

Kazu Suenaga

List of Publications by Year in descending order

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385
papers

34,759
citations

4370

86
h-index

4203

174
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393
all docs

393
docs citations

393
times ranked

31932
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct evidence for atomic defects in graphene layers. <i>Nature</i> , 2004, 430, 870-873.	13.7	1,534
2	A library of atomically thin metal chalcogenides. <i>Nature</i> , 2018, 556, 355-359.	13.7	1,225
3	Atomic mechanism of the semiconducting-to-metallic phase transition in single-layered MoS ₂ . <i>Nature Nanotechnology</i> , 2014, 9, 391-396.	15.6	1,146
4	Nano-aggregates of single-walled graphitic carbon nano-horns. <i>Chemical Physics Letters</i> , 1999, 309, 165-170.	1.2	1,144
5	Epitaxial growth of a monolayer WSe ₂ -MoS ₂ lateral p-n junction with an atomically sharp interface. <i>Science</i> , 2015, 349, 524-528.	6.0	1,009
6	Fabrication of a Freestanding Boron Nitride Single Layer and Its Defect Assignments. <i>Physical Review Letters</i> , 2009, 102, 195505.	2.9	973
7	Phase patterning for ohmic homojunction contact in MoTe ₂ . <i>Science</i> , 2015, 349, 625-628.	6.0	918
8	Graphene Annealing: How Clean Can It Be?. <i>Nano Letters</i> , 2012, 12, 414-419.	4.5	801
9	MoS ₂ monolayer catalyst doped with isolated Co atoms for the hydrodeoxygenation reaction. <i>Nature Chemistry</i> , 2017, 9, 810-816.	6.6	683
10	Graphene Oxide: Structural Analysis and Application as a Highly Transparent Support for Electron Microscopy. <i>ACS Nano</i> , 2009, 3, 2547-2556.	7.3	629
11	New Porous Crystals of Extended Metal-Catecholates. <i>Chemistry of Materials</i> , 2012, 24, 3511-3513.	3.2	618
12	Deriving Carbon Atomic Chains from Graphene. <i>Physical Review Letters</i> , 2009, 102, 205501.	2.9	571
13	Tunable Band Gap Photoluminescence from Atomically Thin Transition-Metal Dichalcogenide Alloys. <i>ACS Nano</i> , 2013, 7, 4610-4616.	7.3	543
14	Open and Closed Edges of Graphene Layers. <i>Physical Review Letters</i> , 2009, 102, 015501.	2.9	539
15	One-Dimensional Metallofullerene Crystal Generated Inside Single-Walled Carbon Nanotubes. <i>Physical Review Letters</i> , 2000, 85, 5384-5387.	2.9	510
16	Coaxial Nanocable: Silicon Carbide and Silicon Oxide Sheathed with Boron Nitride and Carbon. , 1998, 281, 973-975.		491
17	Synthesis of Nanoparticles and Nanotubes with Well-Separated Layers of Boron Nitride and Carbon. <i>Science</i> , 1997, 278, 653-655.	6.0	480
18	Atom-by-atom spectroscopy at graphene edge. <i>Nature</i> , 2010, 468, 1088-1090.	13.7	446

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19	Weaving of organic threads into a crystalline covalent organic framework. <i>Science</i> , 2016, 351, 365-369.	6.0	427
20	Atomically thin noble metal dichalcogenide: a broadband mid-infrared semiconductor. <i>Nature Communications</i> , 2018, 9, 1545.	5.8	367
21	Single-Layer ReS_2 : Two-Dimensional Semiconductor with Tunable In-Plane Anisotropy. <i>ACS Nano</i> , 2015, 9, 11249-11257.	7.3	353
22	Confined linear carbon chains as a route to bulk carbyne. <i>Nature Materials</i> , 2016, 15, 634-639.	13.3	341
23	Imaging active topological defects in carbon nanotubes. <i>Nature Nanotechnology</i> , 2007, 2, 358-360.	15.6	338
24	High-quality monolayer superconductor NbSe_2 grown by chemical vapour deposition. <i>Nature Communications</i> , 2017, 8, 394.	5.8	290
25	Element-Selective Single Atom Imaging. <i>Science</i> , 2000, 290, 2280-2282.	6.0	288
26	Vapour "liquid" solid growth of monolayer MoS_2 nanoribbons. <i>Nature Materials</i> , 2018, 17, 535-542.	13.3	286
27	Clean Transfer of Graphene for Isolation and Suspension. <i>ACS Nano</i> , 2011, 5, 2362-2368.	7.3	285
28	High-yield fullerene encapsulation in single-wall carbon nanotubes. <i>Synthetic Metals</i> , 2001, 121, 1195-1196.	2.1	270
29	Properties of Individual Dopant Atoms in Single-Layer MoS_2 : Atomic Structure, Migration, and Enhanced Reactivity. <i>Advanced Materials</i> , 2014, 26, 2857-2861.	11.1	258
30	Synthesis and properties of free-standing monolayer amorphous carbon. <i>Nature</i> , 2020, 577, 199-203.	13.7	250
31	Electron knock-on damage in hexagonal boron nitride monolayers. <i>Physical Review B</i> , 2010, 82, .	1.1	241
32	Imaging of Single Organic Molecules in Motion. <i>Science</i> , 2007, 316, 853-853.	6.0	240
33	One-dimensional van der Waals heterostructures. <i>Science</i> , 2020, 367, 537-542.	6.0	238
34	Flexible metallic nanowires with self-adaptive contacts to semiconducting transition-metal dichalcogenide monolayers. <i>Nature Nanotechnology</i> , 2014, 9, 436-442.	15.6	228
35	Mixed Low-Dimensional Nanomaterial: 2D Ultranarrow MoS_2 Inorganic Nanoribbons Encapsulated in Quasi-1D Carbon Nanotubes. <i>Journal of the American Chemical Society</i> , 2010, 132, 13840-13847.	6.6	218
36	Heterogeneous growth of $\text{B}_x\text{C}_y\text{N}$ nanotubes by laser ablation. <i>Chemical Physics Letters</i> , 1997, 279, 264-269.	1.2	209

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37	Structural and Chemical Dynamics of Pyridinic-Nitrogen Defects in Graphene. <i>Nano Letters</i> , 2015, 15, 7408-7413.	4.5	204
38	Plumbing carbon nanotubes. <i>Nature Nanotechnology</i> , 2008, 3, 17-21.	15.6	202
39	Visualization and quantification of transition metal atomic mixing in Mo _{1-x} W _x S ₂ single layers. <i>Nature Communications</i> , 2013, 4, 1351.	5.8	202
40	Cross-Linked Nano-onions of Carbon Nitride in the Solid Phase: Existence of a Novel C ₄₈ N ₁₂ Aza-Fullerene. <i>Physical Review Letters</i> , 2001, 87, 225503.	2.9	184
41	Large Area and High Quality 2D Transition Metal Telluride. <i>Advanced Materials</i> , 2017, 29, 1603471.	11.1	181
42	Three-fold rotational defects in two-dimensional transition metal dichalcogenides. <i>Nature Communications</i> , 2015, 6, 6736.	5.8	179
43	Photoluminescence Enhancement and Structure Repairing of Monolayer MoSe ₂ by Hydrohalic Acid Treatment. <i>ACS Nano</i> , 2016, 10, 1454-1461.	7.3	179
44	A Catalytic Reaction Inside a Single-Walled Carbon Nanotube. <i>Advanced Materials</i> , 2008, 20, 1443-1449.	11.1	178
45	Large intrinsic energy bandgaps in annealed nanotube-derived graphene nanoribbons. <i>Nature Nanotechnology</i> , 2011, 6, 45-50.	15.6	177
46	Gentle STEM: ADF imaging and EELS at low primary energies. <i>Ultramicroscopy</i> , 2010, 110, 935-945.	0.8	174
47	Twisting Bilayer Graphene Superlattices. <i>ACS Nano</i> , 2013, 7, 2587-2594.	7.3	173
48	Graphene Nanoribbons from Unzipped Carbon Nanotubes: Atomic Structures, Raman Spectroscopy, and Electrical Properties. <i>Journal of the American Chemical Society</i> , 2011, 133, 10394-10397.	6.6	170
49	Electron diffraction study of one-dimensional crystals of fullerenes. <i>Physical Review B</i> , 2001, 64, .	1.1	168
50	Linking Chiral Indices and Transport Properties of Double-Walled Carbon Nanotubes. <i>Physical Review Letters</i> , 2002, 89, 155501.	2.9	164
51	Growth and Optical Properties of High-Quality Monolayer WS ₂ on Graphite. <i>ACS Nano</i> , 2015, 9, 4056-4063.	7.3	162
52	Transition metal atom doping of the basal plane of MoS ₂ monolayer nanosheets for electrochemical hydrogen evolution. <i>Chemical Science</i> , 2018, 9, 4769-4776.	3.7	162
53	Visualizing and identifying single atoms using electron energy-loss spectroscopy with low accelerating voltage. <i>Nature Chemistry</i> , 2009, 1, 415-418.	6.6	152
54	Fabricating Dual-Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 16013-16022.	7.2	151

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55	Metal-Free Growth of Nanographene on Silicon Oxides for Transparent Conducting Applications. <i>Advanced Functional Materials</i> , 2012, 22, 2123-2128.	7.8	150
56	Remote Catalyzation for Direct Formation of Graphene Layers on Oxides. <i>Nano Letters</i> , 2012, 12, 1379-1384.	4.5	146
57	In-Situ Observation of Thermal Relaxation of Interstitial-Vacancy Pair Defects in a Graphite Gap. <i>Physical Review Letters</i> , 2005, 94, 155502.	2.9	142
58	Imaging the atomic structure of activated carbon. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 362201.	0.7	142
59	Polymorphic Structures of Iodine and Their Phase Transition in Confined Nanospace. <i>Nano Letters</i> , 2007, 7, 1532-1535.	4.5	139
60	Carbon nitride nanotubulite – densely-packed and well-aligned tubular nanostructures. <i>Chemical Physics Letters</i> , 1999, 300, 695-700.	1.2	137
61	Dielectric response of isolated carbon nanotubes investigated by spatially resolved electron energy-loss spectroscopy: From multiwalled to single-walled nanotubes. <i>Physical Review B</i> , 2002, 66, .	1.1	129
62	Analysis of the reactivity and selectivity of fullerene dimerization reactions at the atomic level. <i>Nature Chemistry</i> , 2010, 2, 117-124.	6.6	127
63	Metal-Semiconductor Phase Transition in $WSe_2(1\sqrt{3}\times\sqrt{3})Te_2$ Monolayer. <i>Advanced Materials</i> , 2017, 29, 1603991.	11.1	123
64	Radially modulated nitrogen distribution in CN _x nanotubular structures prepared by CVD using Ni phthalocyanine. <i>Chemical Physics Letters</i> , 2000, 316, 365-372.	1.2	116
65	Ambipolar field-effect transistor behavior of Gd@C82 metallofullerene peapods. <i>Applied Physics Letters</i> , 2002, 81, 4067-4069.	1.5	116
66	Heterogeneous nucleation of organic crystals mediated by single-molecule templates. <i>Nature Materials</i> , 2012, 11, 877-881.	13.3	112
67	Enhanced performance of in-plane transition metal dichalcogenides monolayers by configuring local atomic structures. <i>Nature Communications</i> , 2020, 11, 2253.	5.8	112
68	Single Atomically Sharp Lateral Monolayer p-n Heterojunction Solar Cells with Extraordinarily High Power Conversion Efficiency. <i>Advanced Materials</i> , 2017, 29, 1701168. https://doi.org/10.1002/adma.201701168	11.1	111
69	Two-Dimensional Phase Driven by Interlayer Fusion in Layered $PdSe_2$. <i>Physical Review Letters</i> , 2017, 119, 016101. https://doi.org/10.1103/PhysRevLett.119.016101	2.9	111
70	Auto-optimizing Hydrogen Evolution Catalytic Activity of ReS_2 through Intrinsic Charge Engineering. <i>ACS Nano</i> , 2018, 12, 4486-4493.	7.3	111
71	Plasmons in layered nanospheres and nanotubes investigated by spatially resolved electron energy-loss spectroscopy. <i>Physical Review B</i> , 2000, 61, 13936-13944.	1.1	110
72	Controllable Synthesis of Atomically Thin Type-II Weyl Semimetal WTe_2 Nanosheets: An Advanced Electrode Material for All-Solid-State Flexible Supercapacitors. <i>Advanced Materials</i> , 2017, 29, 1701909.	11.1	107

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73	EELS and ^{13}C NMR Characterization of Pure $\text{Ti}_2\text{@C}_{80}$ Metallofullerene. <i>Journal of the American Chemical Society</i> , 2001, 123, 9679-9680.	6.6	106
74	Selective deposition of a gadolinium(III) cluster in a hole opening of single-wall carbon nanohorn. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 8527-8530.	3.3	106
75	Encapsulated and hollow closed-cage structures of WS_2 and MoS_2 prepared by laser ablation at $450\text{--}1050^\circ\text{C}$. <i>Chemical Physics Letters</i> , 2001, 340, 242-248.	1.2	100
76	Smallest Carbon Nanotube Assigned with Atomic Resolution Accuracy. <i>Nano Letters</i> , 2008, 8, 459-462.	4.5	100
77	Performance of low-voltage STEM/TEM with delta corrector and cold field emission gun. <i>Journal of Electron Microscopy</i> , 2010, 59, S7-S13.	0.9	98
78	Atomic Structure and Spectroscopy of Single Metal (Cr, V) Substitutional Dopants in Monolayer MoS_2 . <i>ACS Nano</i> , 2016, 10, 10227-10236.	7.3	96
79	Position and momentum mapping of vibrations in graphene nanostructures. <i>Nature</i> , 2019, 573, 247-250.	13.7	96
80	Structure and electronic properties of a nongraphitic disordered carbon system and its heat-treatment effects. <i>Physical Review B</i> , 2003, 67, .	1.1	94
81	Atomic-Resolution Imaging of the Nucleation Points of Single-Walled Carbon Nanotubes. <i>Small</i> , 2005, 1, 1180-1183.	5.2	93
82	Coaxially Stacked Coronene Columns inside Single-Walled Carbon Nanotubes. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 4853-4857.	7.2	92
83	InSe monolayer: synthesis, structure and ultra-high second-harmonic generation. <i>2D Materials</i> , 2018, 5, 025019.	2.0	92
84	Engineering Monolayer 1T-MoS_2 into a Bifunctional Electrocatalyst via Sonochemical Doping of Isolated Transition Metal Atoms. <i>ACS Catalysis</i> , 2019, 9, 7527-7534.	5.5	92
85	Evidence for Active Atomic Defects in Monolayer Hexagonal Boron Nitride: A New Mechanism of Plasticity in Two-Dimensional Materials. <i>Nano Letters</i> , 2014, 14, 1064-1068.	4.5	90
86	Dual-Metal Interbonding as the Chemical Facilitator for Single-Atom Dispersions. <i>Advanced Materials</i> , 2020, 32, e2003484.	11.1	90
87	Perovskite Solar Cells Using Carbon Nanotubes Both as Cathode and as Anode. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25743-25749.	1.5	89
88	Material Storage Mechanism in Porous Nanocarbon. <i>Advanced Materials</i> , 2004, 16, 397-401.	11.1	88
89	Atomic Correlation Between Adjacent Graphene Layers in Double-Wall Carbon Nanotubes. <i>Physical Review Letters</i> , 2005, 94, 045504.	2.9	88
90	Photogating WS_2 Photodetectors Using Embedded WSe_2 Charge Puddles. <i>ACS Nano</i> , 2020, 14, 4559-4566.	7.3	87

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91	Real Time Reaction Dynamics in Carbon Nanotubes. Journal of the American Chemical Society, 2001, 123, 9673-9674.	6.6	85
92	Identification of active atomic defects in a monolayered tungsten disulphide nanoribbon. Nature Communications, 2011, 2, 213.	5.8	85
93	Imaging the dynamic behaviour of individual retinal chromophores confined inside carbon nanotubes. Nature Nanotechnology, 2007, 2, 422-425.	15.6	84
94	<i>In-Situ</i> Formation of Sandwiched Structures of Nanotube/Cu _x O _y /Cu Composites for Lithium Battery Applications. ACS Nano, 2009, 3, 2177-2184.	7.3	84
95	Controllable Synthesis of Band-Gap-Tunable and Monolayer Transition-Metal Dichalcogenide Alloys. Frontiers in Energy Research, 2014, 2, .	1.2	84
96	Synthesis of Co-Doped MoS ₂ Monolayers with Enhanced Valley Splitting. Advanced Materials, 2020, 32, e1906536.	11.1	84
97	Atomic structure and dynamic behaviour of truly one-dimensional ionic chains inside carbon nanotubes. Nature Materials, 2014, 13, 1050-1054.	13.3	82
98	Direct Observation of Band Structure Modifications in Nanocrystals of CsPbBr ₃ Perovskite. Nano Letters, 2016, 16, 7198-7202.	4.5	82
99	Exploring the Single Atom Spin State by Electron Spectroscopy. Physical Review Letters, 2015, 115, 206803.	2.9	80
100	Vacancy Migrations in Carbon Nanotubes. Nano Letters, 2008, 8, 1127-1130.	4.5	79
101	Exciton Mapping at Subwavelength Scales in Two-Dimensional Materials. Physical Review Letters, 2015, 114, 107601.	2.9	79
102	Transport evidence of asymmetric spin-orbit coupling in few-layer superconducting 1Td-MoTe ₂ . Nature Communications, 2019, 10, 2044.	5.8	79
103	Which Do Endohedral Ti ₂ C ₈₀ Metallofullerenes Prefer Energetically: Ti ₂ @C ₈₀ or Ti ₂ C ₂ @C ₇₈ ? A Theoretical Study. Journal of Physical Chemistry B, 2005, 109, 20251-20255.	1.2	78
104	Wafer-scale and deterministic patterned growth of monolayer MoS ₂ via vapor-liquid-solid method. Nanoscale, 2019, 11, 16122-16129.	2.8	76
105	Nanorods of Endohedral Metallofullerene Derivative. Journal of the American Chemical Society, 2008, 130, 450-451.	6.6	75
106	Controlled Synthesis of Atomically Thin 1T-TaS ₂ for Tunable Charge Density Wave Phase Transitions. Chemistry of Materials, 2016, 28, 7613-7618.	3.2	75
107	Cation-mixing stabilized layered oxide cathodes for sodium-ion batteries. Science Bulletin, 2018, 63, 376-384.	4.3	75
108	Ultra-narrow WS ₂ nanoribbons encapsulated in carbon nanotubes. Journal of Materials Chemistry, 2011, 21, 171-180.	6.7	74

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109	Stable 1T Tungsten Disulfide Monolayer and Its Junctions: Growth and Atomic Structures. ACS Nano, 2018, 12, 12080-12088.	7.3	74
110	Towards atomically precise manipulation of 2D nanostructures in the electron microscope. 2D Materials, 2017, 4, 042004.	2.0	73
111	Dynamics of Carbon Nanotube Growth from Fullerenes. Nano Letters, 2007, 7, 2428-2434.	4.5	72
112	Epitaxial Synthesis of Monolayer PtSe ₂ Single Crystal on MoSe ₂ with Strong Interlayer Coupling. ACS Nano, 2019, 13, 10929-10938.	7.3	72
113	Electron energy-loss spectroscopy of electron states in isolated carbon nanostructures. Physical Review B, 2001, 63, .	1.1	71
114	Synthesis and Transport Properties of Degenerate P-Type Nb-Doped WS ₂ Monolayers. Chemistry of Materials, 2019, 31, 3534-3541.	3.2	71
115	Correction of higher order geometrical aberration by triple 3-fold astigmatism field. Journal of Electron Microscopy, 2009, 58, 341-347.	0.9	70
116	Experimental Observation of Boron Nitride Chains. ACS Nano, 2014, 8, 11950-11957.	7.3	70
117	Direct Imaging of Sc ₂ @C ₈₄ Molecules Encapsulated Inside Single-Wall Carbon Nanotubes by High Resolution Electron Microscopy with Atomic Sensitivity. Physical Review Letters, 2003, 90, 055506.	2.9	69
118	Chiral-Angle Distribution for Separated Single-Walled Carbon Nanotubes. Nano Letters, 2008, 8, 3151-3154.	4.5	69
119	Revealing the Atomic Defects of WS ₂ Governing Its Distinct Optical Emissions. Advanced Functional Materials, 2018, 28, 1704210.	7.8	69
120	Temperature Dependence of the Reconstruction of Zigzag Edges in Graphene. ACS Nano, 2015, 9, 4786-4795.	7.3	68
121	Carbon Nanotubes as Electrically Active Nanoreactors for Multi-Step Inorganic Synthesis: Sequential Transformations of Molecules to Nanoclusters and Nanoclusters to Nanoribbons. Journal of the American Chemical Society, 2016, 138, 8175-8183.	6.6	68
122	Hybridization of Single Nanocrystals of Cs ₄ PbBr ₆ and CsPbBr ₃ . Journal of Physical Chemistry C, 2017, 121, 19490-19496.	1.5	68
123	Chemical vapor deposition of trigonal prismatic NbS ₂ monolayers and 3R-polytype few-layers. Nanoscale, 2017, 9, 16607-16611.	2.8	67
124	Morphology Engineering in Monolayer MoS ₂ @ WS ₂ Lateral Heterostructures. Advanced Functional Materials, 2018, 28, 1801568.	7.8	67
125	Tunable Doping of Rhenium and Vanadium into Transition Metal Dichalcogenides for Two-Dimensional Electronics. Advanced Science, 2021, 8, e2004438.	5.6	66
126	How accurate can the determination of chiral indices of carbon nanotubes be?. European Physical Journal B, 2003, 32, 457-469.	0.6	65

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127	A strategy to control the chirality of single-walled carbon nanotubes. <i>Journal of Crystal Growth</i> , 2008, 310, 5473-5476.	0.7	65
128	Screening the Missing Electron: Nanochemistry in Action. <i>Physical Review Letters</i> , 2009, 102, 046804.	2.9	64
129	Surface-Mediated Aligned Growth of Monolayer MoS ₂ and In-Plane Heterostructures with Graphene on Sapphire. <i>ACS Nano</i> , 2018, 12, 10032-10044.	7.3	64
130	Structures of D _{5d} -C ₈₀ and h-Er ₃ N@C ₈₀ Fullerenes and Their Rotation Inside Carbon Nanotubes Demonstrated by Aberration-Corrected Electron Microscopy. <i>Nano Letters</i> , 2007, 7, 3704-3708.	4.5	63
131	Composition and phase engineering of metal chalcogenides and phosphorous chalcogenides. <i>Nature Materials</i> , 2023, 22, 450-458.	13.3	62
132	Metallic Wires of Lanthanum Atoms Inside Carbon Nanotubes. <i>Journal of the American Chemical Society</i> , 2008, 130, 2162-2163.	6.6	61
133	Isolation of Single-Wired Transition-Metal Monochalcogenides by Carbon Nanotubes. <i>Nano Letters</i> , 2019, 19, 4845-4851.	4.5	61
134	Doping of single-walled carbon nanotubes controlled via chemical transformation of encapsulated nickelocene. <i>Nanoscale</i> , 2015, 7, 1383-1391.	2.8	60
135	Hydrogen-Assisted Epitaxial Growth of Monolayer Tungsten Disulfide and Seamless Grain Stitching. <i>Chemistry of Materials</i> , 2018, 30, 403-411.	3.2	60
136	Polymeric acid-doped transparent carbon nanotube electrodes for organic solar cells with the longest doping durability. <i>Journal of Materials Chemistry A</i> , 2018, 6, 14553-14559.	5.2	60
137	Transport properties of C ₇₈ , C ₉₀ and Dy@C ₈₂ fullerenes-nanopeapods by field effect transistors. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2004, 21, 1089-1092.	1.3	58
138	Growth and optical properties of Nb-doped WS ₂ monolayers. <i>Applied Physics Express</i> , 2016, 9, 071201.	1.1	58
139	Atomic mechanism of metal crystal nucleus formation in a single-walled carbon nanotube. <i>Nature Chemistry</i> , 2020, 12, 921-928.	6.6	58
140	Defect-Induced Atomic Migration in Carbon Nanopeapod: Tracking the Single-Atom Dynamic Behavior. <i>Nano Letters</i> , 2004, 4, 2451-2454.	4.5	57
141	Detection of photons emitted from single erbium atoms in energy-dispersive X-ray spectroscopy. <i>Nature Photonics</i> , 2012, 6, 545-548.	15.6	57
142	Functionalized graphene sheets coordinating metal cations. <i>Carbon</i> , 2014, 75, 81-94.	5.4	57
143	Growth and Raman Spectra of Single-Crystal Trilayer Graphene with Different Stacking Orientations. <i>ACS Nano</i> , 2014, 8, 10766-10773.	7.3	56
144	Single-atom electron energy loss spectroscopy of light elements. <i>Nature Communications</i> , 2015, 6, 7943.	5.8	56

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145	Preparation and Photophysical and Photoelectrochemical Properties of a Covalently Fixed Porphyrin-Chemically Converted Graphene Composite. <i>Chemistry - A European Journal</i> , 2012, 18, 4250-4257.	1.7	55
146	In situ observation of step-edge in-plane growth of graphene in a STEM. <i>Nature Communications</i> , 2014, 5, 4055.	5.8	55
147	Proton and Li-Ion Permeation through Graphene with Eight-Atom-Ring Defects. <i>ACS Nano</i> , 2020, 14, 7280-7286.	7.3	55
148	Catalyst and Chirality Dependent Growth of Carbon Nanotubes Determined Through Nano-Test Tube Chemistry. <i>Advanced Materials</i> , 2010, 22, 3685-3689.	11.1	54
149	Core-Level Spectroscopy of Point Defects in Single Layer h -BN. <i>Physical Review Letters</i> , 2012, 108, 075501.	2.9	54
150	Direct Imaging of the Alkali Metal Site in K-Doped Fullerene Peapods. <i>Physical Review Letters</i> , 2005, 94, 045502.	2.9	53
151	Fine-structure analysis of Gd ₄₅ near-edge EELS on the valence state of Gd@C ₈₂ microcrystals. <i>Physical Review B</i> , 2000, 62, 1627-1630.	1.1	52
152	Anisotropic Ordering in 1T ² Molybdenum and Tungsten Ditelluride Layers Alloyed with Sulfur and Selenium. <i>ACS Nano</i> , 2018, 12, 894-901.	7.3	52
153	Imaging the Structure, Symmetry, and Surface-Inhibited Rotation of Polyoxometalate Ions on Graphene Oxide. <i>Nano Letters</i> , 2010, 10, 4600-4606.	4.5	51
154	Optical orientation and alignment of excitons in ensembles of inorganic perovskite nanocrystals. <i>Physical Review B</i> , 2018, 97, .	1.1	51
155	Direct Imaging of the Structure, Relaxation, and Sterically Constrained Motion of Encapsulated Tungsten Polyoxometalate Lindqvist Ions within Carbon Nanotubes. <i>ACS Nano</i> , 2008, 2, 966-976.	7.3	50
156	Synthesis and Characterization of Eu-Metallofullerenes from Eu@C ₇₄ to Eu@C ₉₀ and Their Nanopeapods. <i>Journal of Physical Chemistry B</i> , 2004, 108, 9011-9015.	1.2	47
157	Entrapping of Exohedral Metallofullerenes in Carbon Nanotubes: (CsC ₆₀) _n @SWNT Nano-Peapods. <i>Journal of the American Chemical Society</i> , 2005, 127, 17972-17973.	6.6	47
158	Template-Assisted Synthesis of Metallic 1T ² Sn _{0.3} W _{0.7} S ₂ Nanosheets for Hydrogen Evolution Reaction. <i>Advanced Functional Materials</i> , 2020, 30, 1906069.	7.8	47
159	Enantioselective Synthesis of Attenols A and B. <i>Organic Letters</i> , 2001, 3, 527-529.	2.4	46
160	Graphene-Transition Metal Dichalcogenide Heterojunctions for Scalable and Low-Power Complementary Integrated Circuits. <i>ACS Nano</i> , 2020, 14, 985-992.	7.3	46
161	Production, Isolation, and EELS Characterization of Ti ₂ @C ₈₄ Ditungsten Metallofullerenes. <i>Journal of Physical Chemistry B</i> , 2002, 106, 9295-9298.	1.2	45
162	Evidence for the Intramolecular Motion of Gd Atoms in a Gd ₂ @C ₉₂ Nanopeapod. <i>Nano Letters</i> , 2003, 3, 1395-1398.	4.5	45

#	ARTICLE	IF	CITATIONS
163	Higher-order aberration corrector for an image-forming system in a transmission electron microscope. <i>Ultramicroscopy</i> , 2010, 110, 958-961.	0.8	45
164	Stability and Spectroscopy of Single Nitrogen Dopants in Graphene at Elevated Temperatures. <i>ACS Nano</i> , 2014, 8, 11806-11815.	7.3	45
165	Atomic-Resolution STEM Imaging of Graphene at Low Voltage of 30 kV with Resolution Enhancement by Using Large Convergence Angle. <i>Physical Review Letters</i> , 2015, 114, 166102.	2.9	45
166	Preparing a Magnetically Responsive Single-Wall Carbon Nanohorn Colloid by Anchoring Magnetite Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2006, 110, 7165-7170.	1.2	44
167	Structural Distortions and Charge Density Waves in Iodine Chains Encapsulated inside Carbon Nanotubes. <i>Nano Letters</i> , 2017, 17, 3694-3700.	4.5	44
168	Ultrafast Monolayer In/Gr-WS ₂ -Gr Hybrid Photodetectors with High Gain. <i>ACS Nano</i> , 2019, 13, 3269-3279.	7.3	44
169	Transmission Electron Microscopy Imaging of Individual Functional Groups of Fullerene Derivatives. <i>Physical Review Letters</i> , 2006, 96, 088304.	2.9	43
170	Photoluminescence quenching in peapod-derived double-walled carbon nanotubes. <i>Physical Review B</i> , 2006, 74, .	1.1	43
171	Electron Microscopic Imaging of a Single Group 8 Metal Atom Catalyzing C-C Bond Reorganization of Fullerenes. <i>Journal of the American Chemical Society</i> , 2011, 133, 14151-14153.	6.6	43
172	Organisation of carbon and boron nitride layers in mixed nanoparticles and nanotubes synthesised by arc discharge. <i>Applied Physics A: Materials Science and Processing</i> , 1999, 68, 301-308.	1.1	42
173	Growth of fullerene-like carbon nitride thin solid films consisting of cross-linked nano-onions. <i>Applied Physics Letters</i> , 2001, 79, 2639-2641.	1.5	42
174	Aberration-corrected STEM/TEM imaging at 15 kV. <i>Ultramicroscopy</i> , 2014, 145, 50-55.	0.8	42
175	Synthesis of 2H-WS ₂ /ReS ₂ Heterophase Structures with Atomically Sharp Interface via Hydrogen-Triggered One-Pot Growth. <i>Advanced Functional Materials</i> , 2020, 30, 1910169.	7.8	42
176	Scalable Graphite/Copper Bishell Composite for High-Performance Interconnects. <i>ACS Nano</i> , 2014, 8, 275-282.	7.3	41
177	Metallization of single-wall carbon nanotube thin films induced by gas phase iodination. <i>Carbon</i> , 2015, 94, 768-774.	5.4	41
178	Synthesis of Highly Active Sub-Nanometer Pt@Rh Core-Shell Nanocatalyst via a Photochemical Route: Porous Titania Nanoplates as a Superior Photoactive Support. <i>Small</i> , 2017, 13, 1603879.	5.2	40
179	Vapor Phase Selective Growth of Two-Dimensional Perovskite/WS ₂ Heterostructures for Optoelectronic Applications. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 40503-40511.	4.0	39
180	Strong Band Bowing Effects and Distinctive Optoelectronic Properties of 2H and 1T Phase-Tunable Mo _x Re _{1-x} S ₂ Alloys. <i>Advanced Functional Materials</i> , 2020, 30, 2003264.	7.8	39

#	ARTICLE	IF	CITATIONS
181	Structural identification of single and double-walled carbon nanotubes by high-resolution transmission electron microscopy. <i>Chemical Physics Letters</i> , 2005, 412, 116-120.	1.2	37
182	Dynamic Structural Evolution of Metal-Metal Bonding Network in Monolayer WS ₂ . <i>Chemistry of Materials</i> , 2016, 28, 2308-2314.	3.2	37
183	Rapid Interchangeable Hydrogen, Hydride, and Proton Species at the Interface of Transition Metal Atom on Oxide Surface. <i>Journal of the American Chemical Society</i> , 2021, 143, 9105-9112.	6.6	37
184	Electron energy-loss spectroscopy on individual nanotubes. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2001, 114-116, 209-217.	0.8	36
185	Intrafullerene electron transfers in Sm-containing metallofullerenes: Sm@C _{2n} (74 ≤ 2n ≤ 84). <i>Journal of Molecular Graphics and Modelling</i> , 2001, 19, 244-251.	1.3	36
186	Coalescence of C ₆₀ Molecules Assisted by Doped Iodine Inside Carbon Nanotubes. <i>Journal of the American Chemical Society</i> , 2007, 129, 8954-8955.	6.6	36
187	Self-Assembled Double Ladder Structure Formed Inside Carbon Nanotubes by Encapsulation of H ₈ Si ₈ O ₁₂ . <i>ACS Nano</i> , 2009, 3, 1160-1166.	7.3	36
188	Electronic Structures of Single-Walled Carbon Nanotubes Encapsulating Ellipsoidal C ₇₀ . <i>Journal of the American Chemical Society</i> , 2010, 132, 15252-15258.	6.6	36
189	Fabrication and Optical Probing of Highly Extended, Ultrathin Graphene Nanoribbons in Carbon Nanotubes. <i>ACS Nano</i> , 2015, 9, 5034-5040.	7.3	36
190	Direct imaging of intracage structure in titanium-carbide endohedral metallofullerene. <i>Physical Review B</i> , 2006, 73, .	1.1	35
191	Composition dependent lattice dynamics in MoS _x Se _(2-x) alloys. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	35
192	One-dimensional van der Waals heterostructures: Growth mechanism and handedness correlation revealed by nondestructive TEM. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	35
193	Unique Tube-Ring Interactions: Complexation of Single-Walled Carbon Nanotubes with Cycloparaphenyleneacetylenes. <i>Small</i> , 2018, 14, e1800720.	5.2	34
194	High-resolution electron microscopy of interfaces in nanocrystalline materials. <i>Scripta Materialia</i> , 1995, 6, 115-124.	0.5	33
195	Electronic properties of Gd@C ₈₂ metallofullerene peapods: (Gd@C ₈₂) _n @SWNTs. <i>Applied Physics A: Materials Science and Processing</i> , 2003, 76, 475-478.	1.1	33
196	How Does A Carbon Nanotube Grow? An In Situ Investigation on the Cap Evolution. <i>ACS Nano</i> , 2008, 2, 1275-1279.	7.3	33
197	Atomic Level Spatial Variations of Energy States along Graphene Edges. <i>Nano Letters</i> , 2014, 14, 6155-6159.	4.5	33
198	Structure and Local Chemical Properties of Boron-Terminated Tetravacancies in Hexagonal Boron Nitride. <i>Physical Review Letters</i> , 2015, 114, 075502.	2.9	33

#	ARTICLE	IF	CITATIONS
199	Molecular interactions on single-walled carbon nanotubes revealed by high-resolution transmission microscopy. <i>Nature Communications</i> , 2015, 6, 7732.	5.8	33
200	Surface decoration accelerates the hydrogen evolution kinetics of a perovskite oxide in alkaline solution. <i>Energy and Environmental Science</i> , 2020, 13, 4249-4257.	15.6	33
201	High-resolution electron microscopy of individual metallofullerene molecules on the dipole orientations in peapods. <i>Applied Physics A: Materials Science and Processing</i> , 2003, 76, 445-447.	1.1	32
202	Imaging the Structure of an Individual C60 Fullerene Molecule and its Deformation Process Using HRTEM with Atomic Sensitivity. <i>Journal of the American Chemical Society</i> , 2007, 129, 6666-6667.	6.6	32
203	Fe on molecular-layer MoS ₂ as inorganic Fe-S ₂ -Mo motifs for light-driven nitrogen fixation to ammonia at elevated temperatures. <i>Chem Catalysis</i> , 2021, 1, 162-182.	2.9	32
204	In situ electron energy-loss spectroscopy on carbon nanotubes during deformation. <i>Applied Physics Letters</i> , 2001, 78, 70-72.	1.5	31
205	Single atom spectroscopy with reduced delocalization effect using a 30 kV-STEM. <i>EPJ Applied Physics</i> , 2011, 54, 33508.	0.3	31
206	Tunable Field-Effect Transistor Device with Metallofullerene Nanopeapods. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 469-472.	0.8	30
207	Capturing the signature of single atoms with the tiny probe of a STEM. <i>Ultramicroscopy</i> , 2012, 123, 80-89.	0.8	30
208	Seamlessly Splicing Metallic Sn _x Mo _{1-x} S ₂ at MoS ₂ Edge for Enhanced Photoelectrocatalytic Performance in Microreactor. <i>Advanced Science</i> , 2020, 7, 2002172.	5.6	30
209	Resolution enhancement in transmission electron microscopy with 60-kV monochromated electron source. <i>Applied Physics Letters</i> , 2016, 108, 013107.	1.5	29
210	Chirality-dependent growth of single-wall carbon nanotubes as revealed inside nano-test tubes. <i>Nanoscale</i> , 2017, 9, 7998-8006.	2.8	29
211	Scalable van der Waals Heterojunctions for High-Performance Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 36181-36188.	4.0	29
212	Sensitivity of Graphene Edge States to Surface Adatom Interactions. <i>Nano Letters</i> , 2013, 13, 4820-4826.	4.5	28
213	Inelastic electron irradiation damage in hexagonal boron nitride. <i>Micron</i> , 2015, 72, 21-27.	1.1	28
214	Isothermal Growth and Stacking Evolution in Highly Uniform Bernal-Stacked Bilayer Graphene. <i>ACS Nano</i> , 2020, 14, 6834-6844.	7.3	28
215	Determination of Optical Isomers for Left-Handed or Right-Handed Chiral Double-Wall Carbon Nanotubes. <i>Physical Review Letters</i> , 2005, 95, 187406.	2.9	27
216	Metal Atom Catalyzed Enlargement of Fullerenes. <i>Physical Review Letters</i> , 2008, 101, 176102.	2.9	27

#	ARTICLE	IF	CITATIONS
217	Extraordinary Interfacial Stitching between Single All-Inorganic Perovskite Nanocrystals. ACS Applied Materials & Interfaces, 2018, 10, 5984-5991.	4.0	27
218	Toward Confined Carbyne with Tailored Properties. Nano Letters, 2021, 21, 1096-1101.	4.5	27
219	Realizing the Intrinsic Anisotropic Growth of $1T\text{-ReS}_2$ on Selected Au(101) Substrate toward Large-Scale Single Crystal Fabrication. Advanced Functional Materials, 2021, 31, 2102138.	7.8	27
220	Band gap expansion, shear inversion phase change behaviour and low-voltage induced crystal oscillation in low-dimensional tin selenide crystals. Dalton Transactions, 2014, 43, 7391-7399.	1.6	26
221	Conformational Analysis of Single Perfluoroalkyl Chains by Single-Molecule Real-Time Transmission Electron Microscopic Imaging. Journal of the American Chemical Society, 2014, 136, 466-473.	6.6	26
222	Mechanistic insights into the photocatalytic properties of metal nanocluster/graphene ensembles. Examining the role of visible light in the reduction of 4-nitrophenol. Nanoscale, 2017, 9, 9685-9692.	2.8	26
223	Coiled structure of eccentric coaxial nanocable made of amorphous boron and silicon oxide. Applied Physics Letters, 2000, 76, 1564-1566.	1.5	25
224	Synthesis and Atomic Characterization of a Ti_2O_3 Nanosheet. Journal of Physical Chemistry Letters, 2011, 2, 1820-1823.	2.1	25
225	Atomically Resolved Images of Ih Single Crystals in the Solid Phase. Physical Review Letters, 2011, 106, 206101.	2.9	25
226	Sulfur-Doped Graphene-Supported Nickel-Core Palladium-Shell Nanoparticles as Efficient Oxygen Reduction and Methanol Oxidation Electrocatalyst. ACS Applied Energy Materials, 2018, 1, 3869-3880.	2.5	25
227	Layer Rotation-Angle-Dependent Excitonic Absorption in van der Waals Heterostructures Revealed by Electron Energy Loss Spectroscopy. ACS Nano, 2019, 13, 9541-9550.	7.3	25
228	Twist Angle-Dependent Optical Responses in Controllably Grown WS_2 Vertical Homojunctions. Chemistry of Materials, 2020, 32, 9721-9729.	3.2	25
229	Probing Exciton Dispersions of Freestanding Monolayer WSe_2 by Momentum-Resolved Electron Energy Loss Spectroscopy. Physical Review Letters, 2020, 124, 087401.	2.9	24
230	Boron-catalyzed multi-walled carbon nanotube growth with the reduced number of layers by laser ablation. Chemical Physics Letters, 2000, 324, 224-230.	1.2	23
231	Nickel clusters embedded in carbon nanotubes as high performance magnets. Scientific Reports, 2015, 5, 15033.	1.6	23
232	Postsynthesis of h-BN/Graphene Heterostructures Inside a STEM. Small, 2016, 12, 252-259.	5.2	23
233	Evaluation of residual aberration in fifth-order geometrical aberration correctors. Microscopy (Oxford, England), 2018, 67, 156-163.	0.7	23
234	Blue emission at atomically sharp 1D heterojunctions between graphene and h-BN. Nature Communications, 2020, 11, 5359.	5.8	23

#	ARTICLE	IF	CITATIONS
235	Nanoheterostructures of Partially Oxidized RuNi Alloy as Bifunctional Electrocatalysts for Overall Water Splitting. <i>ChemSusChem</i> , 2020, 13, 2739-2744.	3.6	23
236	Host-guest interactions in azafullerene (C ₅₉ N)-single-wall carbon nanotube (SWCNT) peapod hybrid structures. <i>Chemical Communications</i> , 2010, 46, 1293.	2.2	22
237	Gating Electron-Hole Asymmetry in Twisted Bilayer Graphene. <i>ACS Nano</i> , 2014, 8, 6962-6969.	7.3	22
238	Atomic Resolution Imaging at an Ultralow Accelerating Voltage by a Monochromatic Transmission Electron Microscope. <i>Physical Review Letters</i> , 2016, 117, 153004.	2.9	22
239	Mixed-Salt Enhanced Chemical Vapor Deposition of Two-Dimensional Transition Metal Dichalcogenides. <i>Chemistry of Materials</i> , 2021, 33, 7301-7308.	3.2	22
240	Influence of rhenium on the structural and optical properties of molybdenum disulfide. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 04DH05.	0.8	21
241	Chiral vector and metal catalyst-dependent growth kinetics of single-wall carbon nanotubes. <i>Carbon</i> , 2018, 133, 283-292.	5.4	21
242	Highly Efficient Mass Production of Boron Nitride Nanosheets via a Borate Nitridation Method. <i>Journal of Physical Chemistry C</i> , 2018, 122, 17370-17377.	1.5	21
243	Transition metal atom-doped monolayer MoS ₂ in a proton-exchange membrane electrolyzer. <i>Materials Today Advances</i> , 2020, 6, 100020.	2.5	20
244	Direct Growth of Wafer-Scale, Transparent, p-Type Reduced-Graphene-Oxide-like Thin Films by Pulsed Laser Deposition. <i>ACS Nano</i> , 2020, 14, 3290-3298.	7.3	20
245	Photoreactivity Preservation of AgBr Nanowires in Confined Nanospaces. <i>Advanced Materials</i> , 2010, 22, 3156-3160.	11.1	19
246	Exfoliated graphene ligands stabilizing copper cations. <i>Carbon</i> , 2011, 49, 3375-3378.	5.4	19
247	Enhancing the Infrared Response of Carbon Nanotubes From Oligo-Quaterthiophene Interactions. <i>Journal of Physical Chemistry C</i> , 2016, 120, 28802-28807.	1.5	19
248	Band gap modification and photoluminescence enhancement of graphene nanoribbon filled single-walled carbon nanotubes. <i>Nanoscale</i> , 2018, 10, 2936-2943.	2.8	19
249	Fabricating Dual-Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. <i>Angewandte Chemie</i> , 2020, 132, 16147-16156.	1.6	19
250	Two-dimensional PdSe ₂ -PdSe ₃ junctions can serve as nanowires. <i>2D Materials</i> , 2018, 5, 035025.	2.0	18
251	Investigations of alumina/spinel and alumina/zirconia interfaces by spatially resolved electron energy loss spectroscopy. <i>Journal of the European Ceramic Society</i> , 1998, 18, 1453-1459.	2.8	17
252	Characterization of Graphene Grown on Bulk and Thin Film Nickel. <i>Langmuir</i> , 2011, 27, 13748-13753.	1.6	17

#	ARTICLE	IF	CITATIONS
253	Individualized p-doped Carbon Nanohorns. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10468-10472.	7.2	17
254	Fermi level shift in carbon nanotubes by dye confinement. <i>Carbon</i> , 2019, 149, 772-780.	5.4	17
255	Gate Effect of Vacancy-type Defect of Fullerene Cages on Metal-Atom Migrations in Metallofullerenes. <i>Nano Letters</i> , 2006, 6, 1389-1395.	4.5	16
256	Microwave assisted covalent functionalization of C60@SWCNT peapods. <i>Chemical Communications</i> , 2010, 46, 9110.	2.2	16
257	Synthesis of sub-millimeter single-crystal grains of aligned hexagonal boron nitride on an epitaxial Ni film. <i>Nanoscale</i> , 2019, 11, 14668-14675.	2.8	16
258	Effective, fast, and low temperature encapsulation of fullerene derivatives in single wall carbon nanotubes. <i>Surface Science</i> , 2007, 601, 5116-5120.	0.8	15
259	Direct evidence for lip-lip interactions in multi-walled carbon nanotubes. <i>Nano Research</i> , 2008, 1, 434-439.	5.8	15
260	Iron and Ruthenium Nanoparticles in Carbon Prepared by Thermolysis of Buckymetalloenes. <i>Chemistry - an Asian Journal</i> , 2009, 4, 457-465.	1.7	15
261	Imaging the structure of activated carbon using aberration corrected TEM. <i>Journal of Physics: Conference Series</i> , 2010, 241, 012050.	0.3	15
262	Quantitative evaluation of temporal partial coherence using 3D Fourier transforms of through-focus TEM images. <i>Ultramicroscopy</i> , 2013, 134, 86-93.	0.8	15
263	Correlation between atomic rearrangement in defective fullerenes and migration behavior of encaged metal ions. <i>Physical Review B</i> , 2006, 73, .	1.1	14
264	Evaluation of probe size in STEM imaging at 30 and 60kV. <i>Micron</i> , 2012, 43, 551-556.	1.1	14
265	Electron energy loss spectroscopy of excitons in two-dimensional-semiconductors as a function of temperature. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	14
266	Electron Spectroscopy of Single Quantum Objects To Directly Correlate the Local Structure to Their Electronic Transport and Optical Properties. <i>Nano Letters</i> , 2016, 16, 3661-3667.	4.5	14
267	Structural analysis and oxygen reduction reaction activity in bamboo-like nitrogen-doped carbon nanotubes containing localized nitrogen in nodal regions. <i>Carbon</i> , 2017, 123, 99-105.	5.4	14
268	A topologically substituted boron nitride hybrid aerogel for highly selective CO2 uptake. <i>Nano Research</i> , 2018, 11, 6325-6335.	5.8	14
269	Imaging of isotope diffusion using atomic-scale vibrational spectroscopy. <i>Nature</i> , 2022, 603, 68-72.	13.7	14
270	Selective High-Yield Catalytic Synthesis of Terbium Metallofullerenes and Single-Wall Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2003, 107, 2485-2489.	1.2	13

#	ARTICLE	IF	CITATIONS
271	Site-Dependent Migration Behavior of Individual Cesium Ions Inside and Outside C ₆₀ Fullerene Nanopeapods. <i>Small</i> , 2008, 4, 1080-1083.	5.2	13
272	In Situ Formation and Structure Tailoring of Carbon Onions by High-Resolution Transmission Electron Microscopy. <i>Journal of Physical Chemistry C</i> , 2009, 113, 5043-5046.	1.5	13
273	Metal resist for extreme ultraviolet lithography characterized by scanning transmission electron microscopy. <i>Applied Physics Express</i> , 2016, 9, 031601.	1.1	13
274	Direct Proof of a Defect-Modulated Gap Transition in Semiconducting Nanotubes. <i>Nano Letters</i> , 2018, 18, 3920-3925.	4.5	13
275	Covalently functionalized layered MoS ₂ supported Pd nanoparticles as highly active oxygen reduction electrocatalysts. <i>Nanoscale</i> , 2020, 12, 18278-18288.	2.8	13
276	Scanning Moiré Fringe Method: A Superior Approach to Perceive Defects, Interfaces, and Distortion in 2D Materials. <i>ACS Nano</i> , 2020, 14, 6034-6042.	7.3	13
277	Formation of Highly Doped Nanostripes in 2D Transition Metal Dichalcogenides via a Dislocation Climb Mechanism. <i>Advanced Materials</i> , 2021, 33, e2007819.	11.1	13
278	Influence of Aromatic Environments on the Physical Properties of β -Carotene. <i>Journal of Physical Chemistry C</i> , 2010, 114, 2524-2530.	1.5	12
279	Aberration Correctors Developed Under the Triple C Project. <i>Advances in Imaging and Electron Physics</i> , 2011, 168, 297-336.	0.1	12
280	Probing interlayer coupling in twisted single-crystal bilayer graphene by Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2014, 45, 912-917.	1.2	12
281	Core-Level Spectroscopy to Probe the Oxidation State of Single Europium Atoms. <i>Physical Review Letters</i> , 2015, 114, 197602.	2.9	12
282	Gentle transfer method for water- and acid/alkali-sensitive 2D materials for (S)TEM study. <i>APL Materials</i> , 2016, 4, .	2.2	12
283	Single atom spectroscopy: Decreased scattering delocalization at high energy losses, effects of atomic movement and X-ray fluorescence yield. <i>Ultramicroscopy</i> , 2016, 160, 239-246.	0.8	12
284	Core-Shell Pd@M (M=Ni, Cu, Co) Nanoparticles/Graphene Ensembles with High Mass Electrocatalytic Activity Toward the Oxygen Reduction Reaction. <i>Chemistry - A European Journal</i> , 2019, 25, 11105-11113.	1.7	12
285	Polymorphic Phases of Metal Chlorides in the Confined 2D Space of Bilayer Graphene. <i>Advanced Materials</i> , 2021, 33, e2105898.	11.1	12
286	ELECTRON ENERGY LOSS SPECTROSCOPY AND ANNULAR DARK FIELD IMAGING AT A NANOMETER RESOLUTION IN A SCANNING TRANSMISSION ELECTRON MICROSCOPE. <i>Surface Review and Letters</i> , 2000, 07, 475-494.	0.5	11
287	Atom-Resolved Imaging of Carbon Hexagons of Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2008, 112, 11098-11101.	1.5	11
288	Diameter dependent growth mode of carbon nanotubes on nanoporous SiO ₂ substrates. <i>Materials Letters</i> , 2009, 63, 1366-1369.	1.3	11

#	ARTICLE	IF	CITATIONS
289	Prevention of Sn and Pb Crystallization in a Confined Nanospace. <i>Small</i> , 2010, 6, 1279-1282.	5.2	11
290	High-precision imaging of an encapsulated Lindqvist ion and correlation of its structure and symmetry with quantum chemical calculations. <i>Nanoscale</i> , 2012, 4, 1190.	2.8	11
291	Direct evidence for covalent functionalization of carbon nanohorns by high-resolution electron microscopy imaging of C60 conjugated onto their skeleton. <i>Carbon</i> , 2012, 50, 3909-3914.	5.4	11
292	[3 + 2] cycloaddition reaction of azomethine ylides generated by thermal ring opening of aziridines onto carbon nanohorns. <i>RSC Advances</i> , 2016, 6, 44782-44787.	1.7	11
293	Room-temperature Y-type emission of perylenes by encapsulation within single-walled carbon nanotubes. <i>Nanoscale</i> , 2016, 8, 7834-7839.	2.8	11
294	Scalable T-Gate Aligned WS ₂ /Gr Radio-Frequency Field-Effect Transistors. <i>ACS Applied Electronic Materials</i> , 2020, 2, 3898-3905.	2.0	11
295	Template-synthesized BN:C nanoboxes. <i>Applied Physics Letters</i> , 2000, 76, 825-827.	1.5	10
296	Preferential S/Se occupation in an anisotropic ReS ₂ (1 \times)Se _{2x} monolayer alloy. <i>Nanoscale</i> , 2017, 9, 18275-18280.	2.8	10
297	Coupling and Decoupling of Bilayer Graphene Monitored by Electron Energy Loss Spectroscopy. <i>Nano Letters</i> , 2021, 21, 10386-10391.	4.5	10
298	Influence of a compositional gradient in the structure and magnetic behavior of strained FeMn ultrathin layers. <i>Physical Review B</i> , 1998, 58, 14135-14138.	1.1	9
299	Low-temperature growth of single-wall carbon nanotubes inside nano test tubes. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 2730-2733.	0.7	9
300	Atomic imaging and spectroscopy of low-dimensional materials with interrupted periodicities. <i>Journal of Electron Microscopy</i> , 2012, 61, 285-291.	0.9	9
301	Ballistic- and quantum-conductor carbon nanotubes: A reference experiment put to the test. <i>Physical Review B</i> , 2014, 90, .	1.1	9
302	Single-atom detection of light elements: Imaging or spectroscopy?. <i>Ultramicroscopy</i> , 2017, 180, 150-155.	0.8	9
303	Selective Growth of Two-Dimensional Heterostructures of Gallium Selenide on Monolayer Graphene and the Thickness Dependent <i>p</i> - and <i>n</i> -Type Nature. <i>ACS Applied Nano Materials</i> , 2018, 1, 3293-3302.	2.4	9
304	In-situ derived highly active NiS ₂ and MoS ₂ nanosheets on NiMoO ₄ microcuboids via controlled surface sulfidation for high-current-density hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2021, 389, 138733.	2.6	9
305	Resolution enhancement at a large convergence angle by a delta corrector with a CFEG in a low-accelerating-voltage STEM. <i>Micron</i> , 2014, 63, 35-39.	1.1	8
306	Molecular Arrangements of Corannulene and Sumanene in Single-Walled Carbon Nanotubes. <i>ChemNanoMat</i> , 2018, 4, 557-561.	1.5	8

#	ARTICLE	IF	CITATIONS
307	High-precision thickness control of ice layer on CVD grown bilayer graphene for cryo-TEM. Carbon, 2020, 160, 107-112.	5.4	8
308	Fine structure analysis of near-edge electron energy loss spectra related to the compositional variation at the diffuse interfaces in FeGe multilayers. Journal of Applied Physics, 1996, 80, 853-858.	1.1	7
309	Single Molecular Spectroscopy: Identification of Individual Fullerene Molecules. Physical Review Letters, 2014, 113, 185502.	2.9	7
310	Direct observation and catalytic role of mediator atom in 2D materials. Science Advances, 2020, 6, eaba4942.	4.7	7
311	Elemental analysis down to the single atom with electron beams. Comptes Rendus Physique, 2014, 15, 151-157.	0.3	6
312	Embedment of Multiple Transition Metal Impurities into WS ₂ Monolayer for Bandstructure Modulation. Small, 2021, 17, e2007171.	5.2	6
313	Optoelectronic Properties of Atomically Thin Mo _x W(1-x)S ₂ Nanoflakes Probed by Spatially-Resolved Monochromated EELS. Nanomaterials, 2021, 11, 3218.	1.9	6
314	<i>In situ</i> TEM visualization of single atom catalysis in solid-state Na ⁺ O ₂ nanobatteries. Journal of Materials Chemistry A, 2022, 10, 6096-6106.	5.2	6
315	Multiple 2D Phase Transformations in Monolayer Transition Metal Chalcogenides. Advanced Materials, 2022, 34, e2200643.	11.1	6
316	Chromatic Aberration Correction by Combination Concave Lens. Microscopy and Microanalysis, 2010, 16, 116-117.	0.2	5
317	Single atom imaging and spectroscopy in nanostructured carbon materials. MRS Bulletin, 2012, 37, 36-38.	1.7	5
318	From a one-dimensional crystal to a one-dimensional liquid: A comprehensive dynamical study of C ₆₀ peapods. Physical Review B, 2013, 87, .	1.1	5
319	Distributions of hafnia and titania cores in EUV metal resists evaluated by scanning transmission electron microscopy and electron energy loss spectroscopy. Applied Physics Express, 2016, 9, 111801.	1.1	5
320	STEM imaging artifacts with three-fold astigmatism in monolayer transition metal dichalcogenides. Applied Physics Letters, 2020, 116, .	1.5	5
321	Two-dimensional iodine-monofluoride epitaxy on WSe ₂ . Npj 2D Materials and Applications, 2021, 5, .	3.9	5
322	One-step synthesis of BaTiO ₃ /CaTiO ₃ core-shell nanocubes by hydrothermal reaction. Journal of Asian Ceramic Societies, 2021, 9, 359-365.	1.0	5
323	Spatially Resolved EELS on Carbon-Based Nanostructures. , 2001, , 201-232.		5
324	Performance of Low-kV Aberration-corrected STEM with Delta-corrector and CFEG in Ultrahigh Vacuum Environment. Microscopy and Microanalysis, 2017, 23, 468-469.	0.2	4

#	ARTICLE	IF	CITATIONS
325	Deciphering the Intense Postgap Absorptions of Monolayer Transition Metal Dichalcogenides. ACS Nano, 2021, 15, 7783-7789.	7.3	4
326	Chemical Vapor Deposition: Tunable Doping of Rhenium and Vanadium into Transition Metal Dichalcogenides for Two-Dimensional Electronics (Adv. Sci. 11/2021). Advanced Science, 2021, 8, 2170059.	5.6	4
327	Photothermal synthesis of confined carbyne. Carbon, 2021, 182, 348-353.	5.4	4
328	HR-TEM study of atomic defects in carbon nanostructures. AIP Conference Proceedings, 2005, , .	0.3	3
329	Performance and Application of Chromatic/Spherical Aberration-Corrected 30 kV Transmission Electron Microscope. Microscopy and Microanalysis, 2011, 17, 1530-1531.	0.2	3
330	Secondary electron imaging of monolayer materials inside a transmission electron microscope. Applied Physics Letters, 2015, 107, 063105.	1.5	3
331	Tuning of photoluminescence intensity and Fermi level position of individual single-walled carbon nanotubes by molecule confinement. Carbon, 2022, 186, 423-430.	5.4	3
332	Core-level spectroscopy on the valence state of encaged metal in metallofullerene-peapods. AIP Conference Proceedings, 2001, , .	0.3	2
333	Electron-Induced Puncturing of Endohedral Metallofullerenes. Fullerenes Nanotubes and Carbon Nanostructures, 2006, 14, 261-267.	1.0	2
334	Development of a Monochromated and Aberration-Corrected Low-Voltage (S)TEM. Microscopy and Microanalysis, 2015, 21, 351-352.	0.2	2
335	Ultra High Energy Resolution EELS Mapping using Aberration-corrected Low-voltage STEM Equipped with Monochromator. Microscopy and Microanalysis, 2016, 22, 962-963.	0.2	2
336	Individualized p-Doped Carbon Nanohorns. Angewandte Chemie, 2016, 128, 10624-10628.	1.6	2
337	Electron-Beam-Induced Synthesis of Hexagonal 1H-MoSe ₂ from Square $\sqrt{2}$ -FeSe Decorated with Mo Adatoms. Nano Letters, 2018, 18, 2016-2020.	4.5	2
338	Carbon Nanomaterials: Unique Tube-Ring Interactions: Complexation of Single-Walled Carbon Nanotubes with Cycloparaphenyleneacetylenes (Small 26/2018). Small, 2018, 14, 1870120.	5.2	2
339	In-situ TEM observation of the growth process of carbon nanomaterials by laser irradiation. Microscopy and Microanalysis, 2021, 27, 2344-2345.	0.2	2
340	Direct observation of atomic defects in carbon nanotubes and fullerenes. , 2008, , 1-2.		2
341	Polymorphic Phases of Metal Chlorides in the Confined 2D Space of Bilayer Graphene (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock 11.1 2		
342	Surface Plasmon Coupling in Nanotubes. AIP Conference Proceedings, 2002, , .	0.3	1

#	ARTICLE	IF	CITATIONS
343	Radiation Damage of C60 Single Molecules Encapsulated in Carbon Nanotube. <i>Microscopy and Microanalysis</i> , 2006, 12, 586-587.	0.2	1
344	Correction of Spherical Aberration and Six-Fold Astigmatism Using Three Dodecapoles,. <i>Microscopy and Microanalysis</i> , 2009, 15, 1458-1459.	0.2	1
345	In-Situ HR-TEM Characterizations on Individual Carbon Nanotubes During its Manipulation, Deformation and Growth. <i>Microscopy and Microanalysis</i> , 2009, 15, 710-711.	0.2	1
346	Development of 30-kV Cc/Cs Correction Tandem System. <i>Microscopy and Microanalysis</i> , 2011, 17, 1184-1185.	0.2	1
347	Advantage of Cc/Cs-corrected Imaging in 30 kV Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2012, 18, 1514-1515.	0.2	1
348	Aberration corrected imaging of a carbon nanotube encapsulated Lindqvist Ion and correlation with Density Functional Theory. <i>Journal of Physics: Conference Series</i> , 2012, 371, 012018.	0.3	1
349	Low-Voltage TEM/STEM for Atomic Resolution Imaging and Spectroscopy. <i>Microscopy and Microanalysis</i> , 2013, 19, 1220-1221.	0.2	1
350	Doping Properties and Phase Transition in Single-Layer MoS ₂ . <i>Microscopy and Microanalysis</i> , 2014, 20, 1750-1751.	0.2	1
351	Resolution Improvement in Aberration-Corrected Low- Voltage TEM with Monochromator at 60 kV. <i>Journal of Physics: Conference Series</i> , 2015, 644, 012033.	0.3	1
352	Aberration Corrected Off-Axis Electron Holography of Layered Transition Metal Dichalcogenides. <i>Microscopy and Microanalysis</i> , 2015, 21, 1399-1400.	0.2	1
353	Single Atom Spectroscopy in Low-Dimensional Materials using Low-voltage STEM. <i>Microscopy and Microanalysis</i> , 2016, 22, 868-869.	0.2	1
354	A novel Pd ₂ Se ₃ two-dimensional phase driven by interlayer fusion in layered PdSe ₂ . <i>Microscopy and Microanalysis</i> , 2017, 23, 1700-1701.	0.2	1
355	Low-Voltage TEM/STEM for Imaging and Spectroscopy of Low-Dimensional Materials. <i>Microscopy and Microanalysis</i> , 2017, 23, 458-459.	0.2	1
356	Measurement of Optical Excitations in Low-Dimensional Materials by Using a Monochromated Electron Source. <i>Microscopy and Microanalysis</i> , 2018, 24, 1574-1575.	0.2	1
357	Highly Depth-sensitive TEM Imaging of Graphene by using Monochromatic Electron Source at Low Accelerating Voltage. <i>Microscopy and Microanalysis</i> , 2018, 24, 1610-1611.	0.2	1
358	In Situ Observation of Structural Changes in Low-dimensional Materials by Means of TEM and STEM. <i>Microscopy and Microanalysis</i> , 2020, 26, 88-89.	0.2	1
359	Filling control of n-type and p-type dopant molecules in single-wall carbon nanotubes. <i>Applied Physics Express</i> , 2020, 13, 065003.	1.1	1
360	Thermal management function of graphene under cryogenic temperature. <i>Carbon</i> , 2021, 183, 970-976.	5.4	1

#	ARTICLE	IF	CITATIONS
379	Low-Loss EELS Investigations on Atomically Thin $\text{Mo}_x\text{W}_{(1-x)}\text{S}_2$ Nanoflakes for Delving into Their Optoelectronic Properties. <i>Microscopy and Microanalysis</i> , 2018, 24, 1576-1577.	0.2	0
380	Nanoscale Vibrational Spectroscopy of Graphene by Large-q EELS. <i>Microscopy and Microanalysis</i> , 2019, 25, 612-613.	0.2	0
381	Frontispiz: Fabricating Dual-Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. <i>Angewandte Chemie</i> , 2020, 132, .	1.6	0
382	Frontispiece: Fabricating Dual-Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. <i>Angewandte Chemie - International Edition</i> , 2020, 59, .	7.2	0
383	HR-TEM imaging of the carbon networks. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2008, 64, C65-C65.	0.3	0
384	Atomic structure of graphitic materials visualized by using TEM and STEM. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2011, 67, C122-C122.	0.3	0
385	(Invited, Digital Presentation) Atomically Precise Synthesis of One-Dimensional Transition Metal Chalcogenides Using Nano-Test-Tubes. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 769-769.	0.0	0