

Juan-Carlos Idrobo

List of Publications by Year in descending order

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Version: 2024-02-01

225
papers

20,044
citations

19608

61
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10424

139
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234
all docs

234
docs citations

234
times ranked

26225
citing authors

#	ARTICLE	IF	CITATIONS
1	Atomically sharp domain walls in an antiferromagnet. <i>Science Advances</i> , 2022, 8, eabn3535.	4.7	12
2	Van der Waals Nanowires with Continuously Variable Interlayer Twist and Twist Homojunctions. <i>Advanced Functional Materials</i> , 2021, 31, 2006412.	7.8	22
3	A new resolution quest in electron microscopy. <i>Nature Reviews Materials</i> , 2021, 6, 100-102.	23.3	13
4	Isotope-Resolved Electron Energy Loss Spectroscopy in a Monochromated Scanning Transmission Electron Microscope. <i>Microscopy Today</i> , 2021, 29, 36-41.	0.2	5
5	Scalable synthesis of nanoporous atomically thin graphene membranes for dialysis and molecular separations via facile isopropanol-assisted hot lamination. <i>Nanoscale</i> , 2021, 13, 2825-2837.	2.8	17
6	High spatial and energy resolution electron energy loss spectroscopy of the magnetic and electric excitations in plasmonic nanorod oligomers. <i>Optics Express</i> , 2021, 29, 4661.	1.7	4
7	Direct visualization of anionic electrons in an electrified reveals inhomogeneities. <i>Science Advances</i> , 2021, 7, .	4.7	24
8	Local electronic structure variation resulting in Li ⁺ filament formation within solid electrolytes. <i>Nature Materials</i> , 2021, 20, 1485-1490.	13.3	226
9	Electron effective mass determination across a $\text{Al}_{0.2}\text{Ga}_{0.8}\text{O}_3/\text{Ga}_2\text{O}_3$ interface by Kramers-Kronig analysis. <i>Microscopy and Microanalysis</i> , 2021, 27, 1168-1169.	0.2	0
10	Exploring electronic coupling of optical and phonon excitations at the nanoscale. <i>Microscopy and Microanalysis</i> , 2021, 27, 1202-1203.	0.2	2
11	Electron energy loss spectroscopy of sub-10 nm 2D MoS ₂ crystals. <i>Microscopy and Microanalysis</i> , 2021, 27, 1210-1211.	0.2	0
12	Metal-Nitrogen-Carbon Cluster-Decorated Titanium Carbide is a Durable and Inexpensive Oxygen Reduction Reaction Electrocatalyst. <i>ChemSusChem</i> , 2021, 14, 4680-4689.	3.6	2
13	Imaging Infrared Plasmon Hybridization in Doped Semiconductor Nanocrystal Dimers. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 10270-10276.	2.1	5
14	Revealing the Brønsted-Evans-Polanyi relation in halide-activated fast MoS ₂ growth toward millimeter-sized 2D crystals. <i>Science Advances</i> , 2021, 7, eabj3274.	4.7	18
15	Experimental observation of localized interfacial phonon modes. <i>Nature Communications</i> , 2021, 12, 6901.	5.8	46
16	Theory of magnon diffuse scattering in scanning transmission electron microscopy. <i>Physical Review B</i> , 2021, 104, .	1.1	8
17	Emerging Electron Microscopy Techniques for Probing Functional Interfaces in Energy Materials. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 1384-1396.	7.2	19
18	Emerging Electron Microscopy Techniques for Probing Functional Interfaces in Energy Materials. <i>Angewandte Chemie</i> , 2020, 132, 1400-1412.	1.6	4

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19	Electroreduction of Carbon Dioxide into Selective Hydrocarbons at Low Overpotential Using Isomorphous Atomic Substitution in Copper Oxide. ACS Sustainable Chemistry and Engineering, 2020, 8, 179-189.	3.2	11
20	Leaning on a ledge. Nature Materials, 2020, 19, 1260-1261.	13.3	0
21	Plasmon Hybridization in Nanorhombus Assemblies. Journal of Physical Chemistry C, 2020, 124, 27009-27016.	1.5	3
22	Synthesis and optoelectronic properties of ultrathin Ga ₂ O ₃ nanowires. Journal of Materials Chemistry C, 2020, 8, 11555-11562.	2.7	10
23	Electron Beam Infrared Nano-Ellipsometry of Individual Indium Tin Oxide Nanocrystals. Nano Letters, 2020, 20, 7987-7994.	4.5	7
24	Atomic Electron Tomography: Past, Present and Future. Microscopy and Microanalysis, 2020, 26, 652-654.	0.2	1
25	2D Electrets of Ultrathin MoO ₂ with Apparent Piezoelectricity. Advanced Materials, 2020, 32, e2000006.	11.1	51
26	Vapor-Liquid-Solid Growth and Optoelectronics of Gallium Sulfide van der Waals Nanowires. ACS Nano, 2020, 14, 6117-6126.	7.3	28
27	Correlating the three-dimensional atomic defects and electronic properties of two-dimensional transition metal dichalcogenides. Nature Materials, 2020, 19, 867-873.	13.3	96
28	Facile Size-Selective Defect Sealing in Large-Area Atomically Thin Graphene Membranes for Sub-Nanometer Scale Separations. Nano Letters, 2020, 20, 5951-5959.	4.5	38
29	Local strain-driven migration of oxygen vacancies to apical sites in YBa ₂ Cu ₃ O _{7-x} . Nanoscale, 2020, 12, 5922-5931.	2.8	14
30	Infrared plasmonics: STEM-EELS characterization of Fabry-Pérot resonance damping in gold nanowires. Physical Review B, 2020, 101, .	1.1	18
31	Chemical Mapping of Unstained DNA Origami Using STEM/EDS and Graphene Supports. ACS Applied Nano Materials, 2020, 3, 1123-1130.	2.4	7
32	Radiation-induced segregation in a ceramic. Nature Materials, 2020, 19, 992-998.	13.3	47
33	Ultrahigh Spatial Resolution of Mid-Infrared Optical Excitations with Monochromated Electron Energy-Loss Spectroscopy. , 2020, , .		0
34	Determining the 3D Atomic Coordinates and Crystal Defects in 2D Materials with Picometer Precision. Microscopy and Microanalysis, 2019, 25, 404-405.	0.2	1
35	EELS in STEM: the "Swiss Army Knife" of Spectroscopy. Microscopy and Microanalysis, 2019, 25, 620-621.	0.2	0
36	Elevated temperature microstructural stability in cast AlCuMnZr alloys through solute segregation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 765, 138279.	2.6	89

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37	Self-Assembly of Atomically Thin Chiral Copper Heterostructures Templated by Black Phosphorus. <i>Advanced Functional Materials</i> , 2019, 29, 1903120.	7.8	9
38	Two-Dimensional Lateral Epitaxy of 2H (MoSe ₂) ^{1T} (ReSe ₂) Phases. <i>Nano Letters</i> , 2019, 19, 6338-6345.	4.5	30
39	Damage-Free Nanoscale Isotopic Analysis of Biological Materials with Vibrational Electron Spectroscopy. <i>Microscopy and Microanalysis</i> , 2019, 25, 1088-1089.	0.2	0
40	Electron-Beam Manipulation of Lattice Impurities in Graphene and Single-Walled Carbon Nanotubes. <i>Microscopy and Microanalysis</i> , 2019, 25, 938-939.	0.2	0
41	Single-Crystalline ¹³ Ga ₂ S ₃ Nanotubes via Epitaxial Conversion of GaAs Nanowires. <i>Nano Letters</i> , 2019, 19, 8903-8910.	4.5	8
42	Focused Electron Beam Induced Deposition Synthesis of 3D Photonic and Magnetic Nanoresonators. <i>ACS Applied Nano Materials</i> , 2019, 2, 8075-8082.	2.4	14
43	Direct Observation of Infrared Plasmonic Fano Antiresonances by a Nanoscale Electron Probe. <i>Physical Review Letters</i> , 2019, 123, 177401.	2.9	25
44	Defect-Induced Electronic Structure Changes in Cesium Lead Halide Nanocrystals. <i>Microscopy and Microanalysis</i> , 2019, 25, 660-661.	0.2	0
45	Prospect for detecting magnetism of a single impurity atom using electron magnetic chiral dichroism. <i>Physical Review B</i> , 2019, 100, .	1.1	4
46	Etching of transition metal dichalcogenide monolayers into nanoribbon arrays. <i>Nanoscale Horizons</i> , 2019, 4, 689-696.	4.1	11
47	Strain-Induced Structural Deformation Study of 2D Mo _x W _{1-x} S ₂ . <i>Advanced Materials Interfaces</i> , 2019, 6, 1801262.	1.9	13
48	Identification of site-specific isotopic labels by vibrational spectroscopy in the electron microscope. <i>Science</i> , 2019, 363, 525-528.	6.0	124
49	Controlling the Infrared Dielectric Function through Atomic-Scale Heterostructures. <i>ACS Nano</i> , 2019, 13, 6730-6741.	7.3	33
50	Atomic-Scale Spectroscopic Imaging of the Extreme-UV Optical Response of B- and N-Doped Graphene. <i>Advanced Functional Materials</i> , 2019, 29, 1901819.	7.8	7
51	Engineering single-atom dynamics with electron irradiation. <i>Science Advances</i> , 2019, 5, eaav2252.	4.7	61
52	Emergence of shallow energy levels in B-doped Q-carbon: A high-temperature superconductor. <i>Acta Materialia</i> , 2019, 174, 153-159.	3.8	10
53	High-K dielectric sulfur-selenium alloys. <i>Science Advances</i> , 2019, 5, eaau9785.	4.7	13
54	Spectroscopic signatures of edge states in hexagonal boron nitride. <i>Nano Research</i> , 2019, 12, 1663-1667.	5.8	7

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55	Syntheses of Colloidal $\text{F:In}_2\text{O}_3$ Cubes: Fluorine-Induced Faceting and Infrared Plasmonic Response. <i>Chemistry of Materials</i> , 2019, 31, 2661-2676.	3.2	41
56	Spatially and spectrally resolved orbital angular momentum interactions in plasmonic vortex generators. <i>Light: Science and Applications</i> , 2019, 8, 33.	7.7	25
57	Low Contact Barrier in $2\text{H}/1\text{T}\epsilon^2$ MoTe_2 In-Plane Heterostructure Synthesized by Chemical Vapor Deposition. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 12777-12785.	4.0	70
58	Two-Dimensional Gold Quantum Dots with Tunable Bandgaps. <i>ACS Nano</i> , 2019, 13, 4347-4353.	7.3	23
59	In-Situ Characterization of 2-Dim Materials at High Energy and Spatial Resolution. <i>Microscopy and Microanalysis</i> , 2019, 25, 17-18.	0.2	0
60	Graphene Optoelectronics: Atomic-Scale Spectroscopic Imaging of the Extreme-UV Optical Response of B - and N -Doped Graphene (<i>Adv. Funct. Mater.</i> 52/2019). <i>Advanced Functional Materials</i> , 2019, 29, 1970356.	7.8	0
61	Progress in ultrahigh energy resolution EELS. <i>Ultramicroscopy</i> , 2019, 203, 60-67.	0.8	111
62	Atomic Structure and Electrical Activity of Grain Boundaries and Ruddlesden-Popper Faults in Cesium Lead Bromide Perovskite. <i>Advanced Materials</i> , 2019, 31, e1805047.	11.1	72
63	Atomic-resolution visualization and doping effects of complex structures in intercalated bilayer graphene. <i>Physical Review Materials</i> , 2019, 3, .	0.9	10
64	Direct observation of apical oxygen vacancies in the high-temperature superconductor $\text{YBaCu}_3\text{O}_{7-x}$. <i>Physical Review Letters</i> , 2019, 122, 087201.	0.9	14
65	Structural Phase Transformation in Strained Monolayer MoWSe_2 Alloy. <i>ACS Nano</i> , 2018, 12, 3468-3476.	7.3	57
66	Temperature Measurement by a Nanoscale Electron Probe Using Energy Gain and Loss Spectroscopy. <i>Physical Review Letters</i> , 2018, 120, 095901.	2.9	97
67	Exploring the capabilities of monochromated electron energy loss spectroscopy in the infrared regime. <i>Scientific Reports</i> , 2018, 8, 5637.	1.6	67
68	Deformation Mechanisms of Vertically Stacked WS_2/MoS_2 Heterostructures: The Role of Interfaces. <i>ACS Nano</i> , 2018, 12, 4036-4044.	7.3	54
69	Local low rank denoising for enhanced atomic resolution imaging. <i>Ultramicroscopy</i> , 2018, 187, 34-42.	0.8	14
70	Probing the localization of magnetic dichroism by atomic-size astigmatic and vortex electron beams. <i>Scientific Reports</i> , 2018, 8, 4019.	1.6	16
71	Novel EELS Experiments in the Newly Opened Monochromated Regime. <i>Microscopy and Microanalysis</i> , 2018, 24, 418-419.	0.2	0
72	Image and Spectrum Image Denoising under the local low Rank Assumption. <i>Microscopy and Microanalysis</i> , 2018, 24, 578-579.	0.2	1

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73	Atomic-resolution electric field measurements with a universal detector. <i>Microscopy and Microanalysis</i> , 2018, 24, 114-115.	0.2	1
74	Probing the Proximity of Magnetic Dichroic Signal in Electron Magnetics Circular Dichroism by Atomic Sized Electron Vortex Beam and Four Fold Astigmatic Beams.. <i>Microscopy and Microanalysis</i> , 2018, 24, 922-923.	0.2	1
75	Sub-Ångstrom electric field measurements on a universal detector in a scanning transmission electron microscope. <i>Advanced Structural and Chemical Imaging</i> , 2018, 4, 10.	4.0	84
76	Quaternary Alloys: Thermally Induced 2D Alloy Heterostructure Transformation in Quaternary Alloys (<i>Adv. Mater.</i> 45/2018). <i>Advanced Materials</i> , 2018, 30, 1870344.	11.1	2
77	Proposal for a three-dimensional magnetic measurement method with nanometer-scale depth resolution. <i>Physical Review B</i> , 2018, 98, .	1.1	4
78	Towards topological spectroscopy in the electron microscope with atomic resolution. <i>Microscopy and Microanalysis</i> , 2018, 24, 926-927.	0.2	1
79	Vibrational Spectroscopy of Liquid Water by Monochromated Aloff EELS. <i>Microscopy and Microanalysis</i> , 2018, 24, 422-423.	0.2	1
80	Significantly Enhanced Emission Stability of CsPbBr ₃ Nanocrystals via Chemically Induced Fusion Growth for Optoelectronic Devices. <i>ACS Applied Nano Materials</i> , 2018, 1, 6091-6098.	2.4	42
81	Telluride-Based Atomically Thin Layers of Ternary Two-Dimensional Transition Metal Dichalcogenide Alloys. <i>Chemistry of Materials</i> , 2018, 30, 7262-7268.	3.2	37
82	Facile MoS ₂ Growth on Reduced Graphene-Oxide via Liquid Phase Method. <i>Frontiers in Materials</i> , 2018, 5, .	1.2	5
83	Thermally Induced 2D Alloy Heterostructure Transformation in Quaternary Alloys. <i>Advanced Materials</i> , 2018, 30, e1804218.	11.1	29
84	Theoretical and Experimental Insight into the Mechanism for Spontaneous Vertical Growth of ReS ₂ Nanosheets. <i>Advanced Functional Materials</i> , 2018, 28, 1801286.	7.8	35
85	Cobalt-Molybdenum Single-Layered Nanocatalysts Decorated on Carbon Nanotubes and the Influence of Preparation Conditions on Their Hydrodesulfurization Catalytic Activity. <i>Energy & Fuels</i> , 2018, 32, 7820-7826.	2.5	12
86	Vibrational Spectroscopy of Water with High Spatial Resolution. <i>Advanced Materials</i> , 2018, 30, e1802702.	11.1	45
87	Atomic-Scale Identification of Planar Defects in Cesium Lead Bromide Perovskite Nanocrystals. <i>Microscopy and Microanalysis</i> , 2018, 24, 100-101.	0.2	2
88	Towards Nanometer-Scale Three-Dimensional Magnetic Studies with Atomic Size Electron Vortex Beams. <i>Microscopy and Microanalysis</i> , 2018, 24, 918-919.	0.2	2
89	A short story of imaging and spectroscopy of two-dimensional materials by scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2017, 180, 156-162.	0.8	13
90	Optical signatures of defects in low temperature Raman and photoluminescence spectra of 2D crystals (Conference Presentation). , 2017, , .		0

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91	Molecular Sieving Across Centimeter-Scale Single-Layer Nanoporous Graphene Membranes. ACS Nano, 2017, 11, 5726-5736.	7.3	105
92	Edge-Controlled Growth and Etching of Two-Dimensional GaSe Monolayers. Journal of the American Chemical Society, 2017, 139, 482-491.	6.6	65
93	Re Doping in 2D Transition Metal Dichalcogenides as a New Route to Tailor Structural Phases and Induced Magnetism. Advanced Materials, 2017, 29, 1703754.	11.1	191
94	Water and Solute Transport Governed by Tunable Pore Size Distributions in Nanoporous Graphene Membranes. ACS Nano, 2017, 11, 10042-10052.	7.3	96
95	Revealing the Bonding of Nitrogen Impurities in Monolayer Graphene. Microscopy and Microanalysis, 2017, 23, 1750-1751.	0.2	1
96	Phase Segregation Behavior of Two-Dimensional Transition Metal Dichalcogenide Binary Alloys Induced by Dissimilar Substitution. Chemistry of Materials, 2017, 29, 7431-7439.	3.2	27
97	2D Materials: Quaternary 2D Transition Metal Dichalcogenides (TMDs) with Tunable Bandgap (Adv.) Tj ETQq1 1 0.784314 rgBT /Overfoc	11.1	1
98	Quaternary 2D Transition Metal Dichalcogenides (TMDs) with Tunable Bandgap. Advanced Materials, 2017, 29, 1702457.	11.1	186
99	Observing Nanoscale Orbital Angular Momentum in Plasmon Vortices with Cathodoluminescence. Microscopy and Microanalysis, 2017, 23, 1694-1695.	0.2	0
100	2D Materials: Re Doping in 2D Transition Metal Dichalcogenides as a New Route to Tailor Structural Phases and Induced Magnetism (Adv. Mater. 43/2017). Advanced Materials, 2017, 29, .	11.1	1
101	Nanoporous Atomically Thin Graphene Membranes for Desalting and Dialysis Applications. Advanced Materials, 2017, 29, 1700277.	11.1	118
102	Acquisition and Fast Analysis of Multi-Dimensional STEM Data. Microscopy and Microanalysis, 2017, 23, 168-169.	0.2	0
103	Near-Field Mid-Infrared Plasmonics in Complex Nanostructures with Monochromated Electron Energy Loss Spectroscopy. Microscopy and Microanalysis, 2017, 23, 1532-1533.	0.2	0
104	Directly Identifying Phase Segregation in 2D Quaternary Alloys. Microscopy and Microanalysis, 2017, 23, 1438-1439.	0.2	1
105	Microstructure Characterization of Nanoscale Materials and Interconnects. , 2017, , 489-534.		0
106	Low-Loss Imaging of Defect Structures in Two Dimensional Materials Using Aberration Corrected Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2016, 22, 1410-1411.	0.2	0
107	Fast Aberration Measurement in Multi-Dimensional STEM. Microscopy and Microanalysis, 2016, 22, 252-253.	0.2	1
108	Mapping Magnetic Ordering With Aberrated Electron Probes in STEM. Microscopy and Microanalysis, 2016, 22, 1676-1677.	0.2	2

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109	Single Atom Imaging and Spectroscopy of Impurities in 2D Materials. <i>Microscopy and Microanalysis</i> , 2016, 22, 862-863.	0.2	0
110	Atomic and electronic structure of Ti substitution in Ca ₃ Co ₄ O ₉ . <i>Journal of Applied Physics</i> , 2016, 120, 205105.	1.1	2
111	Vertically Oriented Arrays of ReS ₂ Nanosheets for Electrochemical Energy Storage and Electrocatalysis. <i>Nano Letters</i> , 2016, 16, 3780-3787.	4.5	241
112	Persistent photoconductivity in two-dimensional Mo _{1-x} W _x Se ₂ "MoSe ₂ van der Waals heterojunctions. <i>Journal of Materials Research</i> , 2016, 31, 923-930.	1.2	20
113	Polymerization of Acetonitrile via a Hydrogen Transfer Reaction from CH ₃ to CN under Extreme Conditions. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 12040-12044.	7.2	26
114	Transition-Metal Substitution Doping in Synthetic Atomically Thin Semiconductors. <i>Advanced Materials</i> , 2016, 28, 9735-9743.	11.1	208
115	Controllable growth of layered selenide and telluride heterostructures and superlattices using molecular beam epitaxy. <i>Journal of Materials Research</i> , 2016, 31, 900-910.	1.2	85
116	Aberrated electron probes for magnetic spectroscopy with atomic resolution: Theory and practical aspects. <i>Physical Review B</i> , 2016, 93, .	1.1	12
117	Isoelectronic Tungsten Doping in Monolayer MoSe ₂ for Carrier Type Modulation. <i>Advanced Materials</i> , 2016, 28, 8240-8247.	11.1	85
118	Vorticity in electron beams: Definition, properties, and its relationship with magnetism. <i>Physical Review B</i> , 2016, 94, .	1.1	3
119	Humidity sensing using vertically oriented arrays of ReS ₂ nanosheets deposited on an interdigitated gold electrode. <i>2D Materials</i> , 2016, 3, 045012.	2.0	42
120	Signatures of distinct impurity configurations in atomic-resolution valence electron-energy-loss spectroscopy: Application to graphene. <i>Physical Review B</i> , 2016, 94, .	1.1	8
121	Detecting magnetic ordering with atomic size electron probes. <i>Advanced Structural and Chemical Imaging</i> , 2016, 2, .	4.0	36
122	Oxidative dehydrogenation of isobutane over vanadia catalysts supported by titania nanoshapes. <i>Catalysis Today</i> , 2016, 263, 84-90.	2.2	17
123	Mapping Magnetic Properties of Materials At Atomic Spatial Resolution. <i>Microscopy and Microanalysis</i> , 2015, 21, 499-500.	0.2	2
124	Low-loss electron energy loss spectroscopy: An atomic-resolution complement to optical spectroscopies and application to graphene. <i>Physical Review B</i> , 2015, 92, .	1.1	29
125	The quest for inorganic fullerenes. <i>Journal of Applied Physics</i> , 2015, 118, 134302.	1.1	3
126	Intergranular Nanostructure Effects on Strength and Toughness of Si ₃ N ₄ . <i>Journal of the American Ceramic Society</i> , 2015, 98, 1650-1657.	1.9	19

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127	Ptychographic Imaging in an Aberration Corrected STEM. <i>Microscopy and Microanalysis</i> , 2015, 21, 1219-1220.	0.2	4
128	Ultrahigh photo-responsivity and detectivity in multilayer InSe nanosheets phototransistors with broadband response. <i>Journal of Materials Chemistry C</i> , 2015, 3, 7022-7028.	2.7	203
129	The observation of square ice in graphene questioned. <i>Nature</i> , 2015, 528, E1-E2.	13.7	95
130	Structural and superconducting features of Tl-1223 prepared at ambient pressure. <i>Superconductor Science and Technology</i> , 2015, 28, 115006.	1.8	3
131	Revealing the Preferred Interlayer Orientations and Stackings of Two-Dimensional Bilayer Gallium Selenide Crystals. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 2712-2717.	7.2	45
132	Van der Waals Epitaxial Growth of Two-Dimensional Single-Crystalline GaSe Domains on Graphene. <i>ACS Nano</i> , 2015, 9, 8078-8088.	7.3	103
133	Nanofiltration across Defect-Sealed Nanoporous Monolayer Graphene. <i>Nano Letters</i> , 2015, 15, 3254-3260.	4.5	272
134	Low-Frequency Raman Fingerprints of Two-Dimensional Metal Dichalcogenide Layer Stacking Configurations. <i>ACS Nano</i> , 2015, 9, 6333-6342.	7.3	151
135	Heterogeneous sub-continuum ionic transport in statistically isolated graphene nanopores. <i>Nature Nanotechnology</i> , 2015, 10, 1053-1057.	15.6	203
136	Toward Single Mode, Atomic Size Electron Vortex Beams. <i>Microscopy and Microanalysis</i> , 2014, 20, 832-836.	0.2	16
137	Engineered Porous Carbon for High Volumetric Methane Storage. <i>Adsorption Science and Technology</i> , 2014, 32, 681-691.	1.5	16
138	Modeling ellipsometry and electron energy loss spectroscopy of graphene. , 2014, , .		1
139	Facet-Dependent Disorder in Pristine High-Voltage Lithium-Manganese-Rich Cathode Material. <i>ACS Nano</i> , 2014, 8, 12710-12716.	7.3	71
140	Simulation of Charge Transport in Disordered Assemblies of Metallic Nano-Islands: Application to Boron-Nitride Nanotubes Functionalized with Gold Quantum Dots. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1700, 17-28.	0.1	5
141	Selective Ionic Transport through Tunable Subnanometer Pores in Single-Layer Graphene Membranes. <i>Nano Letters</i> , 2014, 14, 1234-1241.	4.5	687
142	p-type doping of MoS ₂ thin films using Nb. <i>Applied Physics Letters</i> , 2014, 104, 092104.	1.5	268
143	Flexible metallic nanowires with self-adaptive contacts to semiconducting transition-metal dichalcogenide monolayers. <i>Nature Nanotechnology</i> , 2014, 9, 436-442.	15.6	228
144	Direct visualization of the Jahn-Teller effect coupled to Na ordering in Na _{5/8} MnO ₂ . <i>Nature Materials</i> , 2014, 13, 586-592.	13.3	237

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145	Electronic and Quantum Transport Properties of Atomically Identified Si Point Defects in Graphene. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1711-1718.	2.1	14
146	Heteroepitaxial Growth of Two-Dimensional Hexagonal Boron Nitride Templated by Graphene Edges. <i>Science</i> , 2014, 343, 163-167.	6.0	479
147	Interlaced crystals having a perfect Bravais lattice and complex chemical order revealed by real-space crystallography. <i>Nature Communications</i> , 2014, 5, 5431.	5.8	29
148	Orbital Occupancy and Charge Doping in Iron-Based Superconductors. <i>Advanced Materials</i> , 2014, 26, 6193-6198.	11.1	13
149	Electrode architectures for high capacity multivalent conversion compounds: iron (ii and iii) fluoride. <i>RSC Advances</i> , 2014, 4, 6730.	1.7	39
150	Achieving Atomic Resolution Magnetic Dichroism by Controlling the Phase Symmetry of an Electron Probe. <i>Physical Review Letters</i> , 2014, 113, 145501.	2.9	54
151	Atomic-Scale Characterization of Oxide Thin Films Gated by Ionic Liquid. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 17018-17023.	4.0	9
152	High-performance Ag-Co alloy catalysts for electrochemical oxygen reduction. <i>Nature Chemistry</i> , 2014, 6, 828-834.	6.6	383
153	Highly sensitive phototransistors based on two-dimensional GaTe nanosheets with direct bandgap. <i>Nano Research</i> , 2014, 7, 694-703.	5.8	140
154	Thickness-Dependent Crossover from Charge- to Strain-Mediated Magnetoelectric Coupling in Ferromagnetic/Piezoelectric Oxide Heterostructures. <i>ACS Nano</i> , 2014, 8, 894-903.	7.3	61
155	Evidence for superconductivity at $T_c < 100$ K in oxygen-deficient MoO_2 and MoO_3 binaries. <i>Physical Review B</i> , 2014, 90, 114501.	1.1	9
156	Electronic Excitations in Graphene in the 1-50 eV Range: The $\tilde{\Gamma}$ and $\tilde{\Gamma} + \tilde{\Gamma}$ Peaks Are Not Plasmons. <i>Nano Letters</i> , 2014, 14, 3827-3831.	4.5	69
157	Atomic Imaging and Spectroscopy of Two-Dimensional Materials. <i>Microscopy and Microanalysis</i> , 2014, 20, 92-93.	0.2	0
158	Imaging and Spectroscopy of Graphene/Hexagonal Boron Nitride Lateral Heterostructure Interfaces. <i>Microscopy and Microanalysis</i> , 2014, 20, 94-95.	0.2	0
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