Reactions in Graphene Liquid Cells and Degradation in Sensitive 2D Materials. Microscopy and Microanalysis, 2020, 26, 538-541.	0.4	O
54	Nonreciprocal superconducting NbSe2 antenna. Nature Communications, 2020, 11, 5634.	12.8	43

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55	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.	1.9	13
56	Design-controlled synthesis of IrO ₂ sub-monolayers on Au nanoflowers: marrying plasmonic and electrocatalytic properties. Nanoscale, 2020, 12, 12281-12291.	5 . 6	20
57	Gas-Phase Deposition of Gold Nanoclusters to Produce Heterogeneous Glycerol Oxidation Catalysts. ACS Applied Nano Materials, 2020, 3, 4997-5001.	5.0	6
58	Convergent beam electron diffraction of multilayer Van der Waals structures. Ultramicroscopy, 2020, 212, 112976.	1.9	6
59	Photo―and Electroluminescence from Znâ€Doped InN Semiconductor Nanocrystals. Advanced Optical Materials, 2020, 8, 2000604.	7.3	4
60	Heterostructures formed through abraded van der Waals materials. Nature Communications, 2020, 11, 3047.	12.8	36
61	Large magnetoelectric coupling in multiferroic oxide heterostructures assembled via epitaxial lift-off. Nature Communications, 2020, 11, 3190.	12.8	48
62	Raman Fingerprints of Graphene Produced by Anodic Electrochemical Exfoliation. Nano Letters, 2020, 20, 3411-3419.	9.1	59
63	Electrically pumped WSe2-based light-emitting van der Waals heterostructures embedded in monolithic dielectric microcavities. 2D Materials, 2020, 7, 031006.	4.4	16
64	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.	20.2	15
65	Mechanisms of Liquid-Phase Exfoliation for the Production of Graphene. ACS Nano, 2020, 14, 10976-10985.	14.6	157
66	RF Helicon-based Inductive Plasma Thruster (IPT) Design for an Atmosphere-Breathing Electric Propulsion system (ABEP). Acta Astronautica, 2020, 176, 476-483.	3.2	45
67	Holographic reconstruction of the interlayer distance of bilayer two-dimensional crystal samples from their convergent beam electron diffraction patterns. Ultramicroscopy, 2020, 219, 113020.	1.9	2
68	Mechanistic study of non-thermal plasma assisted CO2 hydrogenation over Ru supported on MgAl layered double hydroxide. Applied Catalysis B: Environmental, 2020, 268, 118752.	20.2	101
69	Ultra-thin van der Waals crystals as semiconductor quantum wells. Nature Communications, 2020, 11, 125.	12.8	33
70	Porous Silica-Pillared MXenes with Controllable Interlayer Distances for Long-Life Na-Ion Batteries. Langmuir, 2020, 36, 4370-4382.	3. 5	30
71	Enhanced Superconductivity in Few-Layer TaS ₂ due to Healing by Oxygenation. Nano Letters, 2020, 20, 3808-3818.	9.1	23
72	Automated Single-Particle Reconstruction of Heterogeneous Inorganic Nanoparticles. Microscopy and Microanalysis, 2020, 26, 1168-1175.	0.4	13

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73	Atomic reconstruction in twisted bilayers of transition metal dichalcogenides. Nature Nanotechnology, 2020, 15, 592-597.	31.5	245
74	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.	4.1	15
75	Two-Dimensional Covalent Crystals by Chemical Conversion of Thin van der Waals Materials. Nano Letters, 2019, 19, 6475-6481.	9.1	32
76	Liquid-Phase STEM-EDS in Graphene and Silicon Nitride Cells. Microscopy and Microanalysis, 2019, 25, 1500-1501.	0.4	2
77	Two Methods for Measuring Lamellae Thicknesses In situ for Improved FIB Specimen Preparation. Microscopy and Microanalysis, 2019, 25, 858-859.	0.4	0
78	Three-Dimensional Imaging of Nanoparticle Chemistry Using Spectroscopic Single Particle Reconstruction. Microscopy and Microanalysis, 2019, 25, 400-401.	0.4	0
79	Morphological and compositional changes of MFe2O4@Co3O4 (M = Ni, Zn) core-shell nanoparticles after mild reduction. Materials Characterization, 2019, 155, 109806.	4.4	5
80	Synthesis of copper catalysts for click chemistry from distillery wastewater using magnetically recoverable bionanoparticles. Green Chemistry, 2019, 21, 4020-4024.	9.0	17
81	Solution-Processed HfO _{<i>x</i>} for Half-Volt Operation of InGaZnO Thin-Film Transistors. ACS Applied Electronic Materials, 2019, 1, 1581-1589.	4.3	22
82	Liquid Exfoliation of Ni ₂ P ₂ S ₆ : Structural Characterization, Size-Dependent Properties, and Degradation. Chemistry of Materials, 2019, 31, 9127-9139.	6.7	13
83	Stacking Order in Graphite Films Controlled by van der Waals Technology. Nano Letters, 2019, 19, 8526-8532.	9.1	54
84	Confinement Effects and Charge Dynamics in Zn ₃ N ₂ Colloidal Quantum Dots: Implications for QD-LED Displays. ACS Applied Nano Materials, 2019, 2, 7214-7219.	5.0	20
85	Atomically thin micas as proton-conducting membranes. Nature Nanotechnology, 2019, 14, 962-966.	31.5	45
86	Synthetic 2-D lead tin sulfide nanosheets with tuneable optoelectronic properties from a potentially scalable reaction pathway. Chemical Science, 2019, 10, 1035-1045.	7.4	16
87	Imaging Three-Dimensional Elemental Inhomogeneity in Pt–Ni Nanoparticles Using Spectroscopic Single Particle Reconstruction. Nano Letters, 2019, 19, 732-738.	9.1	18
88	Indirect to Direct Gap Crossover in Two-Dimensional InSe Revealed by Angle-Resolved Photoemission Spectroscopy. ACS Nano, 2019, 13, 2136-2142.	14.6	63
89	Laser-writable high-k dielectric for van der Waals nanoelectronics. Science Advances, 2019, 5, eaau0906.	10.3	51
90	Self-Limiting Growth of Two-Dimensional Palladium between Graphene Oxide Layers. Nano Letters, 2019, 19, 4678-4683.	9.1	18

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91	Formation and Healing of Defects in Atomically Thin GaSe and InSe. ACS Nano, 2019, 13, 5112-5123.	14.6	35
92	Nanometre electron beam sculpting of suspended graphene and hexagonal boron nitride heterostructures. 2D Materials, 2019, 6, 025032.	4.4	10
93	Micromagnetometry of two-dimensional ferromagnets. Nature Electronics, 2019, 2, 457-463.	26.0	93
94	Characterising porosity in platinum nanoparticles. Nanoscale, 2019, 11, 17791-17799.	5.6	17
95	Photocatalytic hydrogen production by biomimetic indium sulfide using Mimosa pudica leaves as template. International Journal of Hydrogen Energy, 2019, 44, 2770-2783.	7.1	17
96	Convergent and divergent beam electron holography and reconstruction of adsorbates on free-standing two-dimensional crystals. Frontiers of Physics, 2019, 14, 1.	5.0	7
97	Au@HgxCd1-xTe core@shell nanorods by sequential aqueous cation exchange for near-infrared photodetectors. Nano Energy, 2019, 57, 57-65.	16.0	38
98	Direct synthesis of MoS ₂ or MoO ₃ <i>via</i> thermolysis of a dialkyl dithiocarbamato molybdenum(<scp>iv</scp>) complex. Chemical Communications, 2019, 55, 99-102.	4.1	38
99	Chemical vapor deposition of tin sulfide from diorganotin(IV) dixanthates. Journal of Materials Science, 2019, 54, 2315-2323.	3.7	24
100	Fate of Lu(III) sorbed on 2-line ferrihydrite at pHÂ5.7 and aged for 12Âyears at room temperature. II: insights from STEM-EDXS and DFT calculations. Environmental Science and Pollution Research, 2019, 26, 5282-5293.	5. 3	4
101	Biosynthesis and Characterization of Copper Nanoparticles Using <i>Shewanella oneidensis</i> Application for Click Chemistry. Small, 2018, 14, 1703145.	10.0	112
102	Nanometer Resolution Elemental Mapping in Graphene-Based TEM Liquid Cells. Nano Letters, 2018, 18, 1168-1174.	9.1	99
103	Atomic-Scale Insights into the Oxidation of Aluminum. ACS Applied Materials & Samp; Interfaces, 2018, 10, 2230-2235.	8.0	95
104	Black phosphorus with near-superhydrophobic properties and long-term stability in aqueous media. Chemical Communications, 2018, 54, 3831-3834.	4.1	28
105	Transport of hydrogen isotopes through interlayer spacing in van der Waals crystals. Nature Nanotechnology, 2018, 13, 468-472.	31.5	45
106	Synthesis of Bi _{2â^'2x} Sb _{2x} S ₃ (0 ≤i>x à‰¤i) solid solutions from solventless thermolysis of metal xanthate precursors. Journal of Materials Chemistry C, 2018, 6, 12652-12659.	5.5	23
107	Controlling Reaction Selectivity over Hybrid Plasmonic Nanocatalysts. Nano Letters, 2018, 18, 7289-7297.	9.1	92
108	Magnetoresistance in Co-hBN-NiFe Tunnel Junctions Enhanced by Resonant Tunneling through Single Defects in Ultrathin hBN Barriers. Nano Letters, 2018, 18, 6954-6960.	9.1	15

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109	Anomalous twin boundaries in two dimensional materials. Nature Communications, 2018, 9, 3597.	12.8	46
110	Infrared-to-violet tunable optical activity in atomic films of GaSe, InSe, and their heterostructures. 2D Materials, 2018, 5, 041009.	4.4	52
111	Photo-oxidized HfS2 - An embeddable and writable high-k dielectric for flexible Van der Waals nano-electronics. , 2018, , .		0
112	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.	7.1	17
113	Core–shell–shell cytocompatible polymer dot-based particles with near-infrared emission and enhanced dispersion stability. Chemical Communications, 2018, 54, 9364-9367.	4.1	3
114	Scalable Patterning of Encapsulated Black Phosphorus. Nano Letters, 2018, 18, 5373-5381.	9.1	43
115	Unraveling the H ₂ Promotional Effect on Palladium-Catalyzed CO Oxidation Using a Combination of Temporally and Spatially Resolved Investigations. ACS Catalysis, 2018, 8, 8255-8262.	11,2	19
116	Ballistic molecular transport through two-dimensional channels. Nature, 2018, 558, 420-424.	27.8	139
117	Co-precipitation on the Basal and Prismatic Planes in Mg–Gd–Ag–Zr Alloy Subjected to Over-Ageing. Minerals, Metals and Materials Series, 2018, , 379-383.	0.4	0
118	Exploring Nanoscale Precursor Reactions in Alloy 600 in H2/N2–H2O Vapor Using In Situ Analytical Transmission Electron Microscopy. Minerals, Metals and Materials Series, 2018, , 399-407.	0.4	0
119	The application of in situ analytical transmission electron microscopy to the study of preferential intergranular oxidation in Alloy 600. Ultramicroscopy, 2017, 176, 46-51.	1.9	37
120	Atomic Defects and Doping of Monolayer NbSe ₂ . ACS Nano, 2017, 11, 2894-2904.	14.6	63
121	Exfoliation of natural van der Waals heterostructures to a single unit cell thickness. Nature Communications, 2017, 8, 14410.	12.8	93
122	Single-Source Precursor for Tungsten Dichalcogenide Thin Films: Mo _{1â€"<i>x</i>} W _{<i>x</i>} S ₂ (0 ≤i>x â‰♯) Alloys by Aerosol-Assisted Chemical Vapor Deposition. Chemistry of Materials, 2017, 29, 3858-3862.	6.7	28
123	Elemental distribution within the long-period stacking ordered structure in a Mg-Gd-Zn-Mn alloy. Materials Characterization, 2017, 129, 247-251.	4.4	4
124	Cu segregation on the interface between Al 2 O 3 substrate and Al-1.4Cu alloy. Materials Characterization, 2017, 129, 300-304.	4.4	7
125	Galvanic replacement reaction: recent developments for engineering metal nanostructures towards catalytic applications. Chemical Communications, 2017, 53, 7135-7148.	4.1	222
126	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.	2.1	15

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127	Magnetoresistance of vertical Co-graphene-NiFe junctions controlled by charge transfer and proximity-induced spin splitting in graphene. 2D Materials, 2017, 4, 031004.	4.4	73
128	Tunable sieving of ions using graphene oxide membranes. Nature Nanotechnology, 2017, 12, 546-550.	31.5	1,364
129	Enhanced organophilic separations with mixed matrix membranes of polymers of intrinsic microporosity and graphene-like fillers. Journal of Membrane Science, 2017, 526, 437-449.	8.2	57
130	Solution processing of two-dimensional black phosphorus. Chemical Communications, 2017, 53, 1445-1458.	4.1	63
131	Role of 2D and 3D defects on the reduction of LaNiO3 nanoparticles for catalysis. Scientific Reports, 2017, 7, 10080.	3.3	27
132	Desalination and Nanofiltration through Functionalized Laminar MoS ₂ Membranes. ACS Nano, 2017, 11, 11082-11090.	14.6	275
133	The influence of precursor on rhenium incorporation into Re-doped MoS ₂ (Mo _{1â^'x} Re _x S ₂) thin films by aerosol-assisted chemical vapour deposition (AACVD). Journal of Materials Chemistry C, 2017, 5, 9044-9052.	5.5	18
134	Magnetic spectroscopy of nanoparticulate greigite, Fe ₃ S ₄ . Mineralogical Magazine, 2017, 81, 857-872.	1.4	9
135	Understanding 2D Crystal Vertical Heterostructures at the Atomic Scale Using Advanced Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2017, 23, 1714-1715.	0.4	0
136	High magnetic relaxivity in a fluorescent CdSe/CdS/ZnS quantum dot functionalized with MRI contrast molecules. Chemical Communications, 2017, 53, 10500-10503.	4.1	14
137	Dual Functionalization of Liquidâ€Exfoliated Semiconducting 2 <i>Hâ€</i> MoS ₂ with Lanthanide Complexes Bearing Magnetic and Luminescence Properties. Advanced Functional Materials, 2017, 27, 1703646.	14.9	23
138	Analysis of grain size in FePt films fabricated using remote plasma deposition. Journal of Magnetism and Magnetic Materials, 2017, 443, 67-72.	2.3	0
139	An in situ and ex situ TEM study into the oxidation of titanium (IV) sulphide. Npj 2D Materials and Applications, 2017, 1, .	7.9	21
140	Multiscale correlative tomography: an investigation of creep cavitation in 316 stainless steel. Scientific Reports, 2017, 7, 7332.	3.3	33
141	Hydrogen evolution and capacitance behavior of Au/Pd nanoparticle-decorated graphene heterostructures. Applied Materials Today, 2017, 8, 125-131.	4.3	20
142	Plasmon-induced nanoscale quantised conductance filaments. Scientific Reports, 2017, 7, 2878.	3.3	3
143	Automated quantification of morphology and chemistry from STEM data of individual nanoparticles. Journal of Physics: Conference Series, 2017, 902, 012018.	0.4	3
144	Observing Imperfection in Atomic Interfaces for van der Waals Heterostructures. Nano Letters, 2017, 17, 5222-5228.	9.1	53

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145	Combining Non-Rigid Registration with Non-Local Principle Component Analysis for Atomic Resolution EDS Mapping. Microscopy and Microanalysis, 2016, 22, 1406-1407.	0.4	O
146	Imaging the Hydrated Microbe-Metal Interface Using Nanoscale Spectrum Imaging. Particle and Particle Systems Characterization, 2016, 33, 833-841.	2.3	2
147	Radiation damage in biotite mica by accelerated \hat{l} ±-particles: A synchrotron microfocus X-ray diffraction and X-ray absorption spectroscopy studyk. American Mineralogist, 2016, 101, 928-942.	1.9	7
148	Temperature Programmed Reduction of a PdCu Bimetallic Catalyst via Atmospheric Pressure in situ STEM-EDS and in situ X-Ray Adsorption Analysis. Microscopy and Microanalysis, 2016, 22, 214-215.	0.4	1
149	Energy Dispersive X-Ray Spectroscopy in Liquids: Inorganic and Biological Applications. Microscopy and Microanalysis, 2016, 22, 72-73.	0.4	1
150	The Effects of Extensive Glomerular Filtration of Thin Graphene Oxide Sheets on Kidney Physiology. ACS Nano, 2016, 10, 10753-10767.	14.6	70
151	Dislocation core structures in (0001) InGaN. Journal of Applied Physics, 2016, 119, .	2.5	16
152	The Biosynthesis of Infrared-Emitting Quantum Dots in Allium Fistulosum. Scientific Reports, 2016, 6, 20480.	3.3	6
153	Quantitative Energy-Dispersive X-Ray Analysis of Catalyst Nanoparticles Using a Partial Cross Section Approach. Microscopy and Microanalysis, 2016, 22, 71-81.	0.4	36
154	Self-catalytic membrane photo-reactor made of carbon nitride nanosheets. Journal of Materials Chemistry A, 2016, 4, 11666-11671.	10.3	47
155	Compositional quantification of PtCo acid-leached fuel cell catalysts using EDX partial cross sections. Materials Science and Technology, 2016, 32, 248-253.	1.6	11
156	Sequential bottom-up and top-down processing for the synthesis of transition metal dichalcogenide nanosheets: the case of rhenium disulfide (ReS ₂). Chemical Communications, 2016, 52, 7878-7881.	4.1	42
157	X-Ray Absorption Correction for Quantitative Scanning Transmission Electron Microscopic Energy-Dispersive X-Ray Spectroscopy of Spherical Nanoparticles. Microscopy and Microanalysis, 2016, 22, 440-447.	0.4	7
158	STEM-EDX tomography of bimetallic nanoparticles: A methodological investigation. Ultramicroscopy, 2016, 162, 61-73.	1.9	74
159	An investigation of diffusion-mediated cyclic coarsening and reversal coarsening in an advanced Ni-based superalloy. Acta Materialia, 2016, 110, 295-305.	7.9	69
160	Molecular transport through capillaries made with atomic-scale precision. Nature, 2016, 538, 222-225.	27.8	483
161	Non-rigid registration and non-local principle component analysis to improve electron microscopy spectrum images. Nanotechnology, 2016, 27, 364001.	2.6	30
162	Diatom Frustules as a Biomineralized Scaffold for the Growth of Molybdenum Disulfide Nanosheets. Chemistry of Materials, 2016, 28, 5582-5586.	6.7	13

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163	Nanostructured Aptamer-Functionalized Black Phosphorus Sensing Platform for Label-Free Detection of Myoglobin, a Cardiovascular Disease Biomarker. ACS Applied Materials & Samp; Interfaces, 2016, 8, 22860-22868.	8.0	208
164	Asymmetric MoS ₂ /Graphene/Metal Sandwiches: Preparation, Characterization, and Application. Advanced Materials, 2016, 28, 8256-8264.	21.0	64
165	Metal-organic framework templated electrodeposition of functional gold nanostructures. Electrochimica Acta, 2016, 222, 361-369.	5.2	40
166	Van der Waals pressure and its effect on trapped interlayer molecules. Nature Communications, 2016, 7, 12168.	12.8	137
167	Energy Dispersive X-ray Tomography for 3D Elemental Mapping of Individual Nanoparticles. Journal of Visualized Experiments, 2016, , .	0.3	4
168	Bimetallic Au@Pdâ€Au Tadpoleâ€Shaped Asymmetric Nanostructures by a Combination of Precursor Reduction and Ostwald Ripening. ChemNanoMat, 2016, 2, 509-514.	2.8	3
169	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.	6.6	119
170	Synthesis and characterization of composite membranes made of graphene and polymers of intrinsic microporosity. Carbon, 2016, 102, 357-366.	10.3	34
171	Synthesis of Lateral Size-Controlled Monolayer 1 <i>H-</i> MoS ₂ @Oleylamine as Supercapacitor Electrodes Chemistry of Materials, 2016, 28, 657-664.	6.7	134
172	Radiation damage haloes in biotite investigated using high-resolution transmission electron microscopy. American Mineralogist, 2016, 101, 105-110.	1.9	5
173	Preparation of low-dimensional carbon material-based metal nanocomposites using a polarizable organic/water interface. Journal of Materials Research, 2015, 30, 2679-2687.	2.6	11
174	Cross sectional STEM imaging and analysis of multilayered two dimensional crystal heterostructure devices. Microscopy and Microanalysis, 2015, 21, 107-108.	0.4	1
175	Revealing New Atomic-scale Information about Materials by Improving the Quality and Quantifiability of Aberration-corrected STEM Data. Microscopy and Microanalysis, 2015, 21, 2409-2410.	0.4	0
176	Photoluminescence: Nearâ€Unity Quantum Yields from Chloride Treated CdTe Colloidal Quantum Dots (Small 13/2015). Small, 2015, 11, 1482-1482.	10.0	0
177	Advanced Analytical Electron Microscopy: New Perspectives on Real Materials. Microscopy and Microanalysis, 2015, 21, 489-490.	0.4	1
178	In situ Analytical TEM of Ilmenite Reduction in Hydrogen. Microscopy and Microanalysis, 2015, 21, 565-566.	0.4	2
179	XEDS and EELS in the TEM at Atmospheric Pressure and High Temperature. Microscopy and Microanalysis, 2015, 21, 247-248.	0.4	8
180	Frontispiece: Surface Segregated AgAu Tadpole-Shaped Nanoparticles Synthesized Via a Single Step Combined Galvanic and Citrate Reduction Reaction. Chemistry - A European Journal, 2015, 21, n/a-n/a.	3.3	0

#	Article	IF	CITATIONS
181	Surface Segregated AgAu Tadpoleâ€6haped Nanoparticles Synthesized Via a Single Step Combined Galvanic and Citrate Reduction Reaction. Chemistry - A European Journal, 2015, 21, 12314-12320.	3.3	17
182	WSe ₂ Light-Emitting Tunneling Transistors with Enhanced Brightness at Room Temperature. Nano Letters, 2015, 15, 8223-8228.	9.1	231
183	Controlling Size, Morphology, and Surface Composition of AgAu Nanodendrites in 15 s for Improved Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Low Metal Loadings. ACS Applied Materials & Environmental Catalysis under Loadings. ACS Applied Materials & Environmental Catalysis under Loadings. ACS Applied Materials & Environmental Catalysis under Loadings. ACS A	8.0	42
184	Surface Properties of Nanocrystalline PbS Films Deposited at the Water–Oil Interface: A Study of Atmospheric Aging. Langmuir, 2015, 31, 1445-1453.	3.5	74
185	Controlled Folding of Graphene: GraFold Printing. Nano Letters, 2015, 15, 857-863.	9.1	27
186	Thin Films of Molybdenum Disulfide Doped with Chromium by Aerosol-Assisted Chemical Vapor Deposition (AACVD). Chemistry of Materials, 2015, 27, 1367-1374.	6.7	78
187	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.	6.7	84
188	Segregation of In to Dislocations in InGaN. Nano Letters, 2015, 15, 923-930.	9.1	54
189	Light-emitting diodes by band-structure engineering in van der Waals heterostructures. Nature Materials, 2015, 14, 301-306.	27.5	1,397
190	Synthesis of biocompatible Au–ZnTe core–shell nanoparticles. Journal of Materials Chemistry B, 2015, 3, 2826-2833.	5.8	6
191	Behavior of Alloying Elements during Anodizing of Mg-Cu and Mg-W Alloys in a Fluoride/Glycerol Electrolyte. Journal of the Electrochemical Society, 2015, 162, C487-C494.	2.9	5
192	Quality Heterostructures from Two-Dimensional Crystals Unstable in Air by Their Assembly in Inert Atmosphere. Nano Letters, 2015, 15, 4914-4921.	9.1	358
193	High-resolution imaging of biotite using focal series exit wavefunction restoration and the graphene mechanical exfoliation method. Mineralogical Magazine, 2015, 79, 337-344.	1.4	4
194	Caesium incorporation and retention in illite interlayers. Applied Clay Science, 2015, 108, 128-134.	5.2	155
195	Compositional variations for small-scale gamma prime ($\hat{l}^3\hat{a}\in^2$) precipitates formed at different cooling rates in an advanced Ni-based superalloy. Acta Materialia, 2015, 85, 199-206.	7.9	81
196	Nano-particle precipitation in mechanically alloyed and annealed precursor powders of legacy PM2000 ODS alloy. Journal of Nuclear Materials, 2015, 464, 200-209.	2.7	24
197	Tin(II) Sulfide (SnS) Nanosheets by Liquid-Phase Exfoliation of Herzenbergite: IV–VI Main Group Two-Dimensional Atomic Crystals. Journal of the American Chemical Society, 2015, 137, 12689-12696.	13.7	220
198	Nearâ€Unity Quantum Yields from Chloride Treated CdTe Colloidal Quantum Dots. Small, 2015, 11, 1548-1554.	10.0	86

#	Article	IF	Citations
199	Multiscale 3D analysis of creep cavities in AISI type 316 stainless steel. Materials Science and Technology, 2015, 31, 522-534.	1.6	24
200	Understanding Individual Defects in CdTe Solar Cells: From Atomic Structure to Electrical Activity. Microscopy and Microanalysis, 2014, 20, 518-519.	0.4	1
201	Dielectric nanosheets made by liquid-phase exfoliation in water and their use in graphene-based electronics. 2D Materials, 2014, 1, 011012.	4.4	49
202	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.	2.7	49
203	Precise control of interface anisotropy during deposition of Co/Pd multilayers. Journal of Applied Physics, 2014, 116, .	2.5	10
204	S–Te Interdiffusion within Grains and Grain Boundaries in CdTe Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 1636-1643.	2.5	28
205	Total Ionizing Dose Effects on hBN Encapsulated Graphene Devices. IEEE Transactions on Nuclear Science, 2014, 61, 2868-2873.	2.0	27
206	A Facile Strategy to Support Palladium Nanoparticles on Carbon Nanotubes, Employing Polyvinylpyrrolidone as a Surface Modifier. European Journal of Inorganic Chemistry, 2014, 2014, 1422-1422.	2.0	0
207	Atomic resolution electrostatic potential mapping of graphene sheets by off-axis electron holography. Journal of Applied Physics, 2014, 115, .	2.5	17
208	A Conspicuous Clay Ovoid in Nakhla: Evidence for Subsurface Hydrothermal Alteration on Mars with Implications for Astrobiology. Astrobiology, 2014, 14, 651-693.	3.0	32
209	New capabilities for `colouring in' the chemistry of crystal defects atom-by-atom. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, 521-523.	0.1	0
210	Probing the core-shell-shell structure of CdSe/CdTe/CdS type II quantum dots for solar cell applications. Journal of Physics: Conference Series, 2014, 522, 012069.	0.4	3
211	Grain-Boundary-Enhanced Carrier Collection in CdTe Solar Cells. Physical Review Letters, 2014, 112, 156103.	7.8	258
212	Electronic Properties of Graphene Encapsulated with Different Two-Dimensional Atomic Crystals. Nano Letters, 2014, 14, 3270-3276.	9.1	433
213	Electrochemical properties of CVD grown pristine graphene: monolayer- vs. quasi-graphene. Nanoscale, 2014, 6, 1607-1621.	5.6	177
214	Bilayer graphene formed by passage of current through graphite: evidence for a three-dimensional structure. Nanotechnology, 2014, 25, 465601.	2.6	11
215	Investigation of the GaN-on-GaAs interface for vertical power device applications. Journal of Applied Physics, 2014, 116, .	2.5	7
216	Production of few-layer phosphorene by liquid exfoliation of black phosphorus. Chemical Communications, 2014, 50, 13338-13341.	4.1	667

#	Article	IF	Citations
217	MoS ₂ nanosheet production by the direct exfoliation of molybdenite minerals from several type-localities. RSC Advances, 2014, 4, 35609-35613.	3.6	40
218	The synthesis of metallic and semiconducting nanoparticles from reactive melts of precursors. Journal of Materials Chemistry A, 2014, 2, 570-580.	10.3	45
219	Compositional variations in In _{0.5} Ga _{0.5} N nanorods grown by molecular beam epitaxy. Nanotechnology, 2014, 25, 215705.	2.6	9
220	Real-time imaging and elemental mapping of AgAu nanoparticle transformations. Nanoscale, 2014, 6, 13598-13605.	5.6	64
221	Real-time imaging and local elemental analysis of nanostructures in liquids. Chemical Communications, 2014, 50, 10019-10022.	4.1	56
222	Ultrastructure and Crystallography of Nanoscale Calcite Building Blocks in <i>Rhabdosphaera clavigera</i> Coccolith Spines. Crystal Growth and Design, 2014, 14, 1710-1718.	3.0	17
223	Correlating Catalytic Activity of Ag–Au Nanoparticles with 3D Compositional Variations. Nano Letters, 2014, 14, 1921-1926.	9.1	119
224	A Facile Strategy to Support Palladium Nanoparticles on Carbon Nanotubes, Employing Polyvinylpyrrolidone as a Surface Modifier. European Journal of Inorganic Chemistry, 2014, 2014, 1439-1445.	2.0	7
225	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.	1.8	55
226	Dynamic microstructural evolution of graphite under displacing irradiation. Carbon, 2014, 68, 273-284.	10.3	33
227	Measurement of size-dependent composition variations for gamma prime ($\hat{l}^3\hat{a}\in^2$) precipitates in an advanced nickel-based superalloy. Ultramicroscopy, 2014, 144, 1-8.	1.9	45
228	Heterostructures Produced from Nanosheet-Based Inks. Nano Letters, 2014, 14, 3987-3992.	9.1	165
229	Formation of barrier-type anodic films on ZE41 magnesium alloy in a fluoride/glycerol electrolyte. Electrochimica Acta, 2014, 138, 124-131.	5.2	26
230	Kink Band Formation in Graphite under Ion Irradiation at 100 and 298 K. Materials Transactions, 2014, 55, 447-450.	1.2	8
231	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.	0.4	12
232	On the diffusion mechanisms of fine-scalel̂³â€² in an advanced Ni-based superalloy. MATEC Web of Conferences, 2014, 14, 09002.	0.2	1
233	Applications of Aberration Corrected TEM and Exit Wavefunction Reconstruction to Materials Science. Microscopy and Microanalysis, 2014, 20, 930-931.	0.4	0
234	Atom-by-Atom STEM Investigation of Defect Engineering in Graphene. Microscopy and Microanalysis, 2014, 20, 1736-1737.	0.4	2

#	Article	IF	Citations
235	X-ray Energy-Dispersive Spectrometry During <i>In Situ</i> Liquid Cell Studies Using an Analytical Electron Microscope. Microscopy and Microanalysis, 2014, 20, 323-329.	0.4	66
236	Correlative Tomography. Scientific Reports, 2014, 4, 4711.	3.3	124
237	In-situ observation and atomic resolution imaging of the ion irradiation induced amorphisation of graphene. Scientific Reports, 2014, 4, 6334.	3.3	62
238	Reversible Loss of Bernal Stacking during the Deformation of Few-Layer Graphene in Nanocomposites. ACS Nano, 2013, 7, 7287-7294.	14.6	68
239	Recording low and high spatial frequencies in exit wave reconstructions. Ultramicroscopy, 2013, 133, 26-34.	1.9	14
240	Vertical field-effect transistor based on graphene–WS2 heterostructures for flexible and transparent electronics. Nature Nanotechnology, 2013, 8, 100-103.	31.5	1,543
241	Direct Measurement of the Crystallographically Sensitive Atomic Termination of Nanophase Cerium Dioxide. Journal of Physics: Conference Series, 2012, 371, 012072.	0.4	0
242	Exit wave reconstruction from focal series of HRTEM images, single crystal XRD and total energy studies on Sb _{<i>x</i><(x} WO _{3+<i>y</i>} (<i>x</i> 27, 341-349.	0.8	8
243	Cross-sectional imaging of individual layers and buried interfaces of graphene-based heterostructures and superlattices. Nature Materials, 2012, 11, 764-767.	27.5	796
244	Recent developments in transmission electron microscopy and their application for nanoparticle characterisation. SPR Nanoscience, 2012, , 89-101.	0.6	1
245	CVDgraphenevs. highly ordered pyrolytic graphite for use in electroanalytical sensing. Analyst, The, 2012, 137, 833-839.	3.5	33
246	High Resolution ExitWave Restoration. Nanostructure Science and Technology, 2012, , 41-72.	0.1	3
247	New routes to copper sulfide nanostructures and thin films. Journal of Materials Chemistry, 2011, 21, 17888.	6.7	70
248	Optimized conditions for imaging the effects of bonding charge density in electron microscopy. Ultramicroscopy, 2011, 111, 901-911.	1.9	7
249	Imaging the Active Surfaces of Cerium Dioxide Nanoparticles. ChemPhysChem, 2011, 12, 2397-2399.	2.1	20
250	Inside Cover: Imaging the Active Surfaces of Cerium Dioxide Nanoparticles (ChemPhysChem 13/2011). ChemPhysChem, 2011, 12, 2358-2358.	2.1	0
251	Finding phase information in the darkness. Journal of Physics: Conference Series, 2010, 241, 012013.	0.4	1
252	Exceeding Conventional Resolution Limits in High-Resolution Transmission Electron Microscopy Using Tilted Illumination and Exit-Wave Restoration. Microscopy and Microanalysis, 2010, 16, 409-415.	0.4	7

#	ARTICLE	IF	CITATIONS
253	Synthesis and Structural Characterization of Branched Palladium Nanostructures. Advanced Materials, 2009, 21, 2288-2293.	21.0	124
254	Aberration Correction and Exit Wave Reconstruction Using Tilt Azimuth Data. Microscopy and Microanalysis, 2009, 15, 1472-1473.	0.4	0
255	Atomic Structure Imaging Beyond Conventional Resolution Limits in the Transmission Electron Microscope. Physical Review Letters, 2009, 103, 126101.	7.8	26
256	Real-space Measurements of Bonding Charge Density in Aberration-corrected High Resolution Electron Microscopy. Microscopy and Microanalysis, 2009, 15, 1478-1479.	0.4	0
257	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.	3.4	17
258	Transmission electron microscopy without aberrations: Applications to materials science. Current Applied Physics, 2008, 8, 425-428.	2.4	11
259	Chapter 8 Aberration-Corrected Imaging in Conventional Transmission Electron Microscopy and Scanning Transmission Electron Microscopy. Advances in Imaging and Electron Physics, 2008, , 283-325.	0.2	6
260	High-Resolution TEM and the Application of Direct and Indirect Aberration Correction. Microscopy and Microanalysis, 2008, 14, 60-67.	0.4	15
261	Ultrahigh resolution imaging of local structural distortions in intergrowth tungsten bronzes. Ultramicroscopy, 2007, 107, 501-506.	1.9	8
262	High-Pressure High-Temperature Synthesis of Nanostructural Magnesium Diboride for Electromotors and Devices Working at Liquid Hydrogen Temperatures. Advances in Science and Technology, 2006, 47, 25.	0.2	6
263	Chemical interactions in Ti doped MgB2superconducting bulk samples and wires. Superconductor Science and Technology, 2005, 18, 1190-1196.	3.5	27