Juan-Carlos Idrobo

List of Publications by Year
in descending order

225 papers	20,044 citations	19657 61 h-index	10445 139 g-index
234 all docs	234 docs citations	234 times ranked	26225 citing authors

#	Article	IF	Citations
1	Intrinsic Structural Defects in Monolayer Molybdenum Disulfide. Nano Letters, 2013, 13, 2615-2622.	9.1	1,766
2	Vapour phase growth and grain boundary structure of molybdenum disulphide atomic layers. Nature Materials, 2013, 12, 754-759.	27.5	1,590
3	An oxygen reduction electrocatalyst based on carbon nanotubeâ€"graphene complexes. Nature Nanotechnology, 2012, 7, 394-400.	31.5	1,533
4	van der Waals Epitaxy of MoS₂ Layers Using Graphene As Growth Templates. Nano Letters, 2012, 12, 2784-2791.	9.1	888
5	In-plane heterostructures of graphene and hexagonal boron nitride with controlled domain sizes. Nature Nanotechnology, 2013, 8, 119-124.	31.5	796
6	Selective Ionic Transport through Tunable Subnanometer Pores in Single-Layer Graphene Membranes. Nano Letters, 2014, 14, 1234-1241.	9.1	687
7	Highly Responsive Ultrathin GaS Nanosheet Photodetectors on Rigid and Flexible Substrates. Nano Letters, 2013, 13, 1649-1654.	9.1	683
8	Dopamine as a Carbon Source: The Controlled Synthesis of Hollow Carbon Spheres and Yolkâ€Structured Carbon Nanocomposites. Angewandte Chemie - International Edition, 2011, 50, 6799-6802.	13.8	674
9	Ultrathin high-temperature oxidation-resistant coatings of hexagonal boron nitride. Nature Communications, 2013, 4, 2541.	12.8	536
10	Heteroepitaxial Growth of Two-Dimensional Hexagonal Boron Nitride Templated by Graphene Edges. Science, 2014, 343, 163-167.	12.6	479
11	High-performance Agâ€"Co alloy catalysts for electrochemical oxygen reduction. Nature Chemistry, 2014, 6, 828-834.	13.6	383
12	Selective Molecular Transport through Intrinsic Defects in a Single Layer of CVD Graphene. ACS Nano, 2012, 6, 10130-10138.	14.6	331
13	Nanofiltration across Defect-Sealed Nanoporous Monolayer Graphene. Nano Letters, 2015, 15, 3254-3260.	9.1	272
14	Long-range ferromagnetic ordering in manganese-doped two-dimensional dichalcogenides. Physical Review B, 2013, 88, .	3.2	271
15	p-type doping of MoS₂ thin films using Nb. Applied Physics Letters, 2014, 104, 092104.	3.3	268
16	Vertically Oriented Arrays of ReS₂ Nanosheets for Electrochemical Energy Storage and Electrocatalysis. Nano Letters, 2016, 16, 3780-3787.	9.1	241
17	Direct visualization of the Jahnâ€"Teller effect coupled to Na ordering in Na5/8MnO2. Nature Materials, 2014, 13, 586-592.	27.5	237
18	Flexible metallic nanowires with self-adaptive contacts to semiconducting transition-metal dichalcogenide monolayers. Nature Nanotechnology, 2014, 9, 436-442.	31.5	228

#	Article	IF	Citations
19	Local electronic structure variation resulting in Li â€˜filamentâ€™ formation within solid electrolytes. Nature Materials, 2021, 20, 1485-1490.	27.5	226
20	Direct Determination of the Chemical Bonding of Individual Impurities in Graphene. Physical Review Letters, 2012, 109, 206803.	7.8	222
21	Controlled Vapor Phase Growth of Single Crystalline, Two-Dimensional GaSe Crystals with High Photoresponse. Scientific Reports, 2014, 4, 5497.	3.3	222
22	Interface Structure and Atomic Bonding Characteristics in Silicon Nitride Ceramics. Science, 2004, 306, 1768-1770.	12.6	216
23	Growth Mechanisms and Oxidation Resistance of Gold-Coated Iron Nanoparticles. Chemistry of Materials, 2005, 17, 3181-3186.	6.7	212
24	Transitionâ€Metal Substitution Doping in Synthetic Atomically Thin Semiconductors. Advanced Materials, 2016, 28, 9735-9743.	21.0	208
25	Ultrahigh photo-responsivity and detectivity in multilayer InSe nanosheets phototransistors with broadband response. Journal of Materials Chemistry C, 2015, 3, 7022-7028.	5.5	203
26	Heterogeneous sub-continuum ionic transport in statistically isolated graphene nanopores. Nature Nanotechnology, 2015, 10, 1053-1057.	31.5	203
27	Atomically localized plasmon enhancement in monolayer graphene. Nature Nanotechnology, 2012, 7, 161-165.	31.5	196
28	Re Doping in 2D Transition Metal Dichalcogenides as a New Route to Tailor Structural Phases and Induced Magnetism. Advanced Materials, 2017, 29, 1703754.	21.0	191
29	Quaternary 2D Transition Metal Dichalcogenides (TMDs) with Tunable Bandgap. Advanced Materials, 2017, 29, 1702457.	21.0	186
30	Synthesis of Patched or Stacked Graphene and hBN Flakes: A Route to Hybrid Structure Discovery. Nano Letters, 2013, 13, 933-941.	9.1	179
31	Static polarizabilities and optical absorption spectra of gold clusters (<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 282 Td	3.2	161
32	Low-Frequency Raman Fingerprints of Two-Dimensional Metal Dichalcogenide Layer Stacking Configurations. ACS Nano, 2015, 9, 6333-6342.	14.6	151
33	Highly sensitive phototransistors based on two-dimensional GaTe nanosheets with direct bandgap. Nano Research, 2014, 7, 694-703.	10.4	140
34	AC/AB Stacking Boundaries in Bilayer Graphene. Nano Letters, 2013, 13, 3262-3268.	9.1	137
35	Identification of site-specific isotopic labels by vibrational spectroscopy in the electron microscope. Science, 2019, 363, 525-528.	12.6	124
36	Nanoporous Atomically Thin Graphene Membranes for Desalting and Dialysis Applications. Advanced Materials, 2017, 29, 1700277.	21.0	118

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37	Platinum-Modulated Cobalt Nanocatalysts for Low-Temperature Aqueous-Phase Fischerâ€“Tropsch Synthesis. Journal of the American Chemical Society, 2013, 135, 4149-4158.	13.7	116
38	Progress in ultrahigh energy resolution EELS. Ultramicroscopy, 2019, 203, 60-67.	1.9	111
39	Molecular Sieving Across Centimeter-Scale Single-Layer Nanoporous Graphene Membranes. ACS Nano, 2017, 11, 5726-5736.	14.6	105
40	Direct visualization of reversible dynamics in a Si6 cluster embedded in a graphene pore. Nature Communications, 2013, 4, 1650.	12.8	104
41	Van der Waals Epitaxial Growth of Two-Dimensional Single-Crystalline GaSe Domains on Graphene. ACS Nano, 2015, 9, 8078-8088.	14.6	103
42	Size dependence of the static polarizabilities and absorption spectra ofAgn(n=2â€“8)clusters. Physical Review B, 2005, 72, .	3.2	102
43	Temperature Measurement by a Nanoscale Electron Probe Using Energy Gain and Loss Spectroscopy. Physical Review Letters, 2018, 120, 095901.	7.8	97
44	Atomic Structure of Highly Strained<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:math>Thin Films. Physical Review Letters, 2012, 108, 047601.	7.8	96
45	Water and Solute Transport Governed by Tunable Pore Size Distributions in Nanoporous Graphene Membranes. ACS Nano, 2017, 11, 10042-10052.	14.6	96
46	Correlating the three-dimensional atomic defects and electronic properties of two-dimensional transition metal dichalcogenides. Nature Materials, 2020, 19, 867-873.	27.5	96
47	The observation of square ice in graphene questioned. Nature, 2015, 528, E1-E2.	27.8	95
48	Elevated temperature microstructural stability in cast AlCuMnZr alloys through solute segregation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 765, 138279.	5.6	89
49	Controllable growth of layered selenide and telluride heterostructures and superlattices using molecular beam epitaxy. Journal of Materials Research, 2016, 31, 900-910.	2.6	85
50	Isoelectronic Tungsten Doping in Monolayer MoSe₂ for Carrier Type Modulation. Advanced Materials, 2016, 28, 8240-8247.	21.0	85
51	Direct observation of nanometer-scale Mg- and B-oxide phases at grain boundaries in MgB2. Applied Physics Letters, 2001, 79, 1837-1839.	3.3	84
52	Sub-Ã…ngstrom electric field measurements on a universal detector in a scanning transmission electron microscope. Advanced Structural and Chemical Imaging, 2018, 4, 10.	4.0	84
53	Temperature Dependence of Aliovalent-Vanadium Doping in LiFePO₄ Cathodes. Chemistry of Materials, 2013, 25, 768-781.	6.7	83
54	Epitaxial stabilization of Îµ-Fe2O3 (00l) thin films on SrTiO3 (111). Applied Physics Letters, 2010, 96, .	3.3	79

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55	Atomic Structure and Electrical Activity of Grain Boundaries and Ruddlesdenâ€"Popper Faults in Cesium Lead Bromide Perovskite. Advanced Materials, 2019, 31, e1805047.	21.0	72
56	Facet-Dependent Disorder in Pristine High-Voltage Lithiumâ€"Manganese-Rich Cathode Material. ACS Nano, 2014, 8, 12710-12716.	14.6	71
57	Low Contact Barrier in 2H/1Tâ€² MoTe₂ In-Plane Heterostructure Synthesized by Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2019, 11, 12777-12785.	8.0	70
58	Electronic Excitations in Graphene in the 1â€"50 eV Range: The Ï€ and Ï€ + Ïƒ Peaks Are Not Plasmons. Nano Letters, 2014, 14, 3827-3831.	9.1	69
59	Optical absorption spectra of intermediate-size silver clusters from first principles. Physical Review B, 2008, 78, .	3.2	67
60	Exploring the capabilities of monochromated electron energy loss spectroscopy in the infrared regime. Scientific Reports, 2018, 8, 5637.	3.3	67
61	Edge-Controlled Growth and Etching of Two-Dimensional GaSe Monolayers. Journal of the American Chemical Society, 2017, 139, 482-491.	13.7	65
62	Single Atom Microscopy. Microscopy and Microanalysis, 2012, 18, 1342-1354.	0.4	63
63	Thickness-Dependent Crossover from Charge- to Strain-Mediated Magnetoelectric Coupling in Ferromagnetic/Piezoelectric Oxide Heterostructures. ACS Nano, 2014, 8, 894-903.	14.6	61
64	Engineering single-atom dynamics with electron irradiation. Science Advances, 2019, 5, eaav2252.	10.3	61
65	Observation of coherent oxide precipitates in polycrystalline MgB2. Applied Physics Letters, 2002, 80, 3970-3972.	3.3	60
66	Structural Phase Transformation in Strained Monolayer MoWSe₂ Alloy. ACS Nano, 2018, 12, 3468-3476.	14.6	57
67	Electronic and optical excitations in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ag</mml:mtext></mml:mrow><mml:mi>n</mml:mi></mml:msu xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:mi>n</mml:mi><mml:mo>=</mml:mo><mml:m Physical Review B, 2009, 79, .	3.2	56
68	Roomâ€•Temperature Tunneling Behavior of Boron Nitride Nanotubes Functionalized with Gold Quantum Dots. Advanced Materials, 2013, 25, 4544-4548.	21.0	56
69	Effect of confined space reduction of graphite oxide followed by sulfur doping on oxygen reduction reaction in neutral electrolyte. Journal of Materials Chemistry A, 2013, 1, 7059.	10.3	56
70	Achieving Atomic Resolution Magnetic Dichroism by Controlling the Phase Symmetry of an Electron Probe. Physical Review Letters, 2014, 113, 145501.	7.8	54
71	Deformation Mechanisms of Vertically Stacked WS₂ /MoS₂ Heterostructures: The Role of Interfaces. ACS Nano, 2018, 12, 4036-4044.	14.6	54
72	2D Electrets of Ultrathin MoO₂ with Apparent Piezoelectricity. Advanced Materials, 2020, 32, e2000006.	21.0	51

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73	Radiation-induced segregation in a ceramic. Nature Materials, 2020, 19, 992-998.	27.5	47
74	Vacancy-Driven Anisotropic Defect Distribution in the Battery-Cathode Material<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LiFePO</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2011, 107, 085507.	7.8	46
75	Experimental observation of localized interfacial phonon modes. Nature Communications, 2021, 12, 6901.	12.8	46
76	First-principles absorption spectra of Cu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mi>n</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>(<mml:math) Tj ETQq0 0 0 rgBT /Overlock	3.2	45
77	Observations of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>Co</mml:mi><mml:mrow><mml:mn>4</mml:mn><mml:mo>+</mml:mo></mml:mrow></mm a Higher Spin State and the Increase in the Seebeck Coefficient of Thermoelectric<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Ca</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi>Co</mml:mi><mml:m mathvariant="normal">O<. Physical Review Letters, 2012, 108, 196601.	7.8	45
78	Revealing the Preferred Interlayer Orientations and Stackings of Twoâ€Dimensional Bilayer Gallium Selenide Crystals. Angewandte Chemie - International Edition, 2015, 54, 2712-2717.	13.8	45
79	Vibrational Spectroscopy of Water with High Spatial Resolution. Advanced Materials, 2018, 30, e1802702.	21.0	45
80	Humidity sensing using vertically oriented arrays of ReS ₂ nanosheets deposited on an interdigitated gold electrode. 2D Materials, 2016, 3, 045012.	4.4	42
81	Significantly Enhanced Emission Stability of CsPbBr₃ Nanocrystals via Chemically Induced Fusion Growth for Optoelectronic Devices. ACS Applied Nano Materials, 2018, 1, 6091-6098.	5.0	42
82	Syntheses of Colloidal F:In₂O₃ Cubes: Fluorine-Induced Faceting and Infrared Plasmonic Response. Chemistry of Materials, 2019, 31, 2661-2676.	6.7	41
83	Characterizing the Two- and Three-Dimensional Resolution of an Improved Aberration-Corrected STEM. Microscopy and Microanalysis, 2009, 15, 441-453.	0.4	40
84	Structural, Electronic, and Optical Properties of Noble Metal Clusters from First Principles. Journal of Cluster Science, 2006, 17, 609-626.	3.3	39
85	Electrode architectures for high capacity multivalent conversion compounds: iron (ii and iii) fluoride. RSC Advances, 2014, 4, 6730.	3.6	39
86	Facile Size-Selective Defect Sealing in Large-Area Atomically Thin Graphene Membranes for Sub-Nanometer Scale Separations. Nano Letters, 2020, 20, 5951-5959.	9.1	38
87	Telluride-Based Atomically Thin Layers of Ternary Two-Dimensional Transition Metal Dichalcogenide Alloys. Chemistry of Materials, 2018, 30, 7262-7268.	6.7	37
88	Localization of inelastic electron scattering in the low-loss energy regime. Ultramicroscopy, 2012, 119, 51-56.	1.9	36
89	Detecting magnetic ordering with atomic size electron probes. Advanced Structural and Chemical Imaging, 2016, 2, .	4.0	36
90	Theoretical and Experimental Insight into the Mechanism for Spontaneous Vertical Growth of ReS 2 Nanosheets. Advanced Functional Materials, 2018, 28, 1801286.	14.9	35

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91	Controlling the Infrared Dielectric Function through Atomic-Scale Heterostructures. ACS Nano, 2019, 13, 6730-6741.	14.6	33
92	Ab initiostructural energetics ofÎ²â^'Si3N4surfaces. Physical Review B, 2005, 72, .	3.2	30
93	Two-Dimensional Lateral Epitaxy of 2H (MoSe₂)â€"1Tâ€² (ReSe₂) Phases. Nano Letters, 2019, 19, 6338-6345.	9.1	30
94	Interlaced crystals having a perfect Bravais lattice and complex chemical order revealed by real-space crystallography. Nature Communications, 2014, 5, 5431.	12.8	29
95	Low-loss electron energy loss spectroscopy: An atomic-resolution complement to optical spectroscopies and application to graphene. Physical Review B, 2015, 92, .	3.2	29
96	Thermally Induced 2D Alloyâ€Heterostructure Transformation in Quaternary Alloys. Advanced Materials, 2018, 30, e1804218.	21.0	29
97	First-principles isomer-specific absorption spectra ofAg11. Physical Review B, 2007, 75, .	3.2	28
98	Formation of Iron Oxyfluoride Phase on the Surface of Nano-Fe3O4 Conversion Compound for Electrochemical Energy Storage. Journal of Physical Chemistry Letters, 2013, 4, 3798-3805.	4.6	28
99	Vaporâ€"Liquidâ€"Solid Growth and Optoelectronics of Gallium Sulfide van der Waals Nanowires. ACS Nano, 2020, 14, 6117-6126.	14.6	28
100	Phase Segregation Behavior of Two-Dimensional Transition Metal Dichalcogenide Binary Alloys Induced by Dissimilar Substitution. Chemistry of Materials, 2017, 29, 7431-7439.	6.7	27
101	Polymerization of Acetonitrile via a Hydrogen Transfer Reaction from CH₃ to CN under Extreme Conditions. Angewandte Chemie - International Edition, 2016, 55, 12040-12044.	13.8	26
102	Direct Observation of Infrared Plasmonic Fano Antiresonances by a Nanoscale Electron Probe. Physical Review Letters, 2019, 123, 177401.	7.8	25
103	Spatially and spectrally resolved orbital angular momentum interactions in plasmonic vortex generators. Light: Science and Applications, 2019, 8, 33.	16.6	25
104	Direct visualization of anionic electrons in an electride reveals inhomogeneities. Science Advances, 2021, 7, .	10.3	24
105	Two-Dimensional Gold Quantum Dots with Tunable Bandgaps. ACS Nano, 2019, 13, 4347-4353.	14.6	23
106	Measuring the hole-state anisotropy inMgB2by electron energy-loss spectroscopy. Physical Review B, 2003, 67, .	3.2	22
107	First-principles absorption spectra ofSin(n=20â€"28)clusters: Time-dependent local-density approximation versus predictions from Mie theory. Physical Review B, 2006, 74, .	3.2	22
108	Single Crystalline La_{0.7}Sr_{0.3}MnO₃Molecular Sieve Nanowires with High Temperature Ferromagnetism. Journal of the American Chemical Society, 2011, 133, 4053-4061.	13.7	22

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109	Van der Waals Nanowires with Continuously Variable Interlayer Twist and Twist Homojunctions. Advanced Functional Materials, 2021, 31, 2006412.	14.9	22
110	Atomic-resolution observations of semicrystalline intergranular thin films in silicon nitride. Applied Physics Letters, 2006, 88, 041919.	3.3	21
111	Optical gaps of free and embedded Si nanoclusters: Density functional theory calculations. Physical Review B, 2010, 82, .	3.2	20
112	Persistent photoconductivity in two-dimensional Mo_{1âˆ’<i>x</i>}W_{<i>x</i>}Se₂â€“MoSe₂ van der Waals heterojunctions. Journal of Materials Research, 2016, 31, 923-930.	2.6	20
113	Intergranular Nanostructure Effects on Strength and Toughness of Si₃N₄. Journal of the American Ceramic Society, 2015, 98, 1650-1657.	3.8	19
114	Emerging Electron Microscopy Techniques for Probing Functional Interfaces in Energy Materials. Angewandte Chemie - International Edition, 2020, 59, 1384-1396.	13.8	19
115	Infrared plasmonics: STEM-EELS characterization of Fabry-PÃ©rot resonance damping in gold nanowires. Physical Review B, 2020, 101, .	3.2	18
116	Revealing the BrÃ¸nsted-Evans-Polanyi relation in halide-activated fast MoS ₂ growth toward millimeter-sized 2D crystals. Science Advances, 2021, 7, eabj3274.	10.3	18
117	Examining the structure and bonding in complex oxides using aberration-corrected imaging and spectroscopy. Physical Review B, 2012, 85, .	3.2	17
118	Atomic and electronic structures of SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>/GaAs heterointerfaces: An 80-kV atomic-resolution electron energy-loss spectroscopy study. Physical Review B, 2012, 85, .	3.2	17
119	Oxidative dehydrogenation of isobutane over vanadia catalysts supported by titania nanoshapes. Catalysis Today, 2016, 263, 84-90.	4.4	17
120	Scalable synthesis of nanoporous atomically thin graphene membranes for dialysis and molecular separations <i>via</i> facile isopropanol-assisted hot lamination. Nanoscale, 2021, 13, 2825-2837.	5.6	17
121	Toward Single Mode, Atomic Size Electron Vortex Beams. Microscopy and Microanalysis, 2014, 20, 832-836.	0.4	16
122	Engineered Porous Carbon for High Volumetric Methane Storage. Adsorption Science and Technology, 2014, 32, 681-691.	3.2	16
123	Probing the localization of magnetic dichroism by atomic-size astigmatic and vortex electron beams. Scientific Reports, 2018, 8, 4019.	3.3	16
124	Origin of bulklike optical response in noble-metal Ag and Au nanoparticles. Physical Review B, 2010, 82, .	3.2	14
125	Towards atomic scale engineering of rare-earth-doped SiAlON ceramics through aberration-corrected scanning transmission electron microscopy. Scripta Materialia, 2011, 65, 656-659.	5.2	14
126	Electronic and Quantum Transport Properties of Atomically Identified Si Point Defects in Graphene. Journal of Physical Chemistry Letters, 2014, 5, 1711-1718.	4.6	14

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127	Local low rank denoising for enhanced atomic resolution imaging. Ultramicroscopy, 2018, 187, 34-42.	1.9	14
128	Focused Electron Beam Induced Deposition Synthesis of 3D Photonic and Magnetic Nanoresonators. ACS Applied Nano Materials, 2019, 2, 8075-8082.	5.0	14
129	Local strain-driven migration of oxygen vacancies to apical sites in YBa₂Cu₃O_{7âˆ’x}. Nanoscale, 2020, 12, 5922-5931.	5.6	14
130	Direct observation of apical oxygen vacancies in the high-temperature superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>YB</mml:mi><mml:msub><mml:mi mathvariant="normal">a</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">u</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>7</mml:mn><mml:mo>âˆ’</mml:mo><mml:mi>x</mml:mi></mml:mrow></	2.4	14
131	Vortex beams for atomic resolution dichroism. Microscopy (Oxford, England), 2011, 60, 295-300.	1.5	13
132	Orbital Occupancy and Charge Doping in Ironâ€Based Superconductors. Advanced Materials, 2014, 26, 6193-6198.	21.0	13
133	A short story of imaging and spectroscopy of two-dimensional materials by scanning transmission electron microscopy. Ultramicroscopy, 2017, 180, 156-162.	1.9	13
134	Strainâ€Induced Structural Deformation Study of 2D Mo<i>_x</i>W_{(1â€}<i>_x</i>₎ S₂. Advanced Materials Interfaces, 2019, 6, 1801262.	3.7	13
135	High-K dielectric sulfur-selenium alloys. Science Advances, 2019, 5, eaau9785.	10.3	13
136	A new resolution quest in electron microscopy. Nature Reviews Materials, 2021, 6, 100-102.	48.7	13
137	Reconstructions and nonstoichiometry of oxygenatedÎ²-Si3N4(101Â¯0)surfaces. Physical Review B, 2008, 78, .	3.2	12
138	Aberrated electron probes for magnetic spectroscopy with atomic resolution: Theory and practical aspects. Physical Review B, 2016, 93, .	3.2	12
139	Cobalt-Molybdenum Single-Layered Nanocatalysts Decorated on Carbon Nanotubes and the Influence of Preparation Conditions on Their Hydrodesulfurization Catalytic Activity. Energy & Fuels, 2018, 32, 7820-7826.	5.1	12
140	Atomically sharp domain walls in an antiferromagnet. Science Advances, 2022, 8, eabn3535.	10.3	12
141	Universal optical response of Si-Si bonds and its evolution from nanoparticles to bulk crystals. Physical Review B, 2009, 79, .	3.2	11
142	Crystal-induced effects at crystal/amorphous interfaces: The case of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Si</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub Physical Review B, 2010, 82, .	3.2	11
143	Etching of transition metal dichalcogenide monolayers into nanoribbon arrays. Nanoscale Horizons, 2019, 4, 689-696.	8.0	11
144	Electroreduction of Carbon Dioxide into Selective Hydrocarbons at Low Overpotential Using Isomorphic Atomic Substitution in Copper Oxide. ACS Sustainable Chemistry and Engineering, 2020, 8, 179-189.	6.7	11

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145	Identification and lattice location of oxygen impurities in Î±-Si3N4. Applied Physics Letters, 2009, 95, 164101.	3.3	10
146	Selenium Segregation in Femtosecond-Laser Hyperdoped Silicon Revealed by Electron Tomography. Microscopy and Microanalysis, 2013, 19, 716-725.	0.4	10
147	Emergence of shallow energy levels in B-doped Q-carbon: A high-temperature superconductor. Acta Materialia, 2019, 174, 153-159.	7.9	10
148	Synthesis and optoelectronic properties of ultrathin Ga2O3 nanowires. Journal of Materials Chemistry C, 2020, 8, 11555-11562.	5.5	10
149	Atomic-resolution visualization and doping effects of complex structures in intercalated bilayer graphene. Physical Review Materials, 2019, 3, .	2.4	10
150	Atomic resolution study of the interfacial bonding at Si3N4/CeO2âˆ'Î´ grain boundaries. Applied Physics Letters, 2008, 93, 053104.	3.3	9
151	Probing the electronic structure and optical response of a graphene quantum disk supported on monolayer graphene. Journal of Physics Condensed Matter, 2012, 24, 314213.	1.8	9
152	Atomic-Scale Characterization of Oxide Thin Films Gated by Ionic Liquid. ACS Applied Materials & Interfaces, 2014, 6, 17018-17023.	8.0	9
153	Evidence for superconductivity at<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>T</mml:mi><mml:mi>c</mml:mi></mml:msub><mml:mo in oxygen-deficient<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">MoO</mml:mi><mml:mrow><mml:mn>2</mml:mn><mml:mo>âˆ'</mml:mo><mml:mi>Î´</mml:mi></mml:mrow properties of molybdenum arsenide and oxide binaries. Physical Review B, 2014, 90, .	3.2	9
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