Quentin Ramasse

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1180653/publications.pdf

Version: 2024-02-01

245	10,334	36303	42399
papers	citations	51 h-index	92 g-index

262	262	262	15754
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Liquid exfoliation of solvent-stabilized few-layer black phosphorus for applications beyond electronics. Nature Communications, 2015, 6, 8563.	12.8	921
2	Interface Ferromagnetism and Orbital Reconstruction in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>BiFeO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mtext mathvariant="normal">â^'</mml:mtext><mml:msub><mml:mi>La</mml:mi><mml:mn>0.7</mml:mn></mml:msub><mml:msub><mml:r Physical Review Letters, 2010, 105, 027201.	7.8	335
3	Sample preparation for atomic-resolution STEM at low voltages by FIB. Ultramicroscopy, 2012, 114, 62-71.	1.9	321
4	Single Atoms of Pt-Group Metals Stabilized by N-Doped Carbon Nanofibers for Efficient Hydrogen Production from Formic Acid. ACS Catalysis, 2016, 6, 3442-3451.	11.2	270
5	Detection of Single Atoms and Buried Defects in Three Dimensions by Aberration-Corrected Electron Microscope with 0.5-Ã... Information Limit. Microscopy and Microanalysis, 2008, 14, 469-477.	0.4	266
6	Stabilization of Single Metal Atoms on Graphitic Carbon Nitride. Advanced Functional Materials, 2017, 27, 1605785.	14.9	249
7	Control of Radiation Damage in MoS₂ by Graphene Encapsulation. ACS Nano, 2013, 7, 10167-10174.	14.6	237
8	Graphene Reknits Its Holes. Nano Letters, 2012, 12, 3936-3940.	9.1	227
9	Atomicâ€Scale Edge Structures on Industrialâ€Style MoS₂ Nanocatalysts. Angewandte Chemie - International Edition, 2011, 50, 10153-10156.	13.8	223
10	Interface control of bulk ferroelectric polarization. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9710-9715.	7.1	212
11	Preparation of Gallium Sulfide Nanosheets by Liquid Exfoliation and Their Application As Hydrogen Evolution Catalysts. Chemistry of Materials, 2015, 27, 3483-3493.	6.7	195
12	Probing the Bonding and Electronic Structure of Single Atom Dopants in Graphene with Electron Energy Loss Spectroscopy. Nano Letters, 2013, 13, 4989-4995.	9.1	187
13	Ion Implantation of Grapheneâ€"Toward IC Compatible Technologies. Nano Letters, 2013, 13, 4902-4907.	9.1	180
14	Unravelling structural ambiguities in lithium- and manganese-rich transition metal oxides. Nature Communications, 2015, 6, 8711.	12.8	176
15	Metalâ^'Graphene Interaction Studied via Atomic Resolution Scanning Transmission Electron Microscopy. Nano Letters, 2011, 11, 1087-1092.	9.1	172
16	Engineering grain boundaries at theÂ2D limit for theÂhydrogen evolution reaction. Nature Communications, 2020, 11, 57.	12.8	153
17	Single-atom vibrational spectroscopy in the scanning transmission electron microscope. Science, 2020, 367, 1124-1127.	12.6	143
18	Direct Experimental Evidence of Metal-Mediated Etching of Suspended Graphene. ACS Nano, 2012, 6, 4063-4071.	14.6	141

#	Article	IF	Citations
19	Visualizing the Stoichiometry of Industrialâ€Style Coâ€Moâ€S Catalysts with Singleâ€Atom Sensitivity. Angewandte Chemie - International Edition, 2014, 53, 10723-10727.	13.8	124
20	Siliconâ€“Carbon Bond Inversions Driven by 60-keV Electrons in Graphene. Physical Review Letters, 2014, 113, 115501.	7.8	123
21	High-resolution low-dose scanning transmission electron microscopy. Journal of Electron Microscopy, 2010, 59, 103-112.	0.9	113
22	Origin of reduced magnetization and domain formation in small magnetite nanoparticles. Scientific Reports, 2017, 7, 45997.	3.3	113
23	Nanoscale momentum-resolved vibrational spectroscopy. Science Advances, 2018, 4, eaar7495.	10.3	111
24	Micro-to nano-scale characterisation of polyamide structures of the SW30HR RO membrane using advanced electron microscopy and stain tracers. Journal of Membrane Science, 2016, 520, 465-476.	8.2	107
25	Phonon Spectroscopy at Atomic Resolution. Physical Review Letters, 2019, 122, 016103.	7.8	105
26	Non-equilibrium induction of tin in germanium: towards direct bandgap Ge1â^'xSnx nanowires. Nature Communications, 2016, 7, 11405.	12.8	100
27	Imaging MoS₂ Nanocatalysts with Singleâ€Atom Sensitivity. Angewandte Chemie - International Edition, 2010, 49, 2708-2710.	13.8	96
28	Single atom identification by energy dispersive x-ray spectroscopy. Applied Physics Letters, 2012, 100, .	3.3	86
29	Interaction of Metals with Suspended Graphene Observed by Transmission Electron Microscopy. Journal of Physical Chemistry Letters, 2012, 3, 953-958.	4.6	85
30	Mobile metal adatoms on single layer, bilayer, and trilayer graphene: Anab initioDFT study with van der Waals corrections correlated with electron microscopy data. Physical Review B, 2013, 87, .	3.2	84
31	Electronic Structure Modification of Ion Implanted Graphene: The Spectroscopic Signatures of p- and n-Type Doping. ACS Nano, 2015, 9, 11398-11407.	14.6	75
32	Delaminated Graphene at Silicon Carbide Facets: Atomic Scale Imaging and Spectroscopy. ACS Nano, 2013, 7, 3045-3052.	14.6	73
33	Towards atomically precise manipulation of 2D nanostructures in the electron microscope. 2D Materials, 2017, 4, 042004.	4.4	73
34	Polarization screening-induced magnetic phase gradients at complex oxide interfaces. Nature Communications, 2015, 6, 6735.	12.8	71
35	Probing Interfacial Electronic Structures in Atomic Layer LaMnO₃ and SrTiO₃ Superlattices. Advanced Materials, 2010, 22, 1156-1160.	21.0	69
36	Single-Atom Scale Structural Selectivity in Te Nanowires Encapsulated Inside Ultranarrow, Single-Walled Carbon Nanotubes. ACS Nano, 2017, 11, 6178-6185.	14.6	69

#	Article	IF	Citations
37	Structure of the (0001) basal twin boundary in Bi2Te3. Journal of Applied Physics, 2010, 108, .	2.5	68
38	Hydrogen Encapsulation in a Silicon Clathrate Type I Structure:â€‰ Na_{5.5}(H₂)_{2.15}Si₄₆:â€‰ Synthesis and Characterization. Journal of the American Chemical Society, 2007, 129, 13857-13862.	13.7	66
39	Aberration-corrected scanning transmission electron microscopy for atomic-resolution studies of functional oxides. International Materials Reviews, 2014, 59, 115-131.	19.3	65
40	Universal geometric frustration in pyrochlores. Nature Communications, 2018, 9, 2619.	12.8	64
41	Tuning the thermoelectric properties of A-site deficient SrTiO₃ ceramics by vacancies and carrier concentration. Physical Chemistry Chemical Physics, 2016, 18, 26475-26486.	2.8	63
42	In-situ observation and atomic resolution imaging of the ion irradiation induced amorphisation of graphene. Scientific Reports, 2014, 4, 6334.	3.3	62
43	Atomically Abrupt Siliconâ€“Germanium Axial Heterostructure Nanowires Synthesized in a Solvent Vapor Growth System. Nano Letters, 2013, 13, 1675-1680.	9.1	61
44	Thickness-Dependent Crossover from Charge- to Strain-Mediated Magnetoelectric Coupling in Ferromagnetic/Piezoelectric Oxide Heterostructures. ACS Nano, 2014, 8, 894-903.	14.6	61
45	Functionalization of graphene at the organic/water interface. Chemical Science, 2015, 6, 1316-1323.	7.4	60
46	Visualizing atomic-scale redox dynamics in vanadium oxide-based catalysts. Nature Communications, 2017, 8, 305.	12.8	59
47	Direct Evidence for Cation Nonâ€Stoichiometry and Cottrell Atmospheres Around Dislocation Cores in Functional Oxide Interfaces. Advanced Materials, 2010, 22, 2430-2434.	21.0	58
48	Probing the local nature of excitons and plasmons in few-layer MoS2. Npj 2D Materials and Applications, 2017, 1, .	7.9	58
49	Evidence for Self-healing Benign Grain Boundaries and a Highly Defective Sb₂Se₃â€“CdS Interfacial Layer in Sb₂Se₃ Thin-Film Photovoltaics. ACS Applied Materials & Interfaces, 2020, 12, 21730-21738.	8.0	57
50	Evolution of Gold Nanostructures on Graphene. Small, 2011, 7, 2868-2872.	10.0	56
51	Self-Nanostructuring in SrTiO₃: A Novel Strategy for Enhancement of Thermoelectric Response in Oxides. ACS Applied Materials & Interfaces, 2019, 11, 32833-32843.	8.0	56
52	Nanoanalytical Electron Microscopy Reveals a Sequential Mineralization Process Involving Carbonate-Containing Amorphous Precursors. ACS Nano, 2016, 10, 6826-6835.	14.6	53
53	Subangstrom Edge Relaxations Probed by Electron Microscopy in Hexagonal Boron Nitride. Physical Review Letters, 2012, 109, 205502.	7.8	52
54	Transmission Electron Microscopy Reveals Deposition of Metal Oxide Coatings onto Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2018, 140, 1348-1357.	13.7	51

#	Article	IF	Citations
55	Electronic Properties and Chemical Reactivity of TiS₂ Nanoflakes. Journal of Physical Chemistry C, 2015, 119, 15707-15715.	3.1	47
56	Compositional and electrical properties of line and planar defects in Cu(In,Ga)Se₂ thin films for solar cells â€“ a review. Physica Status Solidi - Rapid Research Letters, 2016, 10, 363-375.	2.4	47
57	The structural conversion from Î±-AgVO₃to Î²-AgVO₃: Ag nanoparticle decorated nanowires with application as cathode materials for Li-ion batteries. Nanoscale, 2016, 8, 16266-16275.	5.6	47
58	Direct observation of quantum confinement of Si nanocrystals in Si-rich nitrides. Physical Review B, 2012, 85, .	3.2	45
59	Local stabilisation of polar order at charged antiphase boundaries in antiferroelectric (Bi0.85Nd0.15)(Ti0.1Fe0.9)O3. APL Materials, 2013, 1, .	5.1	44
60	The legacy of crystal-plastic deformation in olivine: high-diffusivity pathways during serpentinization. Contributions To Mineralogy and Petrology, 2012, 163, 701-724.	3.1	43
61	Concurrent La and A-Site Vacancy Doping Modulates the Thermoelectric Response of SrTiO₃: Experimental and Computational Evidence. ACS Applied Materials & Interfaces, 2017, 9, 41988-42000.	8.0	43
62	Atomically resolved imaging of highly ordered alternating fluorinated graphene. Nature Communications, 2014, 5, 4902.	12.8	42
63	Annihilation of structural defects in chalcogenide absorber films for high-efficiency solar cells. Energy and Environmental Science, 2016, 9, 1818-1827.	30.8	42
64	Electronic Structure Control of Sub-nanometer 1D SnTe via Nanostructuring within Single-Walled Carbon Nanotubes. ACS Nano, 2018, 12, 6023-6031.	14.6	42
65	Managing dose-, damage- and data-rates in multi-frame spectrum-imaging. Microscopy (Oxford,) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.5	42
66	Effect of composition on the structure of lithium- and manganese-rich transition metal oxides. Energy and Environmental Science, 2018, 11, 830-840.	30.8	41
67	Anomalous Electrical Conductivity of Nanosheaves of CeO₂. Chemistry of Materials, 2009, 21, 1182-1186.	6.7	39
68	Factors that determine and limit the resistivity of high-quality individual ZnO nanowires. Nanotechnology, 2013, 24, 435706.	2.6	39
69	Long Cycle Life, Highly Ordered SnO₂/GeO₂ Nanocomposite Inverse Opal Anode Materials for Liâ€ion Batteries. Advanced Functional Materials, 2020, 30, 2005073.	14.9	39
70	Room Temperature Ferrimagnetism and Ferroelectricity in Strained, Thin Films of BiFe_{0.5}Mn_{0.5}O₃. Advanced Functional Materials, 2014, 24, 7478-7487.	14.9	38
71	Crystal structure and thermoelectric properties of Srâ€“Mo substituted CaMnO₃: a combined experimental and computational study. Journal of Materials Chemistry C, 2015, 3, 12245-12259.	5.5	37
72	Location of Co and Ni promoter atoms in multi-layer MoS2 nanocrystals for hydrotreating catalysis. Catalysis Today, 2016, 261, 75-81.	4.4	36

#	Article	IF	Citations
73	The roles of Eu during the growth of eutectic Si in Al-Si alloys. Scientific Reports, 2015, 5, 13802.	3.3	35
74	Controlling the Electrical Transport Properties of Nanocontacts to Nanowires. Nano Letters, 2015, 15, 4248-4254.	9.1	34
75	Enhancing the thermoelectric power factor of Sr_{0.9}Nd_{0.1}TiO₃ through control of the nanostructure and microstructure. Journal of Materials Chemistry A, 2018, 6, 24928-24939.	10.3	34
76	Tuning Thermoelectric Properties of Misfit Layered Cobaltites by Chemically Induced Strain. Journal of Physical Chemistry C, 2015, 119, 21818-21827.	3.1	33
77	Automated Image Analysis for Single-Atom Detection in Catalytic Materials by Transmission Electron Microscopy. Journal of the American Chemical Society, 2022, 144, 8018-8029.	13.7	33
78	Polarity-driven nickel oxide precipitation in LaNiO3-LaAlO3 superlattices. Applied Physics Letters, 2011, 99, 211903.	3.3	32
79	Direct Imaging of Dopant Clustering in Metalâ€“Oxide Nanoparticles. ACS Nano, 2012, 6, 7077-7083.	14.6	32
80	Ruddlesden-Popper faults in LaNiO3/LaAlO3 superlattices. Journal of Applied Physics, 2012, 112, .	2.5	32
81	Tents, Chairs, Tacos, Kites, and Rods: Shapes and Plasmonic Properties of Singly Twinned Magnesium Nanoparticles. ACS Nano, 2020, 14, 5968-5980.	14.6	32
82	Symmetric and Asymmetric Decoration of Graphene: Bimetalâ€Graphene Sandwiches. Advanced Functional Materials, 2015, 25, 2899-2909.	14.9	31
83	Misfit strain driven cation inter-diffusion across an epitaxial multiferroic thin film interface. Journal of Applied Physics, 2014, 115, .	2.5	30
84	Novel Nanorod Precipitate Formation in Neodymium and Titanium Codoped Bismuth Ferrite. Advanced Functional Materials, 2013, 23, 683-689.	14.9	29
85	Fluid-induced organic synthesis in the solar nebula recorded in extraterrestrial dust from meteorites. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15338-15343.	7.1	29
86	Correlative characterization on microstructure evolution of Ni-based K403 alloy during thermal exposure. Acta Materialia, 2017, 131, 169-186.	7.9	29
87	Activation of Copper Species on Carbon Nitride for Enhanced Activity in the Arylation of Amines. ACS Catalysis, 2020, 10, 11069-11080.	11.2	29
88	Synthesis and Characterization of K_{8â^'x}(H₂)_ySi₄₆. Inorganic Chemistry, 2010, 49, 815-822.	4.0	28
89	Revealing heterogeneous nucleation of primary Si and eutectic Si by AlP in hypereutectic Al-Si alloys. Scientific Reports, 2016, 6, 25244.	3.3	28
90	Interfaceâ€Induced Polarization in SrTiO₃â€LaCrO₃ Superlattices. Advanced Materials Interfaces, 2016, 3, 1500779.	3.7	28

#	Article	IF	Citations
91	Functional Group Mapping by Electron Beam Vibrational Spectroscopy from Nanoscale Volumes. Nano Letters, 2020, 20, 1272-1279.	9.1	28
92	Impact of oxygen bonding on the atomic structure and photoluminescence properties of Si-rich silicon nitride thin films. Journal of Applied Physics, 2012, 112, 073514.	2.5	27
93	Solvent Vapor Growth of Axial Heterostructure Nanowires with Multiple Alternating Segments of Silicon and Germanium. Nano Letters, 2016, 16, 374-380.	9.1	27
94	Ion-beam modification of 2-D materials - single implant atom analysis via annular dark-field electron microscopy. Ultramicroscopy, 2017, 176, 31-36.	1.9	27
95	Exfoliation of Alphaâ€Germanium: A Covalent Diamondâ€Like Structure. Advanced Materials, 2021, 33, e2006826.	21.0	27
96	Diagnosis of aberrations from crystalline samples in scanning transmission electron microscopy. Ultramicroscopy, 2005, 106, 37-56.	1.9	26
97	Presence and spatial distribution of interfacial electronic states in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>LaMnO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2010, 82, .	3.2	26
98	Atomic-resolution electron energy loss studies of precipitates in an Alâ€“Mgâ€“Siâ€“Cuâ€“Ag alloy. Scripta Materialia, 2014, 74, 92-95.	5.2	26
99	Anomalous diffusion of single metal atoms on a graphene oxide support. Chemical Physics Letters, 2017, 683, 370-374.	2.6	25
100	Local Plasmon Engineering in Doped Graphene. ACS Nano, 2018, 12, 1837-1848.	14.6	25
101	Atomic-Resolution Imaging of the Nanoscale Origin of Toughness in Rare-Earth Doped SiC. Nano Letters, 2008, 8, 2935-2939.	9.1	24
102	On the Origin of Nanochessboard Superlattices in A-Site-Deficient Ca-Stabilized Nd_{2/3}TiO₃. Chemistry of Materials, 2015, 27, 497-507.	6.7	24
103	Subwavelength Spatially Resolved Coordination Chemistry of Metalâ€“Organic Framework Glass Blends. Journal of the American Chemical Society, 2018, 140, 17862-17866.	13.7	23
104	Electron Energy Loss Spectroscopy of Bright and Dark Modes in Hyperbolic Metamaterial Nanostructures. Advanced Optical Materials, 2020, 8, 2000277.	7.3	23
105	Atomic scale high-angle annular dark field STEM analysis of the N configuration in dilute nitrides of GaAs. Physical Review B, 2009, 80, .	3.2	22
106	Role of Structure and Defect Chemistry in High-Performance Thermoelectric Bismuth Strontium Cobalt Oxides. Chemistry of Materials, 2016, 28, 7470-7478.	6.7	22
107	Plasmons in MoS₂ studied via experimental and theoretical correlation of energy loss spectra. Journal of Microscopy, 2020, 279, 256-264.	1.8	22
108	Atomic-Resolution Spectrum Imaging of Semiconductor Nanowires. Nano Letters, 2018, 18, 1557-1563.	9.1	21

#	Article	IF	Citations
109	Van der Waals epitaxy between the highly lattice mismatched Cu-doped FeSe and Bi2Te3. NPG Asia Materials, 2017, 9, e402-e402.	7.9	21
110	Controlling the Thermoelectric Properties of Nb-Doped TiO₂ Ceramics through Engineering Defect Structures. ACS Applied Materials & Interfaces, 2021, 13, 57326-57340.	8.0	21
111	Chemically ordered decahedral FePt nanocrystals observed by electron microscopy. Physical Review B, 2014, 89, .	3.2	20
112	Theory of momentum-resolved phonon spectroscopy in the electron microscope. Physical Review B, 2019, 99, .	3.2	20
113	Linear and Helical Cesium Iodide Atomic Chains in Ultranarrow Single-Walled Carbon Nanotubes: Impact on Optical Properties. ACS Nano, 2021, 15, 13389-13398.	14.6	20
114	Band gap widening at random CIGS grain boundary detected by valence electron energy loss spectroscopy. Applied Physics Letters, 2016, 109, .	3.3	19
115	Visualizing surface plasmons with photons, photoelectrons, and electrons. Analyst, The, 2016, 141, 3562-3572.	3.5	19
116	Probing the Origin of Interfacial Carriers in SrTiO₃â€“LaCrO₃ Superlattices. Chemistry of Materials, 2017, 29, 1147-1155.	6.7	19
117	Twenty years after: How â€œAberration correction in the STEMâ€•truly placed a â€œA synchrotron in a Microscopeâ€• Ultramicroscopy, 2017, 180, 41-51.	1.9	19
118	Heterogeneous nucleation of Al on AlB 2 in Al-7Si alloy. Materials Characterization, 2017, 128, 7-13.	4.4	19
119	The atomic structure and chemistry of Fe-rich steps on antiphase boundaries in Ti-doped Bi0.9Nd0.15FeO3. APL Materials, 2014, 2, .	5.1	18
120	Realisation of magnetically and atomically abrupt half-metal/semiconductor interface: Co2FeSi0.5Al0.5/Ge(111). Scientific Reports, 2016, 6, 37282.	3.3	18
121	Influence of growth kinetics on Sn incorporation in direct band gap Ge_{1â^'x}Sn_x nanowires. Journal of Materials Chemistry C, 2018, 6, 8738-8750.	5.5	18
122	Direct measurement of Co-ion spin state transitions in Ca3Co4O9 using variable-temperature electron energy-loss spectroscopy. Applied Physics Letters, 2009, 94, 093112.	3.3	17
123	Application of two-dimensional crystallography and image processing to atomic resolution Z-contrast images. Journal of Electron Microscopy, 2009, 58, 223-244.	0.9	17
124	Ba6â^'3x Nd8+2x Ti18O54 Tungsten Bronze: A New High-Temperature n-Type Oxide Thermoelectric. Journal of Electronic Materials, 2016, 45, 1894-1899.	2.2	17
125	Tungsten Bronze Barium Neodymium Titanate (Ba_{6â€“3n}Nd_{8+2n}Ti₁₈O₅₄): An Intrinsic Nanostructured Material and Its Defect Distribution. Inorganic Chemistry, 2016, 55, 3338-3350.	4.0	17
126	Momentum- and space-resolved high-resolution electron energy loss spectroscopy of individual single-wall carbon nanotubes. Physical Review B, 2017, 95, .	3.2	17

#	Article	IF	Citations
127	Bond Dissociation and Reactivity of HF and H₂O in a Nano Test Tube. ACS Nano, 2020, 14, 11178-11189.	14.6	17
128	Practical spatial resolution of electron energy loss spectroscopy in aberration corrected scanning transmission electron microscopy. Micron, 2011, 42, 539-546.	2.2	16
129	Interfacial Charge Transfer and Chemical Bonding in a Niâ€“LaNbO₄ Cermet for Proton-Conducting Solid-Oxide Fuel Cell Anodes. Chemistry of Materials, 2012, 24, 4152-4159.	6.7	16
130	Element-specific depth profile of magnetism and stoichiometry at the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">La</mml:mi><mml:mrow><mml:mn>0.67</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">Sr</mml:mi><mml:mrow><mml:mn>0.33</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">MnO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mo>/</mml:mo><mml:msub><mml:mi mathvariant="normal">BiFeO</mml:mi><mml:mn>3</mml:mn></mml:msub><. Physical Review B, 2014, 90,	3.2	16
131	Isotopic compositions, nitrogen functional chemistry, and lowâ€loss electron spectroscopy of complex organic aggregates at the nanometer scale in the carbonaceous chondrite Renazzo. Meteoritics and Planetary Science, 2020, 55, 1293-1319.	1.6	16
132	Chemistry of Ruddlesdenâ€“Popper planar faults at a ferroelectricâ€“ferromagnet perovskite interface. Journal of Applied Physics, 2011, 109, 084101.	2.5	15
133	Carbonâ€“metal interfaces analyzed by aberration-corrected TEM: How copper and nickel nanoparticles interact with MWCNTs. Micron, 2015, 72, 52-58.	2.2	15
134	The role of chemical structure on the magnetic and electronic properties of Co2FeAl0.5Si0.5/Si(111) interface. Applied Physics Letters, 2016, 108, .	3.3	15
135	Atomic and electronic structure of twin growth defects in magnetite. Scientific Reports, 2016, 6, 20943.	3.3	15
136	Optical Properties and Dielectric Functions of Grain Boundaries and Interfaces in CdTe Thin-Film Solar Cells. ACS Applied Energy Materials, 2019, 2, 1419-1427.	5.1	15
137	Elemental redistributions at structural defects in Cu(In,Ga)Se2 thin films for solar cells. Journal of Applied Physics, 2016, 120, .	2.5	15
138	Elucidation of Metal Local Environments in Singleâ€Atom Catalysts Based on Carbon Nitrides. Small, 2022, 18, .	10.0	15
139	Direct imaging and chemical analysis of unstained DNA origami performed with a transmission electron microscope. Chemical Communications, 2011, 47, 9375.	4.1	14
140	Mapping strain modulated electronic structure perturbations in mixed phase bismuth ferrite thin films. Journal of Materials Chemistry C, 2015, 3, 1835-1845.	5.5	14
141	Experimental and density functional study of Mn doped Bi2Te3 topological insulator. APL Materials, 2016, 4, .	5.1	14
142	Local Aâ€Site Layering in Rareâ€Earth Orthochromite Perovskites by Solution Synthesis. Chemistry - A European Journal, 2016, 22, 18362-18367.	3.3	14
143	Microstructural analysis of interfaces in a ferromagnetic-multiferroic epitaxial heterostructure. Journal of Applied Physics, 2011, 109, .	2.5	13
144	Diffusion in yttrium aluminium garnet at the nanometer-scale: Insight into the effective grain boundary width. American Mineralogist, 2011, 96, 1521-1529.	1.9	13

#	Article	IF	Citations
145	Quantifying the low-energy limit and spectral resolution in valence electron energy loss spectroscopy. Ultramicroscopy, 2013, 124, 130-138.	1.9	13
146	A facile electrochemical route to the preparation of uniform and monoatomic copper shells for gold nanoparticles. Physical Chemistry Chemical Physics, 2015, 17, 5565-5568.	2.8	13
147	Observation of complete inversion of the hysteresis loop in a bimodal magnetic thin film. Physical Review B, 2017, 95, .	3.2	13
148	Utilising unit-cell twinning operators to reduce lattice thermal conductivity in modular structures: Structure and thermoelectric properties of Ga2O3(ZnO)9. Journal of Alloys and Compounds, 2018, 762, 892-900.	5.5	13
149	Direct Quantification of Cu Vacancies and Spatial Localization of Surface Plasmon Resonances in Copper Phosphide Nanocrystals. , 2019, 1, 665-670.		13
150	Quantum confinement of volume plasmons and interband transitions in germanium nanocrystals. Physical Review B, 2012, 86, .	3.2	12
151	Epitaxial growth and enhanced conductivity of an IT-SOFC cathode based on a complex perovskite superstructure with six distinct cation sites. Chemical Science, 2013, 4, 2403.	7.4	12
152	Topologically induced confinement of collective modes in multilayer graphene nanocones measured by momentum-resolved STEM-VEELS. Physical Review B, 2013, 88, .	3.2	12
153	Characterization of Ordering in A-Site Deficient Perovskite Ca_{1â€“x}La_{2x/3}TiO₃ Using STEM/EELS. Inorganic Chemistry, 2016, 55, 9937-9948.	4.0	12
154	Evidence for Cu2â€“xSe platelets at grain boundaries and within grains in Cu(In,Ga)Se2 thin films. Applied Physics Letters, 2017, 111, .	3.3	12
155	The structure and thermoelectric properties of tungsten bronze Ba6Ti2Nb8O30. Journal of Applied Physics, 2019, 126, 125115.	2.5	12
156	Nanoscale Chemical Heterogeneity in Aromatic Polyamide Membranes for Reverse Osmosis Applications. ACS Applied Materials & Interfaces, 2020, 12, 19890-19902.	8.0	12
157	Tuning band alignment at a semiconductor-crystalline oxide heterojunction via electrostatic modulation of the interfacial dipole. Physical Review Materials, 2021, 5, .	2.4	12
158	Imaging the Spatial Distribution of Electronic States in Graphene Using Electron Energy-Loss Spectroscopy: Prospect of Orbital Mapping. Physical Review Letters, 2022, 128, 116401.	7.8	12
159	Bilayer graphene formed by passage of current through graphite: evidence for a three-dimensional structure. Nanotechnology, 2014, 25, 465601.	2.6	11
160	Point defect segregation and its role in the detrimental nature of Frank partials in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mrow><mml:mi>Cu</mml:mi></mml:mrow><mml:mo>(</mml:mo> thin-film absorbers. Physical Review B, 2017, 95, .	3.2	11
161	Mapping grain boundary heterogeneity at the nanoscale in a positive temperature coefficient of resistivity ceramic. APL Materials, 2017, 5, 066105.	5.1	11
162	Low-energy Se ion implantation in MoS2 monolayers. Npj 2D Materials and Applications, 2022, 6, .	7.9	11

#	Article	IF	Citations
163	Polar Spinel-Perovskite Interfaces: an atomistic study of Fe3O4(111)/SrTiO3(111) structure and functionality. Scientific Reports, 2016, 6, 29724.	3.3	10
164	Study of Structure of Li- and Mn-rich Transition Metal Oxides Using 4D-STEM. Microscopy and Microanalysis, 2016, 22, 494-495.	0.4	10
165	Observation of compositional domains within individual copper indium sulfide quantum dots. Nanoscale, 2016, 8, 16157-16161.	5.6	10
166	Modifying the Interface Edge to Control the Electrical Transport Properties of Nanocontacts to Nanowires. Nano Letters, 2017, 17, 687-694.	9.1	10
167	Effect of annealing on the structure and magnetic properties of Co2FeAl0.5Si0.5 thin films on Ge(111). Journal of Alloys and Compounds, 2018, 748, 323-327.	5.5	10
168	Contrast reversal in atomic-scale phonon spectroscopic imaging. Physical Review B, 2020, 102, .	3.2	10
169	Enhanced Spinâ€“Orbit Coupling in Heavy Metals via Molecular Coupling. ACS Applied Materials & Interfaces, 2021, 13, 5228-5234.	8.0	10
170	Sub-nanometer mapping of strain-induced band structure variations in planar nanowire core-shell heterostructures. Nature Communications, 2022, 13, .	12.8	10
171	Stabilisation of Fe2O3-rich Perovskite Nanophase in Epitaxial Rare-earth Doped BiFeO3 Films. Scientific Reports, 2015, 5, 13066.	3.3	9
172	Practical Implementation of Compressive Sensing for High Resolution STEM. Microscopy and Microanalysis, 2016, 22, 558-559.	0.4	9
173	Electron Microscopy Reveals Structural and Chemical Changes at the Nanometer Scale in the Osteogenesis Imperfecta Murine Pathology. ACS Biomaterials Science and Engineering, 2017, 3, 2788-2797.	5.2	9
174	Prospects for Engineering Thermoelectric Properties in La_{1/3}NbO₃ Ceramics Revealed via Atomic-Level Characterization and Modeling. Inorganic Chemistry, 2018, 57, 45-55.	4.0	9
175	Selfâ€Assembly of Atomically Thin Chiral Copper Heterostructures Templated by Black Phosphorus. Advanced Functional Materials, 2019, 29, 1903120.	14.9	9
176	Accurate EELS background subtraction â€“ an adaptable method in MATLAB. Ultramicroscopy, 2020, 217, 113052.	1.9	9
177	Chemistry of the Fe2O3/BiFeO3 Interface in BiFeO3 Thin Film Heterostructures. Materials, 2010, 3, 5274-5282.	2.9	8
178	The information content in single-molecule Raman nanoscopy. Advances in Physics: X, 2016, 1, 35-54.	4.1	8
179	High-resolution monochromated electron energy-loss spectroscopy of organic photovoltaic materials. Ultramicroscopy, 2017, 180, 125-132.	1.9	8
180	Robust theoretical modelling of core ionisation edges for quantitative electron energy loss spectroscopy of B- and N-doped graphene. Journal of Physics Condensed Matter, 2017, 29, 225303.	1.8	8

#	Article	IF	Citations
181	Imaging Two Dimensional Materials and their Heterostructures. Journal of Physics: Conference Series, 2017, 902, 012028.	0.4	8
182	Bandgap determination from individual orthorhombic thin cesium lead bromide nanosheets by electron energy-loss spectroscopy. Nanoscale Horizons, 2020, 5, 1610-1617.	8.0	8
183	Theory of magnon diffuse scattering in scanning transmission electron microscopy. Physical Review B, 2021, 104, .	3.2	8
184	Direct Evidence of Stacking Disorder in the Mixed Ionic-Electronic Conductor Sr₄Fe₆O_{12+Î´}. ACS Nano, 2013, 7, 3078-3085.	14.6	7
185	Stability of Schottky and Ohmic Au Nanocatalysts to ZnO Nanowires. Nano Letters, 2017, 17, 6626-6636.	9.1	7
186	Atomicâ€Scale Study of Metalâ€“Oxide Interfaces and Magnetoelastic Coupling in Selfâ€Assembled Epitaxial Vertically Aligned Magnetic Nanocomposites. Advanced Materials Interfaces, 2019, 6, 1900549.	3.7	7
187	Atomicâ€Scale Spectroscopic Imaging of the Extremeâ€UV Optical Response of Bâ€ and Nâ€Doped Graphene. Advanced Functional Materials, 2019, 29, 1901819.	14.9	7
188	Heterotwin Zn₃P₂superlattice nanowires: the role of indium insertion in the superlattice formation mechanism and their optical properties. Nanoscale, 2020, 12, 22534-22540.	5.6	7
189	Spatial distribution of metallic heteroatoms in soot nanostructure mapped by aberration-corrected STEM-EELS. Carbon, 2021, 173, 953-967.	10.3	7
190	The Application of Scanning Transmission Electron Microscopy (STEM) to the Study of Nanoscale Systems. Nanostructure Science and Technology, 2012, , 11-40.	0.1	6
191	Dielectric response of pentagonal defects in multilayer graphene nano-cones. Nanoscale, 2014, 6, 1833-1839.	5.6	6
192	Performance and Stability of Dedicated Aberration-Corrected STEMs: a User's Perspective. Microscopy and Microanalysis, 2014, 20, 924-925.	0.4	6
193	A primordial 15N-depleted organic component detected within the carbonaceous chondrite Maribo. Scientific Reports, 2020, 10, 20251.	3.3	6
194	Unraveling electronic band structure of narrow-bandgap pâ€“n nanojunctions in heterostructured nanowires. Physical Chemistry Chemical Physics, 2021, 23, 25019-25023.	2.8	6
195	Effect of processing kinetics on the structure of ferromagnetic-ferroelectric-ferromagnetic interfaces. Journal of Applied Physics, 2012, 112, 104102.	2.5	5
196	Toward defectâ€free semiâ€polar GaN templates on preâ€structured sapphire. Physica Status Solidi (B): Basic Research, 2016, 253, 834-839.	1.5	5
197	Maghemite-like regions at the crossing of two antiphase boundaries in doped BiFeO₃. Materials Science and Technology, 2016, 32, 242-247.	1.6	5
198	Role of SnO 2 in the Bifunctional Mechanism of CO Oxidation at Ptâ€SnO 2 Electrocatalysts. ChemElectroChem, 2021, 8, 2572-2582.	3.4	5

#	Article	IF	Citations
199	Atomic scale observation and characterization of redox-induced interfacial layers in commercial Si thin film photovoltaics. Journal of Applied Physics, 2009, 105, 033716.	2.5	4
200	Inside Cover: Atomicâ€Scale Edge Structures on Industrialâ€Style MoS₂ Nanocatalysts (Angew. Chem. Int. Ed. 43/2011). Angewandte Chemie - International Edition, 2011, 50, 9994-9994.	13.8	4
201	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
202	Linear heterostructured Ni₂Si/Si nanowires with abrupt interfaces synthesised in solution. Nanoscale, 2018, 10, 19182-19187.	5.6	4
203	Modification of the van der Waals interaction at the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> and Ge(111) interface. Physical Review Materials, 2021, 5, .	2.4	4
204	Removal of core hole distortion from ionization edges in electron energy loss spectroscopy. Physical Review B, 2021, 103, .	3.2	4
205	The Advantage of Nanowire Configuration in Band Structure Determination. Advanced Functional Materials, 2021, 31, 2105426.	14.9	4
206	Atomic-Resolution Elemental Mapping of Precipitates in a 7449 Aluminium Alloy. Materials Science Forum, 0, 794-796, 63-67.	0.3	3
207	Controlling the half-metallicity of Heusler/Si(1â€‰1â€‰1) interfaces by a monolayer of Siâ€“Coâ€“Si. Journal of Physics Condensed Matter, 2016, 28, 395003.	1.8	3
208	Magnetic and structural depth profiles of Heusler alloy Co₂FeAl_{0.5}Si_{0.5} epitaxial films on Si(1â€‰1â€‰1). Journal of Physics Condensed Matter, 2018, 30, 065801.	1.8	3
209	Systematic Analysis of the Coupling Effects within Supported Plasmonic Nanorod Antenna Arrays. Journal of Physical Chemistry C, 2018, 122, 22041-22053.	3.1	3
210	Analytical STEM Investigation of the Post-Synthetic Modification (PMS) of Metal-Organic Frameworks (MOFs): Metal- and Ligand-Exchange in UiO-66. Microscopy and Microanalysis, 2018, 24, 1970-1971.	0.4	3
211	Mapping VIS-terahertz (â‰17 THz) surface plasmons sustained on native and chemically functionalized percolated gold thin films using EELS. Microscopy (Oxford, England), 2018, 67, i30-i39.	1.5	3
212	Lens Aberrations: Diagnosis and Correction. , 2011, , 55-87.		2
213	Investigating the electronic structure of fluorite-structured oxide compounds: comparison of experimental EELS with first principles calculations. Journal of Physics Condensed Matter, 2012, 24, 295503.	1.8	2
214	Atomic study of Fe3O4/SrTiO3 Interface. Microscopy and Microanalysis, 2015, 21, 1299-1300.	0.4	2
215	Local Variations of Cation Composition on a Nanometer-Sized Scale in a YBa2Cu3 O 6 . 9 2 Superconductor. Journal of Superconductivity and Novel Magnetism, 2016, 29, 1139-1143.	1.8	2
216	Investigating the spatial distribution of plasmon modes in carbon cones. Microscopy and Microanalysis, 2012, 18, 1540-1541.	0.4	1

#	Article	IF	Citations
217	Aberration corrected STEM of iron rhodium nanoislands. Journal of Physics: Conference Series, 2014, 522, 012039.	0.4	1
218	Plasmonic Enhancement at Metal Atoms on Graphene Edges revealed by EFTEM. Journal of Physics: Conference Series, 2014, 522, 012078.	0.4	1
219	Electron Microscopy Studies of Structure and Dynamics in MoS₂-based Hydrodesulfurization Catalysts. Microscopy and Microanalysis, 2014, 20, 1566-1567.	0.4	1
220	Crystal Structure, Cation Occupancy and Vacancy Ordering in Thermoelectric (1-x)SrTiO3-xLa1/3NbO3: A STEM-EELS Study. Microscopy and Microanalysis, 2014, 20, 1958-1959.	0.4	1
221	Atomic-scale insights into 1D and 2D nano-materials. Journal of Physics: Conference Series, 2015, 644, 012021.	0.4	1
222	Detection of oxygen sub-lattice ordering in A-site deficient perovskites through monochromated core-loss EELS mapping. Microscopy and Microanalysis, 2016, 22, 262-263.	0.4	1
223	Molecular Excitation Spectroscopy near Metallic Surfaces using Electron Energy Loss Spectroscopy. Microscopy and Microanalysis, 2018, 24, 476-477.	0.4	1
224	Scan Strategies for Electron Energy Loss Spectroscopy at Optical and Vibrational Energies in Perylene Diimide Nanobelts. Microscopy and Microanalysis, 2019, 25, 1738-1739.	0.4	1
225	TEM Specimen Preparation Using a Low Energy Ion Beam for Nuclear Metallic Materials. Microscopy and Microanalysis, 2019, 25, 1608-1609.	0.4	1
226	High Angle Dark Field Imaging of Two-Dimensional Crystals. Journal of Physics: Conference Series, 2014, 522, 012077.	0.4	0
227	Atomic Scale Imaging and Energy Loss Spectroscopy of Epitaxial Graphene. Materials Research Society Symposia Proceedings, 2014, 1714, 1.	0.1	0
228	Atomic-Scale STEM-EELS Characterization of the Chemistry of Structural Defects and Interfaces in Energy-Related Materials. Microscopy and Microanalysis, 2014, 20, 562-563.	0.4	0
229	Electronic Structure Modification of Boron and Nitrogen Ion-Implanted Graphene Fingerprinted by STEM-EELS. Microscopy and Microanalysis, 2014, 20, 1734-1735.	0.4	0
230	Absence of phase separation in nano-chessboard super-lattices in A-site deficient Ca-stabilized Nd2/3TiO3. Microscopy and Microanalysis, 2015, 21, 1353-1354.	0.4	0
231	Atomic-scale characterization of thermoelectric oxides using high spatial and energy resolution STEM-EELS. Microscopy and Microanalysis, 2017, 23, 370-371.	0.4	0
232	Localized Plasmon Response Engineering in B- and N-Doped Graphene. Microscopy and Microanalysis, 2018, 24, 1580-1581.	0.4	0
233	Atomic-Level Characterization of Thermoelectric La1/3NbO3. Microscopy and Microanalysis, 2018, 24, 1534-1535.	0.4	0
234	Shape Determination in Lithium-Ion Battery Cathode Materials Using Electron Diffraction-Assisted Electron Tomography. Microscopy and Microanalysis, 2019, 25, 1824-1825.	0.4	0

#	Article	IF	Citations
235	High Spatial and Energy Resolution Analytical Scanning Transmission Electron Microscopy for Quantum Materials. Microscopy and Microanalysis, 2019, 25, 946-947.	0.4	0
236	Atomically Resolved Vibrational Spectroscopy in the Electron Microscope. Microscopy and Microanalysis, 2019, 25, 592-593.	0.4	0
237	Local Coordination in Metal-Organic Frameworks Probed in the Vibrational and Optical Regime by EELS. Microscopy and Microanalysis, 2019, 25, 606-607.	0.4	0
238	Challenges and Applications of High Spatial and Energy Resolution EELS for Mapping Functional Chemistry in Beam-Sensitive Materials at Low Acceleration Voltages. Microscopy and Microanalysis, 2019, 25, 480-481.	0.4	0
239	Atomic Scale Near-Edge Structures of a Structurally Abrupt Ni-SrTiO3 Interface. Microscopy and Microanalysis, 2019, 25, 664-665.	0.4	0
240	Graphene Optoelectronics: Atomicâ€Scale Spectroscopic Imaging of the Extremeâ€UV Optical Response of Bâ€•and Nâ€Doped Graphene (Adv. Funct. Mater. 52/2019). Advanced Functional Materials, 2019, 29, 1970356.	14.9	0
241	Vibrational STEM-EELS of Single Si Atom Point Defects in Graphene. Microscopy and Microanalysis, 2020, 26, 954-955.	0.4	0
242	Atomic-Scale Vibrational and Electronic Response of Interfaces in Heterostructures for Spintronics Applications. Microscopy and Microanalysis, 2021, 27, 104-105.	0.4	0
243	Nanoscale functional chemistry and opto-electronic response of organic materials. Microscopy and Microanalysis, 2021, 27, 3062-3064.	0.4	0
244	The Advantage of Nanowire Configuration in Band Structure Determination (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38	14.9	0
245	Co-precipitation on the Basal and Prismatic Planes in Mgâ€“Gdâ€“Agâ€“Zr Alloy Subjected to Over-Ageing. Minerals, Metals and Materials Series, 2018, , 379-383.	0.4	0