

Wu Zhou

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5651599/wu-zhou-publications-by-citations.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

218
papers

26,016
citations

77
h-index

160
g-index

237
ext. papers

30,794
ext. citations

13.1
avg, IF

6.87
L-index

#	Paper	IF	Citations
218	Recent Advances in Two-Dimensional Materials beyond Graphene. <i>ACS Nano</i> , 2015 , 9, 11509-39	16.7	1581
217	Vertical and in-plane heterostructures from WS ₂ /MoS ₂ monolayers. <i>Nature Materials</i> , 2014 , 13, 1135-42	27	1580
216	Intrinsic structural defects in monolayer molybdenum disulfide. <i>Nano Letters</i> , 2013 , 13, 2615-22	11.5	1418
215	An oxygen reduction electrocatalyst based on carbon nanotube-graphene complexes. <i>Nature Nanotechnology</i> , 2012 , 7, 394-400	28.7	1407
214	Vapour phase growth and grain boundary structure of molybdenum disulphide atomic layers. <i>Nature Materials</i> , 2013 , 12, 754-9	27	1384
213	Nanoscale nickel oxide/nickel heterostructures for active hydrogen evolution electrocatalysis. <i>Nature Communications</i> , 2014 , 5, 4695	17.4	1170
212	Defects Engineered Monolayer MoS ₂ for Improved Hydrogen Evolution Reaction. <i>Nano Letters</i> , 2016 , 16, 1097-103	11.5	794
211	van der Waals epitaxy of MoS ₂ layers using graphene as growth templates. <i>Nano Letters</i> , 2012 , 12, 2784-91	11.5	788
210	Low-temperature hydrogen production from water and methanol using Pt/EMoC catalysts. <i>Nature</i> , 2017 , 544, 80-83	50.4	748
209	In-plane heterostructures of graphene and hexagonal boron nitride with controlled domain sizes. <i>Nature Nanotechnology</i> , 2013 , 8, 119-24	28.7	687
208	Ultrathin high-temperature oxidation-resistant coatings of hexagonal boron nitride. <i>Nature Communications</i> , 2013 , 4, 2541	17.4	418
207	Two-Step Growth of Two-Dimensional WSe ₂ /MoSe ₂ Heterostructures. <i>Nano Letters</i> , 2015 , 15, 6135-41	11.5	401
206	Band gap engineering and layer-by-layer mapping of selenium-doped molybdenum disulfide. <i>Nano Letters</i> , 2014 , 14, 442-9	11.5	378
205	Atomic-layered Au clusters on EMoC as catalysts for the low-temperature water-gas shift reaction. <i>Science</i> , 2017 , 357, 389-393	33.3	377
204	High-Electron-Mobility and Air-Stable 2D Layered PtSe FETs. <i>Advanced Materials</i> , 2017 , 29, 1604230	24	368
203	Room-temperature ferroelectricity in CuInP ₂ S ₆ ultrathin flakes. <i>Nature Communications</i> , 2016 , 7, 12357	17.4	355
202	Strain and structure heterogeneity in MoS ₂ atomic layers grown by chemical vapour deposition. <i>Nature Communications</i> , 2014 , 5, 5246	17.4	352

201	PdSe: Pentagonal Two-Dimensional Layers with High Air Stability for Electronics. <i>Journal of the American Chemical Society</i> , 2017 , 139, 14090-14097	16.4	318
200	Large-area synthesis of monolayer and few-layer MoSe ₂ films on SiO ₂ substrates. <i>Nano Letters</i> , 2014 , 14, 2419-25	11.5	312
199	Atomically thin noble metal dichalcogenide: a broadband mid-infrared semiconductor. <i>Nature Communications</i> , 2018 , 9, 1545	17.4	267
198	Two-dimensional heterostructures: fabrication, characterization, and application. <i>Nanoscale</i> , 2014 , 6, 12250-72	7.7	266
197	Structural defects on converted bismuth oxide nanotubes enable highly active electrocatalysis of carbon dioxide reduction. <i>Nature Communications</i> , 2019 , 10, 2807	17.4	252
196	Long-range ferromagnetic ordering in manganese-doped two-dimensional dichalcogenides. <i>Physical Review B</i> , 2013 , 88,	3.3	234
195	MoS ₂ /TiO ₂ Edge-On Heterostructure for Efficient Photocatalytic Hydrogen Evolution. <i>Advanced Energy Materials</i> , 2016 , 6, 1600464	21.8	226
194	Ultrafast high-capacity NiZn battery with NiAlCo-layered double hydroxide. <i>Energy and Environmental Science</i> , 2014 , 7, 2025	35.4	224
193	Fast kinetics of magnesium monochloride cations in interlayer-expanded titanium disulfide for magnesium rechargeable batteries. <i>Nature Communications</i> , 2017 , 8, 339	17.4	220
192	Boron- and Nitrogen-Substituted Graphene Nanoribbons as Efficient Catalysts for Oxygen Reduction Reaction. <i>Chemistry of Materials</i> , 2015 , 27, 1181-1186	9.6	202
191	Chemical Vapor Deposition of Large-Size Monolayer MoSe Crystals on Molten Glass. <i>Journal of the American Chemical Society</i> , 2017 , 139, 1073-1076	16.4	196
190	Direct Synthesis of Large-Area 2D Mo C on In Situ Grown Graphene. <i>Advanced Materials</i> , 2017 , 29, 1700077	17.4	195
189	Two-dimensional GaSe/MoSe ₂ misfit bilayer heterojunctions by van der Waals epitaxy. <i>Science Advances</i> , 2016 , 2, e1501882	14.3	190
188	Direct determination of the chemical bonding of individual impurities in graphene. <i>Physical Review Letters</i> , 2012 , 109, 206803	7.4	189
187	Flexible metallic nanowires with self-adaptive contacts to semiconducting transition-metal dichalcogenide monolayers. <i>Nature Nanotechnology</i> , 2014 , 9, 436-42	28.7	185
186	Chemical Vapor Deposition of Monolayer Rhenium Disulfide (ReS ₂). <i>Advanced Materials</i> , 2015 , 27, 4640-84	8.4	177
185	New insights into the nature of the acidic catalytic active sites present in ZrO ₂ -supported tungsten oxide catalysts. <i>Journal of Catalysis</i> , 2008 , 256, 108-125	7.3	176
184	A highly CO-tolerant atomically dispersed Pt catalyst for chemoselective hydrogenation. <i>Nature Nanotechnology</i> , 2019 , 14, 354-361	28.7	175

183	Atomically localized plasmon enhancement in monolayer graphene. <i>Nature Nanotechnology</i> , 2012 , 7, 161-5	28.7	173
182	Spatially controlled doping of two-dimensional SnS through intercalation for electronics. <i>Nature Nanotechnology</i> , 2018 , 13, 294-299	28.7	169
181	Direct chemical conversion of graphene to boron- and nitrogen- and carbon-containing atomic layers. <i>Nature Communications</i> , 2014 , 5, 3193	17.4	169
180	Phase Restructuring in Transition Metal Dichalcogenides for Highly Stable Energy Storage. <i>ACS Nano</i> , 2016 , 10, 9208-9215	16.7	160
179	Atomically-thin Bi ₂ MoO ₆ nanosheets with vacancy pairs for improved photocatalytic CO ₂ reduction. <i>Nano Energy</i> , 2019 , 61, 54-59	17.1	150
178	Supported Pd-Cu bimetallic nanoparticles that have high activity for the electrochemical oxidation of methanol. <i>Chemistry - A European Journal</i> , 2012 , 18, 4887-93	4.8	146
177	Large-Area and High-Quality 2D Transition Metal Telluride. <i>Advanced Materials</i> , 2017 , 29, 1603471	24	140
176	Vacancy-induced formation and growth of inversion domains in transition-metal dichalcogenide monolayer. <i>ACS Nano</i> , 2015 , 9, 5189-97	16.7	137
175	Blending Cr ₂ O ₃ into a NiO-Ni electrocatalyst for sustained water splitting. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 11989-93	16.4	132
174	Synthesis of Millimeter-Scale Transition Metal Dichalcogenides Single Crystals. <i>Advanced Functional Materials</i> , 2016 , 26, 2009-2015	15.6	126
173	Identification of active Zr-WO(x) clusters on a ZrO ₂ support for solid acid catalysts. <i>Nature Chemistry</i> , 2009 , 1, 722-8	17.6	123
172	Direct Synthesis of a Macroscale Single-Walled Carbon Nanotube Non-Woven Material. <i>Advanced Materials</i> , 2004 , 16, 1529-1534	24	120
171	Worm-Shape Pt Nanocrystals Grown on Nitrogen-Doped Low-Defect Graphene Sheets: Highly Efficient Electrocatalysts for Methanol Oxidation Reaction. <i>Small</i> , 2017 , 13, 1603013	11	117
170	Chemical Stabilization of 1TTPHase Transition Metal Dichalcogenides with Giant Optical Kerr Nonlinearity. <i>Journal of the American Chemical Society</i> , 2017 , 139, 2504-2511	16.4	114
169	AC/AB stacking boundaries in bilayer graphene. <i>Nano Letters</i> , 2013 , 13, 3262-8	11.5	112
168	Molecular Beam Epitaxy of Highly Crystalline Monolayer Molybdenum Disulfide on Hexagonal Boron Nitride. <i>Journal of the American Chemical Society</i> , 2017 , 139, 9392-9400	16.4	110
167	Construction of a sp ² /sp ³ Carbon Interface in 3D N-Doped Nanocarbons for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 15089-15097	16.4	110
166	Rhenium-Doped and Stabilized MoS Atomic Layers with Basal-Plane Catalytic Activity. <i>Advanced Materials</i> , 2018 , 30, e1803477	24	110

165	A stable low-temperature H ₂ -production catalyst by crowding Pt on $\sqrt{3}\times\sqrt{3}$ MoC. <i>Nature</i> , 2021 , 589, 396-401	50.4	109
164	Catalysis Science of Methanol Oxidation over Iron Vanadate Catalysts: Nature of the Catalytic Active Sites. <i>ACS Catalysis</i> , 2011 , 1, 54-66	13.1	107
163	Stacking-Dependent Interlayer Coupling in Trilayer MoS ₂ with Broken Inversion Symmetry. <i>Nano Letters</i> , 2015 , 15, 8155-61	11.5	106
162	In Situ Observation and Electrochemical Study of Encapsulated Sulfur Nanoparticles by MoS Flakes. <i>Journal of the American Chemical Society</i> , 2017 , 139, 10133-10141	16.4	106
161	Intrinsically patterned two-dimensional materials for selective adsorption of molecules and nanoclusters. <i>Nature Materials</i> , 2017 , 16, 717-721	27	105
160	Chemical Insights into the Design and Development of Face-Centered Cubic Ruthenium Catalysts for Fischer-Tropsch Synthesis. <i>Journal of the American Chemical Society</i> , 2017 , 139, 2267-2276	16.4	104
159	Strain-Induced Electronic Structure Changes in Stacked van der Waals Heterostructures. <i>Nano Letters</i> , 2016 , 16, 3314-20	11.5	101
158	Platinum-modulated cobalt nanocatalysts for low-temperature aqueous-phase Fischer-Tropsch synthesis. <i>Journal of the American Chemical Society</i> , 2013 , 135, 4149-58	16.4	98
157	Synthesis of large-scale atomic-layer SnS ₂ through chemical vapor deposition. <i>Nano Research</i> , 2017 , 10, 2386-2394	10	97
156	Origin of the synergistic interaction between MoO ₃ and iron molybdate for the selective oxidation of methanol to formaldehyde. <i>Journal of Catalysis</i> , 2010 , 275, 84-98	7.3	96
155	Boosting hydrogen evolution on MoS via co-confining selenium in surface and cobalt in inner layer. <i>Nature Communications</i> , 2020 , 11, 3315	17.4	95
154	Brittle Fracture of 2D MoSe. <i>Advanced Materials</i> , 2017 , 29, 1604201	24	95
153	Controlled Synthesis of Organic/Inorganic van der Waals Solid for Tunable Light-Matter Interactions. <i>Advanced Materials</i> , 2015 , 27, 7800-8	24	94
152	Chemical Vapor Deposition of High-Quality Large-Sized MoS Crystals on Silicon Dioxide Substrates. <i>Advanced Science</i> , 2016 , 3, 1500033	13.6	93
151	Weakening hydrogen adsorption on nickel via interstitial nitrogen doping promotes bifunctional hydrogen electrocatalysis in alkaline solution. <i>Energy and Environmental Science</i> , 2019 , 12, 3522-3529	35.4	92
150	Spectroscopic Signatures of AA and AB Stacking of Chemical Vapor Deposited Bilayer MoS ₂ . <i>ACS Nano</i> , 2015 , 9, 12246-54	16.7	90
149	Collapse of stamps for soft lithography due to interfacial adhesion. <i>Applied Physics Letters</i> , 2005 , 86, 154106	3.4	89
148	Controllable deuteration of halogenated compounds by photocatalytic D ₂ O splitting. <i>Nature Communications</i> , 2018 , 9, 80	17.4	88

147	Direct visualization of reversible dynamics in a Si ₁₁ cluster embedded in a graphene pore. <i>Nature Communications</i> , 2013 , 4, 1650	17.4	87
146	Rapid and Nondestructive Identification of Polytypism and Stacking Sequences in Few-Layer Molybdenum Diselenide by Raman Spectroscopy. <i>Advanced Materials</i> , 2015 , 27, 4502-4508	24	85
145	Electroreduction of CO to Formate on a Copper-Based Electrocatalyst at High Pressures with High Energy Conversion Efficiency. <i>Journal of the American Chemical Society</i> , 2020 , 142, 7276-7282	16.4	84
144	Relating n-pentane isomerization activity to the tungsten surface density of WO _x /ZrO ₂ . <i>Journal of the American Chemical Society</i> , 2010 , 132, 13462-71	16.4	84
143	The observation of square ice in graphene questioned. <i>Nature</i> , 2015 , 528, E1-2	50.4	80
142	Band engineering for novel two-dimensional atomic layers. <i>Small</i> , 2015 , 11, 1868-84	11	79
141	Mo-Terminated Edge Reconstructions in Nanoporous Molybdenum Disulfide Film. <i>Nano Letters</i> , 2018 , 18, 482-490	11.5	76
140	Engineering covalently bonded 2D layered materials by self-intercalation. <i>Nature</i> , 2020 , 581, 171-177	50.4	68
139	Impact of the Coordination Environment on Atomically Dispersed Pt Catalysts for Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2020 , 10, 907-913	13.1	68
138	Controlled growth of ultrathin Mo ₂ C superconducting crystals on liquid Cu surface. <i>2D Materials</i> , 2017 , 4, 011012	5.9	67
137	Viral-capsid-type vesicle-like structures assembled from M12L24 metal-organic hybrid nanocages. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 5182-7	16.4	66
136	Stabilization of graphene nanopore. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 7522-6	11.5	61
135	Atomically Dispersed Ni/EMoC Catalyst for Hydrogen Production from Methanol/Water. <i>Journal of the American Chemical Society</i> , 2021 , 143, 309-317	16.4	60
134	Enhanced performance of in-plane transition metal dichalcogenides monolayers by configuring local atomic structures. <i>Nature Communications</i> , 2020 , 11, 2253	17.4	58
133	Synergy between tungsten and palladium supported on titania for the catalytic total oxidation of propane. <i>Journal of Catalysis</i> , 2012 , 285, 103-114	7.3	56
132	Atomically Dispersed Semimetallic Selenium on Porous Carbon Membrane as an Electrode for Hydrazine Fuel Cells. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 13466-13471	16.4	55
131	Facet-dependent disorder in pristine high-voltage lithium-manganese-rich cathode material. <i>ACS Nano</i> , 2014 , 8, 12710-6	16.7	55
130	Non-Bonding Interaction of Neighboring Fe and Ni Single-Atom Pairs on MOF-Derived N-Doped Carbon for Enhanced CO Electroreduction. <i>Journal of the American Chemical Society</i> , 2021 , 143, 19417-19424	16.4	55

129	Nature of Catalytically Active Sites in the Supported WO ₃ /ZrO ₂ Solid Acid System: A Current Perspective. <i>ACS Catalysis</i> , 2017 , 7, 2181-2198	13.1	54
128	Single atom microscopy. <i>Microscopy and Microanalysis</i> , 2012 , 18, 1342-54	0.5	54
127	Layer Engineering of 2D Semiconductor Junctions. <i>Advanced Materials</i> , 2016 , 28, 5126-32	24	53
126	Nanostructural and chemical characterization of supported metal oxide catalysts by aberration corrected analytical electron microscopy. <i>Current Opinion in Solid State and Materials Science</i> , 2012 , 16, 10-22	12	52
125	Reactivity of Ga ₂ O ₃ Clusters on Zeolite ZSM-5 for the Conversion of Methanol to Aromatics. <i>Catalysis Letters</i> , 2012 , 142, 1049-1056	2.8	51
124	Anomalous thickness dependence of Curie temperature in air-stable two-dimensional ferromagnetic 1T-CrTe grown by chemical vapor deposition. <i>Nature Communications</i> , 2021 , 12, 809	17.4	51
123	Atomic-scale observation of structural and electronic orders in the layered compound β -RuCl ₃ . <i>Nature Communications</i> , 2016 , 7, 13774	17.4	50
122	Lateral Epitaxy of Atomically Sharp WSe ₂ /WS ₂ Heterojunctions on Silicon Dioxide Substrates. <i>Chemistry of Materials</i> , 2016 , 28, 7194-7197	9.6	50
121	Dynamic Behavior of Single-Atom Catalysts in Electrocatalysis: Identification of Cu-N as an Active Site for the Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2021 , 143, 14530-14539	16.4	49
120	Engineering and modifying two-dimensional materials by electron beams. <i>MRS Bulletin</i> , 2017 , 42, 667-676	5.2	48
119	Large-Scale Synthesis of Rings of Bundled Single-Walled Carbon Nanotubes by Floating Chemical Vapor Deposition. <i>Advanced Materials</i> , 2006 , 18, 1817-1821	24	48
118	Dynamic Evolution of Solid-Liquid Electrochemical Interfaces over Single-Atom Active Sites. <i>Journal of the American Chemical Society</i> , 2020 , 142, 12306-12313	16.4	47
117	Insights into the physical chemistry of materials from advances in HAADF-STEM. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 3982-4006	3.6	47
116	Atom-by-Atom Fabrication of Monolayer Molybdenum Membranes. <i>Advanced Materials</i> , 2018 , 30, e1707281	2.1	46
115	Maximizing the Synergistic Effect of CoNi Catalyst on β -MoC for Robust Hydrogen Production. <i>Journal of the American Chemical Society</i> , 2021 , 143, 628-633	16.4	46
114	Molecular Beam Epitaxy of Highly Crystalline MoSe on Hexagonal Boron Nitride. <i>ACS Nano</i> , 2018 , 12, 7562-7570	16.7	44
113	Vacancy-driven anisotropic defect distribution in the battery-cathode material LiFePO ₄ . <i>Physical Review Letters</i> , 2011 , 107, 085507	7.4	44
112	Diameter dependence of modulus in zinc oxide nanowires and the effect of loading mode: In situ experiments and universal core-shell approach. <i>Applied Physics Letters</i> , 2009 , 95, 091912	3.4	44

111	Blending Cr ₂ O ₃ into a NiO _x /Ni Electrocatalyst for Sustained Water Splitting. <i>Angewandte Chemie</i> , 2015 , 127, 12157-12161	3.6	43
110	Controlled formation of mixed nanoscale domains of high capacity Fe ₂ O ₃ -Fe ₃ O ₄ conversion compounds by direct fluorination. <i>ACS Nano</i> , 2015 , 9, 2530-9	16.7	41
109	Structural Flexibility and Alloying in Ultrathin Transition-Metal Chalcogenide Nanowires. <i>ACS Nano</i> , 2016 , 10, 2782-90	16.7	41
108	Alloying Nickel with Molybdenum Significantly Accelerates Alkaline Hydrogen Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 5771-5777	16.4	41
107	Solvothermal synthesis of ultrasmall tungsten oxide nanoparticles. <i>Langmuir</i> , 2012 , 28, 17771-7	4	40
106	Synergizing metal-support interactions and spatial confinement boosts dynamics of atomic nickel for hydrogenations. <i>Nature Nanotechnology</i> , 2021 , 16, 1141-1149	28.7	40
105	Edge Segregated Polymorphism in 2D Molybdenum Carbide. <i>Advanced Materials</i> , 2019 , 31, e1808343	24	40
104	Temperature- and Phase-Dependent Phonon Renormalization in 1T ₁ MoS ₂ . <i>ACS Nano</i> , 2018 , 12, 5051-5058	6.7	39
103	Large Area Synthesis of 1D-MoSe ₂ Using Molecular Beam Epitaxy. <i>Advanced Materials</i> , 2017 , 29, 1605641	24	38
102	Temperature dependence of excitonic recombination in lateral epitaxially overgrown InGaN/GaN quantum wells studied with cathodoluminescence. <i>Journal of Applied Physics</i> , 2004 , 95, 1832-1842	2.5	38
101	Strain Modulation by van der Waals Coupling in Bilayer Transition Metal Dichalcogenide. <i>ACS Nano</i> , 2018 , 12, 1940-1948	16.7	37
100	Unsupported single-atom-thick copper oxide monolayers. <i>2D Materials</i> , 2017 , 4, 011001	5.9	37
99	Synthesis of Co-Doped MoS ₂ Monolayers with Enhanced Valley Splitting. <i>Advanced Materials</i> , 2020 , 32, e1906536	24	35
98	Optimizing Electron Densities of Ni-N-C Complexes by Hybrid Coordination for Efficient Electrocatalytic CO Reduction. <i>ChemSusChem</i> , 2020 , 13, 929-937	8.3	35
97	Localization of inelastic electron scattering in the low-loss energy regime. <i>Ultramicroscopy</i> , 2012 , 119, 51-6	3.1	32
96	Controlled synthesis and room-temperature pyroelectricity of CuInP ₂ S ₆ ultrathin flakes. <i>Nano Energy</i> , 2019 , 58, 596-603	17.1	31
95	Discovering superior basal plane active two-dimensional catalysts for hydrogen evolution. <i>Materials Today</i> , 2019 , 25, 28-34	21.8	31
94	Construction of a sp ³ /sp ² Carbon Interface in 3D N-Doped Nanocarbons for the Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 2019 , 131, 15233-15241	3.6	30

93	Dislocation-driven growth of two-dimensional lateral quantum-well superlattices. <i>Science Advances</i> , 2018 , 4, eaap9096	14.3	30
92	Viral-Capsid-Type Vesicle-Like Structures Assembled from M12L24 Metal-Organic Hybrid Nanocages. <i>Angewandte Chemie</i> , 2011 , 123, 5288-5293	3.6	28
91	Direct growth of MoS ₂ single crystals on polyimide substrates. <i>2D Materials</i> , 2017 , 4, 021028	5.9	27
90	Selective electrochemical production of hydrogen peroxide at zigzag edges of exfoliated molybdenum telluride nanoflakes. <i>National Science Review</i> , 2020 , 7, 1360-1366	10.8	27
89	3D Band Diagram and Photoexcitation of 2D-3D Semiconductor Heterojunctions. <i>Nano Letters</i> , 2015 , 15, 5919-25	11.5	26
88	Patterned Growth of P-Type MoS ₂ Atomic Layers Using Sol-Gel as Precursor. <i>Advanced Functional Materials</i> , 2016 , 26, 6371-6379	15.6	26
87	Atomically sharp interface enabled ultrahigh-speed non-volatile memory devices. <i>Nature Nanotechnology</i> , 2021 , 16, 882-887	28.7	26
86	Healing of Planar Defects in 2D Materials via Grain Boundary Sliding. <i>Advanced Materials</i> , 2019 , 31, e1900237	13.7	24
85	Observation of the Kondo Effect in Multilayer Single-Crystalline VTe Nanoplates. <i>Nano Letters</i> , 2019 , 19, 8572-8580	11.5	24
84	Low-loss electron energy loss spectroscopy: An atomic-resolution complement to optical spectroscopies and application to graphene. <i>Physical Review B</i> , 2015 , 92,	3.3	24
83	InSe/hBN/graphite heterostructure for high-performance 2D electronics and flexible electronics. <i>Nano Research</i> , 2020 , 13, 1127-1132	10	24
82	Plasmon-induced hot electron transfer in Au-ZnO heterogeneous nanorods for enhanced SERS. <i>Nanoscale</i> , 2019 , 11, 11782-11788	7.7	23
81	An electrodeposition approach to metal/metal oxide heterostructures for active hydrogen evolution catalysts in near-neutral electrolytes. <i>Nano Research</i> , 2019 , 12, 1431-1435	10	23
80	Structural and electrical properties of Mn _{1.56} Co _{0.96} Ni _{0.48} O ₄ NTC thermistor films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2014 , 185, 74-78	3.1	23
79	Boosting Activity and Stability of Metal Single-Atom Catalysts via Regulation of Coordination Number and Local Composition. <i>Journal of the American Chemical Society</i> , 2021 , 143, 18854-18858	16.4	23
78	Interlaced crystals having a perfect Bravais lattice and complex chemical order revealed by real-space crystallography. <i>Nature Communications</i> , 2014 , 5, 5431	17.4	22
77	Atomically Dispersed Semimetallic Selenium on Porous Carbon Membrane as an Electrode for Hydrazine Fuel Cells. <i>Angewandte Chemie</i> , 2019 , 131, 13600-13605	3.6	21
76	In-situ spectroscopic observation of dynamic-coupling oxygen on atomically dispersed iridium electrocatalyst for acidic water oxidation. <i>Nature Communications</i> , 2021 , 12, 6118	17.4	18

75	Atomically dispersed Ir/□MoC catalyst with high metal loading and thermal stability for water-promoted hydrogenation reaction.. <i>National Science Review</i> , 2022 , 9, nwab026	10.8	18
74	Double Wall Carbon Nanotubes with an Inner Diameter of 0.4 nm. <i>Chemical Vapor Deposition</i> , 2003 , 9, 119-121		17
73	Direct Cation Exchange in Monolayer MoS ₂ via Recombination-Enhanced Migration. <i>Physical Review Letters</i> , 2019 , 122, 106101	7.4	16
72	Strain-driven growth of ultra-long two-dimensional nano-channels. <i>Nature Communications</i> , 2020 , 11, 772	17.4	16
71	Sub-10-nm graphene nanoribbons with atomically smooth edges from squashed carbon nanotubes. <i>Nature Electronics</i> , 2021 , 4, 653-663	28.4	14
70	Infrared optical properties of Mn _{1.56} Co _{0.96} Ni _{0.48} O ₄ thin films prepared by chemical solution deposition. <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 114, 829-832	2.6	13
69	Air-Stable Monolayer Cu Se Exhibits a Purely Thermal Structural Phase Transition. <i>Advanced Materials</i> , 2020 , 32, e1908314	24	12
68	Local low rank denoising for enhanced atomic resolution imaging. <i>Ultramicroscopy</i> , 2018 , 187, 34-42	3.1	12
67	Electronic and Quantum Transport Properties of Atomically Identified Si Point Defects in Graphene. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1711-8	6.4	12
66	Orbital occupancy and charge doping in iron-based superconductors. <i>Advanced Materials</i> , 2014 , 26, 6193-8	28	12
65	Single-atom electron microscopy for energy-related nanomaterials. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 16142-16165	13	12
64	Current rectification and asymmetric photoresponse in MoS ₂ stacking-induced homojunctions. <i>2D Materials</i> , 2017 , 4, 035011	5.9	11
63	Unprecedentedly high activity and selectivity for hydrogenation of nitroarenes with single atomic Co-NP sites.. <i>Nature Communications</i> , 2022 , 13, 723	17.4	11
62	Electrochemical CO reduction to ethylene by ultrathin CuO nanoplate arrays.. <i>Nature Communications</i> , 2022 , 13, 1877	17.4	11
61	A short story of imaging and spectroscopy of two-dimensional materials by scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2017 , 180, 156-162	3.1	10
60	Detection of defects in atomic-resolution images of materials using cycle analysis. <i>Advanced Structural and Chemical Imaging</i> , 2020 , 6,	3.9	10
59	Catalytic Amination of Polylactic Acid to Alanine. <i>Journal of the American Chemical Society</i> , 2021 , 143, 16358-16363	16.4	10
58	Watching Atoms Work: Nanocluster Structure and Dynamics. <i>ACS Nano</i> , 2015 , 9, 9437-40	16.7	9

57	Probing the electronic structure and optical response of a graphene quantum disk supported on monolayer graphene. <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 314213	1.8	9
56	Preparation and properties of silicon oxycarbide fibers. <i>Journal of Materials Science</i> , 2005 , 40, 3497-3501	4.3	9
55	Gentle STEM of Single Atoms: Low keV Imaging and Analysis at Ultimate Detection Limits	119-161	9
54	Signatures of distinct impurity configurations in atomic-resolution valence electron-energy-loss spectroscopy: Application to graphene. <i>Physical Review B</i> , 2016 , 94,	3-3	8
53	Self-synergistic cobalt catalysts with symbiotic metal single-atoms and nanoparticles for efficient oxygen reduction. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 1127-1133	13	7
52	Spectroscopic signatures of edge states in hexagonal boron nitride. <i>Nano Research</i> , 2019 , 12, 1663-1667	10	6
51	Study on the fabrication and performance of Mn _{1.56} Co _{0.96} Ni _{0.48} O ₄ film optically immersed infrared detector. <i>Materials Research Innovations</i> , 2015 , 19, S7-S10	1.9	6
50	Pristine edge structures of TTF phase transition metal dichalcogenides (ReSe, ReS) atomic layers. <i>Nanoscale</i> , 2020 , 12, 17005-17012	7-7	6
49	Unveiling Atomic-Scale Moiré Features and Atomic Reconstructions in High-Angle Commensurately Twisted Transition Metal Dichalcogenide Homobilayers. <i>Nano Letters</i> , 2021 , 21, 3262-3270	11.5	5
48	Alloying Nickel with Molybdenum Significantly Accelerates Alkaline Hydrogen Electrocatalysis. <i>Angewandte Chemie</i> , 2021 , 133, 5835-5841	3.6	5
47	Improving the STEM Spatial Resolution Limit. <i>Microscopy and Microanalysis</i> , 2018 , 24, 18-19	0.5	5
46	Aberration-corrected Analytical Microscopy Characterization of Double-Supported WO ₃ /TiO ₂ /SiO ₂ Solid Acid Catalysts. <i>ChemCatChem</i> , 2011 , 3, 1045-1050	5-2	4
45	Ferritin-based targeted delivery of arsenic to diverse leukaemia types confers strong anti-leukaemia therapeutic effects. <i>Nature Nanotechnology</i> , 2021 ,	28.7	4
44	Facile Chemical Route to Prepare Water Soluble Epitaxial Sr ₃ Al ₂ O ₆ Sacrificial Layers for Free-Standing Oxides. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2001643	4.6	4
43	High-resolution electron microscopy for heterogeneous catalysis research. <i>Chinese Physics B</i> , 2018 , 27, 056804	1.2	3
42	Monochromatic STEM-EELS for Correlating the Atomic Structure and Optical Properties of Two-Dimensional Materials. <i>Microscopy and Microanalysis</i> , 2014 , 20, 96-97	0.5	3
41	Structural Characterization of WO ₃ /ZrO ₂ Catalysts using HAADF Imaging. <i>Microscopy and Microanalysis</i> , 2008 , 14, 1350-1351	0.5	3
40	Interfacial Intermixing and Its Impact on the Energy Band Structure in Interband Cascade Infrared Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 38553-38560	9.5	3

39	Insight into the Activity of Atomically Dispersed Cu Catalysts for Semihydrogenation of Acetylene: Impact of Coordination Environments. <i>ACS Catalysis</i> , 2022 , 12, 48-57	13.1	3
38	Using graphene to suppress the selenization of Pt for controllable fabrication of monolayer PtSe ₂ . <i>Nano Research</i> , 2020 , 13, 3212-3216	10	2
37	Selective linear etching of monolayer black phosphorus using electron beams. <i>Chinese Physics B</i> , 2020 , 29, 086801	1.2	1
36	Stabilization of Nanopores in Graphene. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1732-1733	0.5	1
35	Flexible Metallic Nanowires with Self-Adaptive Contacts to Semiconducting Transition-Metal Dichalcogenide Monolayers. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1760-1761	0.5	1
34	Functionalization of Graphene. <i>Microscopy and Microanalysis</i> , 2015 , 21, 737-738	0.5	1
33	Formation of Single-atom-thick Copper Oxide Monolayers. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1684-1685	0.5	1
32	Defect Dynamics in 2D Transition Metal Dichalcogenide Monolayers. <i>Microscopy and Microanalysis</i> , 2015 , 21, 433-434	0.5	1
31	Characterization of Growth Defects in ZnTe Single Crystals. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 299, 203		1
30	Observation of an Incommensurate Charge Density Wave in Monolayer TiSe ₂ /CuSe/Cu(111) Heterostructure.. <i>Physical Review Letters</i> , 2022 , 128, 026401	7.4	1
29	Electron Energy Loss Spectroscopy for Single Atom Catalysis. <i>Topics in Catalysis</i> , 1	2.3	1
28	Two distinct superconducting states controlled by orientations of local wrinkles in LiFeAs. <i>Nature Communications</i> , 2021 , 12, 6312	17.4	1
27	Thermodynamics of order and randomness in dopant distributions inferred from atomically resolved imaging. <i>Npj Computational Materials</i> , 2021 , 7,	10.9	1
26	Investigating phase transitions from local crystallographic analysis based on statistical learning of atomic environments in 2D MoS ₂ -ReS ₂ . <i>Applied Physics Reviews</i> , 2021 , 8, 011409	17.3	1
25	Defect in 2D materials beyond graphene 2018 , 161-187		1
24	MgO intercalation and crystallization between epitaxial graphene and Ru(0001). <i>Rare Metals</i> , 1	5.5	1
23	Diverse Spin-Polarized In-Gap States at Grain Boundaries of Rhenium Dichalcogenides Induced by Unsaturated Re-Re Bonding 1513-1520		1
22	Direct growth of single-metal-atom chains 2022 , 1, 245-253		1

21	Anisotropic point defects in rhenium diselenide monolayers. <i>IScience</i> , 2021 , 24, 103456	6.1	o
20	Accurate and Robust Calibration of the Uniform Affine Transformation Between Scan-Camera Coordinates for Atom-Resolved In-Focus 4D-STEM Datasets.. <i>Microscopy and Microanalysis</i> , 2022 , 1-11	0.5	o
19	Patterned Growth: Patterned Growth of P-Type MoS ₂ Atomic Layers Using Solid Sulfur as Precursor (Adv. Funct. Mater. 35/2016). <i>Advanced Functional Materials</i> , 2016 , 26, 6495-6495	15.6	
18	Alloying in Flexible Transition-metal Chalcogenide Nanowires. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1424-1425	0.5	
17	Dislocation-Driven Growth of Two-Dimensional Lateral Quantum Well Superlattices. <i>Microscopy and Microanalysis</i> , 2018 , 24, 88-89	0.5	
16	Electronic Structure and Coupling of Re Clusters In Monolayer MoS ₂ . <i>Microscopy and Microanalysis</i> , 2019 , 25, 506-507	0.5	
15	Engineering and Modifying Two-Dimensional Materials via Electron Beams. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1474-1475	0.5	
14	Innentitelbild: Atomically Dispersed Semimetallic Selenium on Porous Carbon Membrane as an Electrode for Hydrazine Fuel Cells (Angew. Chem. 38/2019). <i>Angewandte Chemie</i> , 2019 , 131, 13298-13298	3.6	
13	Inelastic STEM Imaging Based on Low-Loss Spectroscopy. <i>Microscopy and Microanalysis</i> , 2014 , 20, 90-91	0.5	
12	Atomic Imaging and Spectroscopy of Two-Dimensional Materials. <i>Microscopy and Microanalysis</i> , 2014 , 20, 92-93	0.5	
11	Quantification of Dopant Distribution and the Local Band Gap in Selenium-Doped Molybdenum Disulfide. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1754-1755	0.5	
10	Interfaces in Two-Dimensional Heterostructures of Transition Metal Dichalcogenides. <i>Microscopy and Microanalysis</i> , 2015 , 21, 105-106	0.5	
9	Exchange of Re and Mo atoms in MoS ₂ driven by Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1702-1703	0.5	
8	Microstructural Development of Supported Pt/ZrO ₂ /SiO ₂ Catalysts: The Effect of ZrO ₂ Nanoligands. <i>Microscopy and Microanalysis</i> , 2009 , 15, 1414-1415	0.5	
7	Preferred Orientation in Fibers of Hipco Single Wall Carbon Nanotubes from Diffuse X-Ray Scattering. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 740, 1		
6	Characterization of Growth Defects in ZnTe Single Crystals. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 302, 451		
5	Low voltage scanning transmission electron microscopy for two-dimensional materials. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2017 , 66, 217303	0.6	
4	Low-Loss Imaging of Defect Structures in Two Dimensional Materials Using Aberration Corrected Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1410-1411	0.5	

- 3 Atomic Level Structure-Property Relationship in a Spin-Orbit Mott insulator: Scanning Transmission Electron and Scanning Tunneling Microscopy Studies. *Microscopy and Microanalysis*, **2016**, 22, 908-909 0.5
- 2 Single Atom Imaging and Spectroscopy of Impurities in 2D Materials. *Microscopy and Microanalysis*, **2016**, 22, 862-863 0.5
- 1 An instrument for measuring scintillators efficiently based on silicon photomultipliers. *Review of Scientific Instruments*, **2016**, 87, 113308 1.7