

# Kazu Suenaga

## List of Publications by Citations

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380  
papers

27,895  
citations

79  
h-index

158  
g-index

393  
ext. papers

31,311  
ext. citations

10.4  
avg, IF

7.05  
L-index

#	Paper	IF	Citations
380	Direct evidence for atomic defects in graphene layers. <i>Nature</i> , <b>2004</b> , 430, 870-3	50.4	1374
379	Nano-aggregates of single-walled graphitic carbon nano-horns. <i>Chemical Physics Letters</i> , <b>1999</b> , 309, 165-170	10.1	1013
378	Atomic mechanism of the semiconducting-to-metallic phase transition in single-layered MoS <sub>2</sub> . <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 391-6	28.7	939
377	Fabrication of a freestanding boron nitride single layer and its defect assignments. <i>Physical Review Letters</i> , <b>2009</b> , 102, 195505	7.4	857
376	A library of atomically thin metal chalcogenides. <i>Nature</i> , <b>2018</b> , 556, 355-359	50.4	812
375	NANOELECTRONICS. Epitaxial growth of a monolayer WSe <sub>2</sub> -MoS <sub>2</sub> lateral p-n junction with an atomically sharp interface. <i>Science</i> , <b>2015</b> , 349, 524-8	33.3	811
374	DEVICE TECHNOLOGY. Phase patterning for ohmic homojunction contact in MoTe <sub>2</sub> . <i>Science</i> , <b>2015</b> , 349, 625-8	33.3	679
373	Graphene annealing: how clean can it be?. <i>Nano Letters</i> , <b>2012</b> , 12, 414-9	11.5	675
372	Graphene oxide: structural analysis and application as a highly transparent support for electron microscopy. <i>ACS Nano</i> , <b>2009</b> , 3, 2547-56	16.7	559
371	Deriving carbon atomic chains from graphene. <i>Physical Review Letters</i> , <b>2009</b> , 102, 205501	7.4	510
370	MoS monolayer catalyst doped with isolated Co atoms for the hydrodeoxygenation reaction. <i>Nature Chemistry</i> , <b>2017</b> , 9, 810-816	17.6	489
369	Open and closed edges of graphene layers. <i>Physical Review Letters</i> , <b>2009</b> , 102, 015501	7.4	476
368	One-dimensional metallofullerene crystal generated inside single-walled carbon nanotubes. <i>Physical Review Letters</i> , <b>2000</b> , 85, 5384-7	7.4	451
367	Coaxial nanocable: silicon carbide and silicon oxide sheathed with boron nitride and carbon. <i>Science</i> , <b>1998</b> , 281, 973-5	33.3	443
366	Tunable band gap photoluminescence from atomically thin transition-metal dichalcogenide alloys. <i>ACS Nano</i> , <b>2013</b> , 7, 4610-6	16.7	442
365	Synthesis of Nanoparticles and Nanotubes with Well-Separated Layers of Boron Nitride and Carbon. <i>Science</i> , <b>1997</b> , 278, 653-655	33.3	433
364	New Porous Crystals of Extended Metal-Catecholates. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 3511-3513	9.6	423

363	Atom-by-atom spectroscopy at graphene edge. <i>Nature</i> , <b>2010</b> , 468, 1088-90	50.4	398
362	Weaving of organic threads into a crystalline covalent organic framework. <i>Science</i> , <b>2016</b> , 351, 365-9	33.3	307
361	Imaging active topological defects in carbon nanotubes. <i>Nature Nanotechnology</i> , <b>2007</b> , 2, 358-60	28.7	289
360	Single-Layer ReS <sub>2</sub> Two-Dimensional Semiconductor with Tunable In-Plane Anisotropy. <i>ACS Nano</i> , <b>2015</b> , 9, 11249-57	16.7	286
359	Atomically thin noble metal dichalcogenide: a broadband mid-infrared semiconductor. <i>Nature Communications</i> , <b>2018</b> , 9, 1545	17.4	267
358	Element-selective single atom imaging. <i>Science</i> , <b>2000</b> , 290, 2280-2	33.3	260
357	Confined linear carbon chains as a route to bulk 'carbyne'. <i>Nature Materials</i> , <b>2016</b> , 15, 634-9	27	250
356	High-yield fullerene encapsulation in single-wall carbon nanotubes. <i>Synthetic Metals</i> , <b>2001</b> , 121, 1195-1196	33.3	249
355	Clean transfer of graphene for isolation and suspension. <i>ACS Nano</i> , <b>2011</b> , 5, 2362-8	16.7	241
354	Properties of individual dopant atoms in single-layer MoS <sub>2</sub> : atomic structure, migration, and enhanced reactivity. <i>Advanced Materials</i> , <b>2014</b> , 26, 2857-61	24	229
353	Electron knock-on damage in hexagonal boron nitride monolayers. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	212
352	Imaging of single organic molecules in motion. <i>Science</i> , <b>2007</b> , 316, 853	33.3	204
351	High-quality monolayer superconductor NbSe grown by chemical vapour deposition. <i>Nature Communications</i> , <b>2017</b> , 8, 394	17.4	199
350	Heterogeneous growth of B <sub>2</sub> C <sub>2</sub> N nanotubes by laser ablation. <i>Chemical Physics Letters</i> , <b>1997</b> , 279, 264-269	33.3	189
349	Mixed low-dimensional nanomaterial: 2D ultranarrow MoS <sub>2</sub> inorganic nanoribbons encapsulated in quasi-1D carbon nanotubes. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 13840-7	16.4	188
348	Vapour-liquid-solid growth of monolayer MoS nanoribbons. <i>Nature Materials</i> , <b>2018</b> , 17, 535-542	27	185
347	Flexible metallic nanowires with self-adaptive contacts to semiconducting transition-metal dichalcogenide monolayers. <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 436-42	28.7	185
346	Plumbing carbon nanotubes. <i>Nature Nanotechnology</i> , <b>2008</b> , 3, 17-21	28.7	185

345	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> , <b>2001</b> , 87, 225503	7.4	167
344	Visualization and quantification of transition metal atomic mixing in Mo <sub>1-x</sub> W <sub>x</sub> S <sub>2</sub> single layers. <i>Nature Communications</i> , <b>2013</b> , 4, 1351	17.4	165
343	A Catalytic Reaction Inside a Single-Walled Carbon Nanotube. <i>Advanced Materials</i> , <b>2008</b> , 20, 1443-1449	24	159
342	Structural and Chemical Dynamics of Pyridinic-Nitrogen Defects in Graphene. <i>Nano Letters</i> , <b>2015</b> , 15, 7408-13	11.5	157
341	Gentle STEM: ADF imaging and EELS at low primary energies. <i>Ultramicroscopy</i> , <b>2010</b> , 110, 935-945	3.1	157
340	Electron diffraction study of one-dimensional crystals of fullerenes. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	156
339	Large intrinsic energy bandgaps in annealed nanotube-derived graphene nanoribbons. <i>Nature Nanotechnology</i> , <b>2011</b> , 6, 45-50	28.7	155
338	Linking chiral indices and transport properties of double-walled carbon nanotubes. <i>Physical Review Letters</i> , <b>2002</b> , 89, 155501	7.4	152
337	Three-fold rotational defects in two-dimensional transition metal dichalcogenides. <i>Nature Communications</i> , <b>2015</b> , 6, 6736	17.4	149
336	Graphene nanoribbons from unzipped carbon nanotubes: atomic structures, Raman spectroscopy, and electrical properties. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 10394-7	16.4	149
335	Metal-Free Growth of Nanographene on Silicon Oxides for Transparent Conducting Applications. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 2123-2128	15.6	142
334	Large-Area and High-Quality 2D Transition Metal Telluride. <i>Advanced Materials</i> , <b>2017</b> , 29, 1603471	24	140
333	Twisting bilayer graphene superlattices. <i>ACS Nano</i> , <b>2013</b> , 7, 2587-94	16.7	139
332	Visualizing and identifying single atoms using electron energy-loss spectroscopy with low accelerating voltage. <i>Nature Chemistry</i> , <b>2009</b> , 1, 415-8	17.6	138
331	Photoluminescence Enhancement and Structure Repairing of Monolayer MoSe <sub>2</sub> by Hydrohalic Acid Treatment. <i>ACS Nano</i> , <b>2016</b> , 10, 1454-61	16.7	137
330	Remote catalyzation for direct formation of graphene layers on oxides. <i>Nano Letters</i> , <b>2012</b> , 12, 1379-84	11.5	130
329	Growth and Optical Properties of High-Quality Monolayer WS <sub>2</sub> on Graphite. <i>ACS Nano</i> , <b>2015</b> , 9, 4056-63	16.7	129
328	In situ observation of thermal relaxation of interstitial-vacancy pair defects in a graphite gap. <i>Physical Review Letters</i> , <b>2005</b> , 94, 155502	7.4	128

327	Polymorphic structures of iodine and their phase transition in confined nanospace. <i>Nano Letters</i> , <b>2007</b> , 7, 1532-5	11.5	126
326	Transition metal atom doping of the basal plane of MoS monolayer nanosheets for electrochemical hydrogen evolution. <i>Chemical Science</i> , <b>2018</b> , 9, 4769-4776	9.4	124
325	Carbon nitride nanotubulite [Densely-packed and well-aligned tubular nanostructures. <i>Chemical Physics Letters</i> , <b>1999</b> , 300, 695-700	2.5	124
324	One-dimensional van der Waals heterostructures. <i>Science</i> , <b>2020</b> , 367, 537-542	33.3	119
323	Imaging the atomic structure of activated carbon. <i>Journal of Physics Condensed Matter</i> , <b>2008</b> , 20, 362201	1.8	117
322	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> , <b>2002</b> , 66,	3.3	117
321	Analysis of the reactivity and selectivity of fullerene dimerization reactions at the atomic level. <i>Nature Chemistry</i> , <b>2010</b> , 2, 117-24	17.6	115
320	Radially modulated nitrogen distribution in CN <sub>x</sub> nanotubular structures prepared by CVD using Ni phthalocyanine. <i>Chemical Physics Letters</i> , <b>2000</b> , 316, 365-372	2.5	110
319	Ambipolar field-effect transistor behavior of Gd@C <sub>82</sub> metallofullerene peapods. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 4067-4069	3.4	107
318	Synthesis and properties of free-standing monolayer amorphous carbon. <i>Nature</i> , <b>2020</b> , 577, 199-203	50.4	104
317	Plasmons in layered nanospheres and nanotubes investigated by spatially resolved electron energy-loss spectroscopy. <i>Physical Review B</i> , <b>2000</b> , 61, 13936-13944	3.3	102
316	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> , <b>2004</b> , 101, 8527-30	11.5	101
315	Heterogeneous nucleation of organic crystals mediated by single-molecule templates. <i>Nature Materials</i> , <b>2012</b> , 11, 877-81	27	95
314	EELS and <sup>13</sup> C NMR characterization of pure Ti <sub>2</sub> @C <sub>80</sub> metallofullerene. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 9679-80	16.4	94
313	Smallest carbon nanotube assigned with atomic resolution accuracy. <i>Nano Letters</i> , <b>2008</b> , 8, 459-62	11.5	93
312	Performance of low-voltage STEM/TEM with delta corrector and cold field emission gun. <i>Journal of Electron Microscopy</i> , <b>2010</b> , 59 Suppl 1, S7-13		90
311	Metal-Semiconductor Phase-Transition in WSe Te Monolayer. <i>Advanced Materials</i> , <b>2017</b> , 29, 1603991	24	88
310	Structure and electronic properties of a nongraphitic disordered carbon system and its heat-treatment effects. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	88

309	Coaxially stacked coronene columns inside single-walled carbon nanotubes. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 4853-7	16.4	87
308	Novel Pd <sub>2</sub> Se <sub>3</sub> Two-Dimensional Phase Driven by Interlayer Fusion in Layered PdSe <sub>2</sub> . <i>Physical Review Letters</i> , <b>2017</b> , 119, 016101	7.4	86
307	Atomic correlation between adjacent graphene layers in double-wall carbon nanotubes. <i>Physical Review Letters</i> , <b>2005</b> , 94, 045504	7.4	86
306	Atomic-resolution imaging of the nucleation points of single-walled carbon nanotubes. <i>Small</i> , <b>2005</b> , 1, 1180-3	11	83
305	Encapsulated and hollow closed-cage structures of WS <sub>2</sub> and MoS <sub>2</sub> prepared by laser ablation at 450–1050°C. <i>Chemical Physics Letters</i> , <b>2001</b> , 340, 242-248	2.5	83
304	Single Atomically Sharp Lateral Monolayer p-n Heterojunction Solar Cells with Extraordinarily High Power Conversion Efficiency. <i>Advanced Materials</i> , <b>2017</b> , 29, 1701168	24	82
303	Controllable Synthesis of Atomically Thin Type-II Weyl Semimetal WTe Nanosheets: An Advanced Electrode Material for All-Solid-State Flexible Supercapacitors. <i>Advanced Materials</i> , <b>2017</b> , 29, 1701909	24	81
302	Material Storage Mechanism in Porous Nanocarbon. <i>Advanced Materials</i> , <b>2004</b> , 16, 397-401	24	81
301	Evidence for active atomic defects in monolayer hexagonal boron nitride: a new mechanism of plasticity in two-dimensional materials. <i>Nano Letters</i> , <b>2014</b> , 14, 1064-8	11.5	79
300	Auto-optimizing Hydrogen Evolution Catalytic Activity of ReS through Intrinsic Charge Engineering. <i>ACS Nano</i> , <b>2018</b> , 12, 4486-4493	16.7	77
299	Atomic Structure and Spectroscopy of Single Metal (Cr, V) Substitutional Dopants in Monolayer MoS <sub>2</sub> . <i>ACS Nano</i> , <b>2016</b> , 10, 10227-10236	16.7	77
298	Identification of active atomic defects in a monolayered tungsten disulphide nanoribbon. <i>Nature Communications</i> , <b>2011</b> , 2, 213	17.4	77
297	Real time reaction dynamics in carbon nanotubes. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 9673-4	16.4	77
296	In-situ formation of sandwiched structures of nanotube/Cu <sub>x</sub> O <sub>y</sub> /Cu composites for lithium battery applications. <i>ACS Nano</i> , <b>2009</b> , 3, 2177-84	16.7	76
295	Imaging the dynamic behaviour of individual retinal chromophores confined inside carbon nanotubes. <i>Nature Nanotechnology</i> , <b>2007</b> , 2, 422-5	28.7	74
294	Vacancy migrations in carbon nanotubes. <i>Nano Letters</i> , <b>2008</b> , 8, 1127-30	11.5	73
293	Which do endohedral Ti <sub>2</sub> C <sub>80</sub> metallofullerenes prefer energetically: Ti <sub>2</sub> @C <sub>80</sub> or Ti <sub>2</sub> C <sub>2</sub> @C <sub>78</sub> ? A theoretical study. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 20251-5	3.4	72
292	Controllable Synthesis of Band-Gap-Tunable and Monolayer Transition-Metal Dichalcogenide Alloys. <i>Frontiers in Energy Research</i> , <b>2014</b> , 2,	3.8	70

291	Perovskite Solar Cells Using Carbon Nanotubes Both as Cathode and as Anode. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 25743-25749	3.8	69
290	Ultra-narrow WS <sub>2</sub> nanoribbons encapsulated in carbon nanotubes. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 171-180		69
289	Direct Observation of Band Structure Modifications in Nanocrystals of CsPbBr Perovskite. <i>Nano Letters</i> , <b>2016</b> , 16, 7198-7202	11.5	68
288	Electron energy-loss spectroscopy of electron states in isolated carbon nanostructures. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	68
287	Dynamics of carbon nanotube growth from fullerenes. <i>Nano Letters</i> , <b>2007</b> , 7, 2428-34	11.5	67
286	Atomic structure and dynamic behaviour of truly one-dimensional ionic chains inside carbon nanotubes. <i>Nature Materials</i> , <b>2014</b> , 13, 1050-4	27	66
285	Nanorods of endohedral metallofullerene derivative. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 450-1	16.4	64
284	Exploring the Single Atom Spin State by Electron Spectroscopy. <i>Physical Review Letters</i> , <b>2015</b> , 115, 206803	3.4	63
283	Correction of higher order geometrical aberration by triple 3-fold astigmatism field. <i>Journal of Electron Microscopy</i> , <b>2009</b> , 58, 341-347		63
282	Exciton mapping at subwavelength scales in two-dimensional materials. <i>Physical Review Letters</i> , <b>2015</b> , 114, 107601	7.4	62
281	A strategy to control the chirality of single-walled carbon nanotubes. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 5473-5476	1.6	62
280	How accurate can the determination of chiral indices of carbon nanotubes be?. <i>European Physical Journal B</i> , <b>2003</b> , 32, 457-469	1.2	62
279	Direct imaging of Sc <sub>2</sub> @C <sub>84</sub> molecules encapsulated inside single-wall carbon nanotubes by high resolution electron microscopy with atomic sensitivity. <i>Physical Review Letters</i> , <b>2003</b> , 90, 055506	7.4	62
278	Fabricating Dual-Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 16013-16022	16.4	60
277	Chiral-angle distribution for separated single-walled carbon nanotubes. <i>Nano Letters</i> , <b>2008</b> , 8, 3151-4	11.5	60
276	InSe monolayer: synthesis, structure and ultra-high second-harmonic generation. <i>2D Materials</i> , <b>2018</b> , 5, 025019	5.9	59
275	Enhanced performance of in-plane transition metal dichalcogenides monolayers by configuring local atomic structures. <i>Nature Communications</i> , <b>2020</b> , 11, 2253	17.4	58
274	Screening the missing electron: nanochemistry in action. <i>Physical Review Letters</i> , <b>2009</b> , 102, 046804	7.4	58



273	Experimental observation of boron nitride chains. <i>ACS Nano</i> , <b>2014</b> , 8, 11950-7	16.7	57
272	Engineering Monolayer 1T-MoS <sub>2</sub> into a Bifunctional Electrocatalyst via Sonochemical Doping of Isolated Transition Metal Atoms. <i>ACS Catalysis</i> , <b>2019</b> , 9, 7527-7534	13.1	56
271	Position and momentum mapping of vibrations in graphene nanostructures. <i>Nature</i> , <b>2019</b> , 573, 247-250	50.4	55
270	Structures of D <sub>5d</sub> -C <sub>80</sub> and Ih-Er <sub>3</sub> N@C <sub>80</sub> Fullerenes and Their Rotation Inside Carbon Nanotubes Demonstrated by Aberration-Corrected Electron Microscopy. <i>Nano Letters</i> , <b>2007</b> , 7, 3704-3708	11.5	55
269	Controlled Synthesis of Atomically Thin 1T-TaS <sub>2</sub> for Tunable Charge Density Wave Phase Transitions. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 7613-7618	9.6	54
268	Temperature dependence of the reconstruction of zigzag edges in graphene. <i>ACS Nano</i> , <b>2015</b> , 9, 4786-956	7	53
267	Carbon Nanotubes as Electrically Active Nanoreactors for Multi-Step Inorganic Synthesis: Sequential Transformations of Molecules to Nanoclusters and Nanoclusters to Nanoribbons. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 8175-83	16.4	53
266	Hybridization of Single Nanocrystals of CsPbBr <sub>3</sub> and CsPbBr. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 19490-19496	3.8	53
265	Morphology Engineering in Monolayer MoS <sub>2</sub> -WS <sub>2</sub> Lateral Heterostructures. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1801568	15.6	52
264	Towards atomically precise manipulation of 2D nanostructures in the electron microscope. <i>2D Materials</i> , <b>2017</b> , 4, 042004	5.9	52
263	Core-level spectroscopy of point defects in single layer h-BN. <i>Physical Review Letters</i> , <b>2012</b> , 108, 075501	7.4	52
262	Transport properties of C <sub>78</sub> , C <sub>90</sub> and Dy@C <sub>82</sub> fullerenes-nanopeapods by field effect transistors. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2004</b> , 21, 1089-1092	3	52
261	Imaging the structure, symmetry, and surface-inhibited rotation of polyoxometalate ions on graphene oxide. <i>Nano Letters</i> , <b>2010</b> , 10, 4600-6	11.5	51
260	Metallic wires of lanthanum atoms inside carbon nanotubes. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 2162-3	16.4	51
259	Fine-structure analysis of Gd M <sub>45</sub> near-edge EELS on the valence state of Gd@C <sub>82</sub> microcrystals. <i>Physical Review B</i> , <b>2000</b> , 62, 1627-1630	3.3	51
258	Stable 1T Tungsten Disulfide Monolayer and Its Junctions: Growth and Atomic Structures. <i>ACS Nano</i> , <b>2018</b> , 12, 12080-12088	16.7	51
257	Cation-mixing stabilized layered oxide cathodes for sodium-ion batteries. <i>Science Bulletin</i> , <b>2018</b> , 63, 376-384	8.4	50
256	Preparation and photophysical and photoelectrochemical properties of a covalently fixed porphyrin-chemically converted graphene composite. <i>Chemistry - A European Journal</i> , <b>2012</b> , 18, 4250-7	4.8	50



255	Defect-Induced Atomic Migration in Carbon Nanopeapod: Tracking the Single-Atom Dynamic Behavior. <i>Nano Letters</i> , <b>2004</b> , 4, 2451-2454	11.5	49
254	Revealing the Atomic Defects of WS <sub>2</sub> Governing Its Distinct Optical Emissions. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1704210	15.6	49
253	Functionalized graphene sheets coordinating metal cations. <i>Carbon</i> , <b>2014</b> , 75, 81-94	10.4	48
252	Doping of single-walled carbon nanotubes controlled via chemical transformation of encapsulated nickelocene. <i>Nanoscale</i> , <b>2015</b> , 7, 1383-91	7.7	47
251	Chemical vapor deposition of trigonal prismatic NbS monolayers and 3R-polytype few-layers. <i>Nanoscale</i> , <b>2017</b> , 9, 16607-16611	7.7	46
250	Polymeric acid-doped transparent carbon nanotube electrodes for organic solar cells with the longest doping durability. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 14553-14559	13	46
249	Direct imaging of the alkali metal site in K-doped fullerene peapods. <i>Physical Review Letters</i> , <b>2005</b> , 94, 045502	7.4	46
248	Epitaxial Synthesis of Monolayer PtSe Single Crystal on MoSe with Strong Interlayer Coupling. <i>ACS Nano</i> , <b>2019</b> , 13, 10929-10938	16.7	45
247	Synthesis and Transport Properties of Degenerate P-Type Nb-Doped WS <sub>2</sub> Monolayers. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 3534-3541	9.6	45
246	In situ observation of step-edge in-plane growth of graphene in a STEM. <i>Nature Communications</i> , <b>2014</b> , 5, 4055	17.4	45
245	Detection of photons emitted from single erbium atoms in energy-dispersive X-ray spectroscopy. <i>Nature Photonics</i> , <b>2012</b> , 6, 545-548	33.9	44
244	Growth and optical properties of Nb-doped WS <sub>2</sub> monolayers. <i>Applied Physics Express</i> , <b>2016</b> , 9, 071201	2.4	44
243	Direct imaging of the structure, relaxation, and sterically constrained motion of encapsulated tungsten polyoxometalate Lindqvist ions within carbon nanotubes. <i>ACS Nano</i> , <b>2008</b> , 2, 966-76	16.7	43
242	Entrapping of exohedral metallofullerenes in carbon nanotubes: (C <sub>5</sub> C <sub>60</sub> ) <sub>n</sub> @SWNT nano-peapods. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 17972-3	16.4	43
241	Catalyst and chirality dependent growth of carbon nanotubes determined through nano-test tube chemistry. <i>Advanced Materials</i> , <b>2010</b> , 22, 3685-9	24	42
240	Surface-Mediated Aligned Growth of Monolayer MoS <sub>2</sub> and In-Plane Heterostructures with Graphene on Sapphire. <i>ACS Nano</i> , <b>2018</b> , 12, 10032-10044	16.7	42
239	Single-atom electron energy loss spectroscopy of light elements. <i>Nature Communications</i> , <b>2015</b> , 6, 7943	17.4	41
238	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> , <b>2011</b> , 133, 14151-3	16.4	41

237	Higher-order aberration corrector for an image-forming system in a transmission electron microscope. <i>Ultramicroscopy</i> , <b>2010</b> , 110, 958-961	3.1	41
236	Synthesis and Characterization of Eu-Metallofullerenes from Eu@C74 to Eu@C90 and Their Nanopeapods. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 9011-9015	3.4	41
235	Photogating WS Photodetectors Using Embedded WSe Charge Puddles. <i>ACS Nano</i> , <b>2020</b> , 14, 4559-4566	16.7	40
234	Wafer-scale and deterministic patterned growth of monolayer MoS <sub>2</sub> via vapor-liquid-solid method. <i>Nanoscale</i> , <b>2019</b> , 11, 16122-16129	7.7	40
233	Photoluminescence quenching in peapod-derived double-walled carbon nanotubes. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	40
232	Preparing a magnetically responsive single-wall carbon nanohorn colloid by anchoring magnetite nanoparticles. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 7165-70	3.4	40
231	Enantioselective synthesis of attenols A and B. <i>Organic Letters</i> , <b>2001</b> , 3, 527-9	6.2	40
230	Dual-Metal Interbonding as the Chemical Facilitator for Single-Atom Dispersions. <i>Advanced Materials</i> , <b>2020</b> , 32, e2003484	24	40
229	Transport evidence of asymmetric spin-orbit coupling in few-layer superconducting 1T-MoTe <sub>2</sub> . <i>Nature Communications</i> , <b>2019</b> , 10, 2044	17.4	39
228	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> , <b>2015</b> , 114, 166102	7.4	39
227	Stability and spectroscopy of single nitrogen dopants in graphene at elevated temperatures. <i>ACS Nano</i> , <b>2014</b> , 8, 11806-15	16.7	39
226	Growth and Raman spectra of single-crystal trilayer graphene with different stacking orientations. <i>ACS Nano</i> , <b>2014</b> , 8, 10766-73	16.7	39
225	Evidence for the Intramolecular Motion of Gd Atoms in a Gd <sub>2</sub> @C <sub>92</sub> Nanopeapod. <i>Nano Letters</i> , <b>2003</b> , 3, 1395-1398	11.5	39
224	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> , <b>1999</b> , 68, 301-308	2.6	38
223	Hydrogen-Assisted Epitaxial Growth of Monolayer Tungsten Disulfide and Seamless Grain Stitching. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 403-411	9.6	38
222	Transmission electron microscopy imaging of individual functional groups of fullerene derivatives. <i>Physical Review Letters</i> , <b>2006</b> , 96, 088304	7.4	37
221	Production, Isolation, and EELS Characterization of Ti <sub>2</sub> @C <sub>84</sub> Ditungsten Metallofullerenes. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 9295-9298	3.4	37
220	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> , <b>2017</b> , 13, 1603879	11	36

219	Synthesis of Co-Doped MoS Monolayers with Enhanced Valley Splitting. <i>Advanced Materials</i> , <b>2020</b> , 32, e1906536	24	35
218	Anisotropic Ordering in 1T-Molybdenum and Tungsten Ditelluride Layers Alloyed with Sulfur and Selenium. <i>ACS Nano</i> , <b>2018</b> , 12, 894-901	16.7	35
217	Electronic structures of single-walled carbon nanotubes encapsulating ellipsoidal C70. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 15252-8	16.4	35
216	Electron energy-loss spectroscopy on individual nanotubes. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , <b>2001</b> , 114-116, 209-217	1.7	35
215	Growth of fullerene-like carbon nitride thin solid films consisting of cross-linked nano-onions. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 2639-2641	3.4	35
214	Metallization of single-wall carbon nanotube thin films induced by gas phase iodination. <i>Carbon</i> , <b>2015</b> , 94, 768-774	10.4	34
213	Aberration-corrected STEM/TEM imaging at 15kV. <i>Ultramicroscopy</i> , <b>2014</b> , 145, 50-5	3.1	34
212	Self-assembled double ladder structure formed inside carbon nanotubes by encapsulation of H8Si8O12. <i>ACS Nano</i> , <b>2009</b> , 3, 1160-6	16.7	34
211	Direct imaging of intracage structure in titanium-carbide endohedral metallofullerene. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	34
210	Structural Distortions and Charge Density Waves in Iodine Chains Encapsulated inside Carbon Nanotubes. <i>Nano Letters</i> , <b>2017</b> , 17, 3694-3700	11.5	33
209	Scalable graphite/copper bishell composite for high-performance interconnects. <i>ACS Nano</i> , <b>2014</b> , 8, 275-287	16.7	33
208	Structural identification of single and double-walled carbon nanotubes by high-resolution transmission electron microscopy. <i>Chemical Physics Letters</i> , <b>2005</b> , 412, 116-120	2.5	33
207	Intrafullerene electron transfers in Sm-containing metallofullerenes: Sm@C <sub>2n</sub> (74) <i>Journal of Molecular Graphics and Modelling</i> , <b>2001</b> , 19, 244-51	2.8	33
206	Coalescence of C60 molecules assisted by doped iodine inside carbon nanotubes. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 8954-5	16.4	32
205	High-resolution electron microscopy of interfaces in nanocrystalline materials. <i>Scripta Materialia</i> , <b>1995</b> , 6, 115-124		32
204	Isolation of Single-Wired Transition-Metal Monochalcogenides by Carbon Nanotubes. <i>Nano Letters</i> , <b>2019</b> , 19, 4845-4851	11.5	31
203	Dynamic Structural Evolution of Metal-Metal Bonding Network in Monolayer WS <sub>2</sub> . <i>Chemistry of Materials</i> , <b>2016</b> , 28, 2308-2314	9.6	31
202	Template-Assisted Synthesis of Metallic 1T'-Sn <sub>0.3</sub> W <sub>0.7</sub> S <sub>2</sub> Nanosheets for Hydrogen Evolution Reaction. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1906069	15.6	31

201	Atomic level spatial variations of energy states along graphene edges. <i>Nano Letters</i> , <b>2014</b> , 14, 6155-9	11.5	30
200	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> , <b>2007</b> , 129, 6666-7	16.4	30
199	Fabrication and optical probing of highly extended, ultrathin graphene nanoribbons in carbon nanotubes. <i>ACS Nano</i> , <b>2015</b> , 9, 5034-40	16.7	29
198	Single atom spectroscopy with reduced delocalization effect using a 30 kV-STEM. <i>EPJ Applied Physics</i> , <b>2011</b> , 54, 33508	1.1	29
197	How does a carbon nanotube grow? An in situ investigation on the cap evolution. <i>ACS Nano</i> , <b>2008</b> , 2, 1275-9	16.7	29
196	Molecular interactions on single-walled carbon nanotubes revealed by high-resolution transmission microscopy. <i>Nature Communications</i> , <b>2015</b> , 6, 7732	17.4	28
195	In situ electron energy-loss spectroscopy on carbon nanotubes during deformation. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 70-72	3.4	28
194	Proton and Li-Ion Permeation through Graphene with Eight-Atom-Ring Defects. <i>ACS Nano</i> , <b>2020</b> , 14, 7280-7286	16.7	27
193	Structure and local chemical properties of boron-terminated tetravacancies in hexagonal boron nitride. <i>Physical Review Letters</i> , <b>2015</b> , 114, 075502	7.4	27
192	Composition dependent lattice dynamics in MoS <sub>x</sub> Se(2-x) alloys. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 193505	2.5	27
191	Electronic properties of Gd@C82 metallofullerene peapods: (Gd@C82) <sub>n</sub> @SWNTs. <i>Applied Physics A: Materials Science and Processing</i> , <b>2003</b> , 76, 475-478	2.6	27
190	Ultrafast Monolayer In/Gr-WS-Gr Hybrid Photodetectors with High Gain. <i>ACS Nano</i> , <b>2019</b> , 13, 3269-3279	16.7	26
189	High-resolution electron microscopy of individual metallofullerene molecules on the dipole orientations in peapods. <i>Applied Physics A: Materials Science and Processing</i> , <b>2003</b> , 76, 445-447	2.6	26
188	Sensitivity of graphene edge states to surface adatom interactions. <i>Nano Letters</i> , <b>2013</b> , 13, 4820-6	11.5	25
187	Determination of optical isomers for left-handed or right-handed chiral double-wall carbon nanotubes. <i>Physical Review Letters</i> , <b>2005</b> , 95, 187406	7.4	25
186	Atomic mechanism of metal crystal nucleus formation in a single-walled carbon nanotube. <i>Nature Chemistry</i> , <b>2020</b> , 12, 921-928	17.6	25
185	Resolution enhancement in transmission electron microscopy with 60-kV monochromated electron source. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 013107	3.4	25
184	Synthesis of 2H-1T' WS <sub>2</sub> -ReS <sub>2</sub> Heterophase Structures with Atomically Sharp Interface via Hydrogen-Triggered One-Pot Growth. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1910169	15.6	24

183	Optical orientation and alignment of excitons in ensembles of inorganic perovskite nanocrystals. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	24
182	Capturing the signature of single atoms with the tiny probe of a STEM. <i>Ultramicroscopy</i> , <b>2012</b> , 123, 80-9	3.1	24
181	Metal atom catalyzed enlargement of fullerenes. <i>Physical Review Letters</i> , <b>2008</b> , 101, 176102	7.4	24
180	Tunable Field-Effect Transistor Device with Metallofullerene Nanopeapods. <i>Japanese Journal of Applied Physics</i> , <b>2005</b> , 44, 469-472	1.4	24
179	Coiled structure of eccentric coaxial nanocable made of amorphous boron and silicon oxide. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 1564-1566	3.4	24
178	Unique Tube-Ring Interactions: Complexation of Single-Walled Carbon Nanotubes with Cycloparaphenyleneacetylenes. <i>Small</i> , <b>2018</b> , 14, e1800720	11	24
177	Scalable van der Waals Heterojunctions for High-Performance Photodetectors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 36181-36188	9.5	23
176	Synthesis and Atomic Characterization of a Ti2O3 Nanosheet. <i>Journal of Physical Chemistry Letters</i> , <b>2011</b> , 2, 1820-1823	6.4	23
175	Mechanistic insights into the photocatalytic properties of metal nanocluster/graphene ensembles. Examining the role of visible light in the reduction of 4-nitrophenol. <i>Nanoscale</i> , <b>2017</b> , 9, 9685-9692	7.7	22
174	Extraordinary Interfacial Stitching between Single All-Inorganic Perovskite Nanocrystals. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 5984-5991	9.5	22
173	Vapor Phase Selective Growth of Two-Dimensional Perovskite/WS Heterostructures for Optoelectronic Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 40503-40511	9.5	22
172	Conformational analysis of single perfluoroalkyl chains by single-molecule real-time transmission electron microscopic imaging. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 466-73	16.4	22
171	Atomically resolved images of I(h) ice single crystals in the solid phase. <i>Physical Review Letters</i> , <b>2011</b> , 106, 206101	7.4	22
170	Inelastic electron irradiation damage in hexagonal boron nitride. <i>Micron</i> , <b>2015</b> , 72, 21-7	2.3	21
169	Host-guest interactions in azafullerene (C59N)-single-wall carbon nanotube (SWCNT) peapod hybrid structures. <i>Chemical Communications</i> , <b>2010</b> , 46, 1293-5	5.8	21
168	Graphene-Transition Metal Dichalcogenide Heterojunctions for Scalable and Low-Power Complementary Integrated Circuits. <i>ACS Nano</i> , <b>2020</b> , 14, 985-992	16.7	20
167	Postsynthesis of h-BN/Graphene Heterostructures Inside a STEM. <i>Small</i> , <b>2016</b> , 12, 252-9	11	20
166	Boron-catalyzed multi-walled carbon nanotube growth with the reduced number of layers by laser ablation. <i>Chemical Physics Letters</i> , <b>2000</b> , 324, 224-230	2.5	19

165	Strong Band Bowing Effects and Distinctive Optoelectronic Properties of 2H and 1T? Phase-Tunable Mo <sub>x</sub> Re <sub>1-x</sub> S <sub>2</sub> Alloys. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2003264	15.6	18
164	Evaluation of residual aberration in fifth-order geometrical aberration correctors. <i>Microscopy (Oxford, England)</i> , <b>2018</b> , 67, 156-163	1.3	18
163	Sulfur-Doped Graphene-Supported Nickel-Core Palladium-Shell Nanoparticles as Efficient Oxygen Reduction and Methanol Oxidation Electrocatalyst. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 3869-3880	6.1	18
162	Band gap expansion, shear inversion phase change behaviour and low-voltage induced crystal oscillation in low-dimensional tin selenide crystals. <i>Dalton Transactions</i> , <b>2014</b> , 43, 7391-9	4.3	18
161	Chirality-dependent growth of single-wall carbon nanotubes as revealed inside nano-test tubes. <i>Nanoscale</i> , <b>2017</b> , 9, 7998-8006	7.7	17
160	Influence of rhenium on the structural and optical properties of molybdenum disulfide. <i>Japanese Journal of Applied Physics</i> , <b>2015</b> , 54, 04DH05	1.4	17
159	Isothermal Growth and Stacking Evolution in Highly Uniform Bernal-Stacked Bilayer Graphene. <i>ACS Nano</i> , <b>2020</b> , 14, 6834-6844	16.7	17
158	Layer Rotation-Angle-Dependent Excitonic Absorption in van der Waals Heterostructures Revealed by Electron Energy Loss Spectroscopy. <i>ACS Nano</i> , <b>2019</b> , 13, 9541-9550	16.7	17
157	Gating electron-hole asymmetry in twisted bilayer graphene. <i>ACS Nano</i> , <b>2014</b> , 8, 6962-9	16.7	17
156	Coaxially Stacked Coronene Columns inside Single-Walled Carbon Nanotubes. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 4955-4959	3.6	17
155	Characterization of graphene grown on bulk and thin film nickel. <i>Langmuir</i> , <b>2011</b> , 27, 13748-53	4	17
154	Photoreactivity preservation of AgBr nanowires in confined nanospaces. <i>Advanced Materials</i> , <b>2010</b> , 22, 3156-60	24	17
153	Two-dimensional PdSe <sub>2</sub> -Pd <sub>2</sub> Se <sub>3</sub> junctions can serve as nanowires. <i>2D Materials</i> , <b>2018</b> , 5, 035025	5.9	17
152	Nickel clusters embedded in carbon nanotubes as high performance magnets. <i>Scientific Reports</i> , <b>2015</b> , 5, 15033	4.9	16
151	Microwave assisted covalent functionalization of C(60)@SWCNT peapods. <i>Chemical Communications</i> , <b>2010</b> , 46, 9110-2	5.8	16
150	Surface decoration accelerates the hydrogen evolution kinetics of a perovskite oxide in alkaline solution. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 4249-4257	35.4	16
149	Gate effect of vacancy-type defect of fullerene cages on metal-atom migrations in metallofullerenes. <i>Nano Letters</i> , <b>2006</b> , 6, 1389-95	11.5	15
148	Tunable Doping of Rhenium and Vanadium into Transition Metal Dichalcogenides for Two-Dimensional Electronics. <i>Advanced Science</i> , <b>2021</b> , 8, e2004438	13.6	15



147	Enhancing the Infrared Response of Carbon Nanotubes From Oligo-Quaterthiophene Interactions. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 28802-28807	3.8	15
146	Atomic Resolution Imaging at an Ultralow Accelerating Voltage by a Monochromatic Transmission Electron Microscope. <i>Physical Review Letters</i> , <b>2016</b> , 117, 153004	7.4	15
145	Toward Confined Carbyne with Tailored Properties. <i>Nano Letters</i> , <b>2021</b> , 21, 1096-1101	11.5	15
144	Fermi level shift in carbon nanotubes by dye confinement. <i>Carbon</i> , <b>2019</b> , 149, 772-780	10.4	14
143	Transition metal atom-doped monolayer MoS <sub>2</sub> in a proton-exchange membrane electrolyzer. <i>Materials Today Advances</i> , <b>2020</b> , 6, 100020	7.4	14
142	Direct evidence for lip-lip interactions in multi-walled carbon nanotubes. <i>Nano Research</i> , <b>2008</b> , 1, 434-439	10	14
141	Seamlessly Splicing Metallic Sn Mo S at MoS Edge for Enhanced Photoelectrocatalytic Performance in Microreactor. <i>Advanced Science</i> , <b>2020</b> , 7, 2002172	13.6	14
140	Probing Exciton Dispersions of Freestanding Monolayer WSe <sub>2</sub> by Momentum-Resolved Electron Energy-Loss Spectroscopy. <i>Physical Review Letters</i> , <b>2020</b> , 124, 087401	7.4	13
139	Band gap modification and photoluminescence enhancement of graphene nanoribbon filled single-walled carbon nanotubes. <i>Nanoscale</i> , <b>2018</b> , 10, 2936-2943	7.7	13
138	Iron and ruthenium nanoparticles in carbon prepared by thermolysis of buckymetalloenes. <i>Chemistry - an Asian Journal</i> , <b>2009</b> , 4, 457-65	4.5	13
137	Exfoliated graphene ligands stabilizing copper cations. <i>Carbon</i> , <b>2011</b> , 49, 3375-3378	10.4	13
136	Investigations of alumina/spinel and alumina/ zirconia interfaces by spatially resolved electron energy loss spectroscopy. <i>Journal of the European Ceramic Society</i> , <b>1998</b> , 18, 1453-1459	6	13
135	Effective, fast, and low temperature encapsulation of fullerene derivatives in single wall carbon nanotubes. <i>Surface Science</i> , <b>2007</b> , 601, 5116-5120	1.8	13
134	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> , <b>2021</b> , 118,	11.5	13
133	Individualized p-Doped Carbon Nanohorns. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 10468-7264	10.4	12
132	Highly Efficient Mass Production of Boron Nitride Nanosheets via a Borate Nitridation Method. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 17370-17377	3.8	12
131	A topologically substituted boron nitride hybrid aerogel for highly selective CO <sub>2</sub> uptake. <i>Nano Research</i> , <b>2018</b> , 11, 6325-6335	10	12
130	Evaluation of probe size in STEM imaging at 30 and 60kV. <i>Micron</i> , <b>2012</b> , 43, 551-556	2.3	12



129	Correlation between atomic rearrangement in defective fullerenes and migration behavior of encaged metal ions. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	12
128	Selective High-Yield Catalytic Synthesis of Terbium Metallofullerenes and Single-Wall Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 2485-2489	3.4	12
127	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> , <b>2019</b> , 25, 11105-11113	4.8	11
126	Fabricating Dual-Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 16147-16156	3.6	11
125	Chiral vector and metal catalyst-dependent growth kinetics of single-wall carbon nanotubes. <i>Carbon</i> , <b>2018</b> , 133, 283-292	10.4	11
124	Quantitative evaluation of temporal partial coherence using 3D Fourier transforms of through-focus TEM images. <i>Ultramicroscopy</i> , <b>2013</b> , 134, 86-93	3.1	11
123	Influence of Aromatic Environments on the Physical Properties of $\beta$ -Carotene. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 2524-2530	3.8	11
122	In Situ Formation and Structure Tailoring of Carbon Onions by High-Resolution Transmission Electron Microscopy. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 5043-5046	3.8	11
121	Prevention of Sn and Pb crystallization in a confined nanospace. <i>Small</i> , <b>2010</b> , 6, 1279-82	11	11
120	Blue emission at atomically sharp 1D heterojunctions between graphene and h-BN. <i>Nature Communications</i> , <b>2020</b> , 11, 5359	17.4	11
119	Fe on molecular-layer MoS <sub>2</sub> as inorganic Fe-S <sub>2</sub> -Mo motifs for light-driven nitrogen fixation to ammonia at elevated temperatures. <i>Chem Catalysis</i> , <b>2021</b> , 1, 162-182		11
118	Electron energy loss spectroscopy of excitons in two-dimensional-semiconductors as a function of temperature. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 163107	3.4	11
117	Electron Spectroscopy of Single Quantum Objects To Directly Correlate the Local Structure to Their Electronic Transport and Optical Properties. <i>Nano Letters</i> , <b>2016</b> , 16, 3661-7	11.5	11
116	Direct Proof of a Defect-Modulated Gap Transition in Semiconducting Nanotubes. <i>Nano Letters</i> , <b>2018</b> , 18, 3920-3925	11.5	11
115	Composition and phase engineering of metal chalcogenides and phosphorous chalcogenides. <i>Nature Materials</i> ,	27	11
114	Structural analysis and oxygen reduction reaction activity in bamboo-like nitrogen-doped carbon nanotubes containing localized nitrogen in nodal regions. <i>Carbon</i> , <b>2017</b> , 123, 99-105	10.4	10
113	Single atom spectroscopy: Decreased scattering delocalization at high energy losses, effects of atomic movement and X-ray fluorescence yield. <i>Ultramicroscopy</i> , <b>2016</b> , 160, 239-246	3.1	10
112	High-precision imaging of an encapsulated Lindqvist ion and correlation of its structure and symmetry with quantum chemical calculations. <i>Nanoscale</i> , <b>2012</b> , 4, 1190-9	7.7	10

111	Direct evidence for covalent functionalization of carbon nanohorns by high-resolution electron microscopy imaging of C60 conjugated onto their skeleton. <i>Carbon</i> , <b>2012</b> , 50, 3909-3914	10.4	10
110	Diameter dependent growth mode of carbon nanotubes on nanoporous SiO <sub>2</sub> substrates. <i>Materials Letters</i> , <b>2009</b> , 63, 1366-1369	3.3	10
109	Atom-Resolved Imaging of Carbon Hexagons of Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 11098-11101	3.8	10
108	Site-dependent migration behavior of individual cesium ions inside and outside C60 fullerene nanopeapods. <i>Small</i> , <b>2008</b> , 4, 1080-3	11	10
107	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> , <b>2000</b> , 07, 475-494	1.1	10
106	Core-level spectroscopy to probe the oxidation state of single europium atoms. <i>Physical Review Letters</i> , <b>2015</b> , 114, 197602	7.4	9
105	Nanoheterostructures of Partially Oxidized RuNi Alloy as Bifunctional Electrocatalysts for Overall Water Splitting. <i>ChemSusChem</i> , <b>2020</b> , 13, 2739-2744	8.3	9
104	Atomic imaging and spectroscopy of low-dimensional materials with interrupted periodicities. <i>Journal of Electron Microscopy</i> , <b>2012</b> , 61, 285-91		9
103	Aberration Correctors Developed Under the Triple C Project. <i>Advances in Imaging and Electron Physics</i> , <b>2011</b> , 168, 297-336	0.2	9
102	Template-synthesized BN:C nanoboxes. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 825-827	3.4	9
101	Influence of a compositional gradient in the structure and magnetic behavior of strained FeMn ultrathin layers. <i>Physical Review B</i> , <b>1998</b> , 58, 14135-14138	3.3	9
100	Realizing the Intrinsic Anisotropic Growth of 1T' ReS <sub>2</sub> on Selected Au(101) Substrate toward Large-Scale Single Crystal Fabrication. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2102138	15.6	9
99	Gentle transfer method for water- and acid/alkali-sensitive 2D materials for (S)TEM study. <i>APL Materials</i> , <b>2016</b> , 4, 116108	5.7	9
98	[3 + 2] cycloaddition reaction of azomethine ylides generated by thermal ring opening of aziridines onto carbon nanohorns. <i>RSC Advances</i> , <b>2016</b> , 6, 44782-44787	3.7	9
97	Room-temperature Y-type emission of perylenes by encapsulation within single-walled carbon nanotubes. <i>Nanoscale</i> , <b>2016</b> , 8, 7834-9	7.7	8
96	Ballistic- and quantum-conductor carbon nanotubes: A reference experiment put to the test. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	8
95	Imaging the structure of activated carbon using aberration corrected TEM. <i>Journal of Physics: Conference Series</i> , <b>2010</b> , 241, 012050	0.3	8
94	Twist Angle-Dependent Optical Responses in Controllably Grown WS <sub>2</sub> Vertical Homojunctions. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 9721-9729	9.6	8

93	High-precision thickness control of ice layer on CVD grown bilayer graphene for cryo-TEM. <i>Carbon</i> , <b>2020</b> , 160, 107-112	10.4	7
92	Metal resist for extreme ultraviolet lithography characterized by scanning transmission electron microscopy. <i>Applied Physics Express</i> , <b>2016</b> , 9, 031601	2.4	7
91	Synthesis of sub-millimeter single-crystal grains of aligned hexagonal boron nitride on an epitaxial Ni film. <i>Nanoscale</i> , <b>2019</b> , 11, 14668-14675	7.7	7
90	Single molecular spectroscopy: identification of individual fullerene molecules. <i>Physical Review Letters</i> , <b>2014</b> , 113, 185502	7.4	7
89	Probing interlayer coupling in twisted single-crystal bilayer graphene by Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , <b>2014</b> , 45, 912-917	2.3	7
88	Resolution enhancement at a large convergence angle by a delta corrector with a CFEG in a low-accelerating-voltage STEM. <i>Micron</i> , <b>2014</b> , 63, 35-9	2.3	7
87	Fine structure analysis of near-edge electron energy loss spectra related to the compositional variation at the diffuse interfaces in FeGe multilayers. <i>Journal of Applied Physics</i> , <b>1996</b> , 80, 853-858	2.5	7
86	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> , <b>2021</b> , 143, 9105-9112	16.4	7
85	Mixed-Salt Enhanced Chemical Vapor Deposition of Two-Dimensional Transition Metal Dichalcogenides. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 7301-7308	9.6	7
84	Single-atom detection of light elements: Imaging or spectroscopy?. <i>Ultramicroscopy</i> , <b>2017</b> , 180, 150-155	3.1	6
83	Preferential S/Se occupation in an anisotropic ReSSe monolayer alloy. <i>Nanoscale</i> , <b>2017</b> , 9, 18275-18280	7.7	6
82	Scalable T-Gate Aligned Gr <sub>1.5</sub> S <sub>2</sub> or Radio-Frequency Field-Effect Transistors. <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 3898-3905	4	6
81	Direct Growth of Wafer-Scale, Transparent, p-Type Reduced-Graphene-Oxide-like Thin Films by Pulsed Laser Deposition. <i>ACS Nano</i> , <b>2020</b> , 14, 3290-3298	16.7	6
80	Low-temperature growth of single-wall carbon nanotubes inside nano test tubes. <i>Physica Status Solidi (B): Basic Research</i> , <b>2010</b> , 247, 2730-2733	1.3	6
79	Covalently functionalized layered MoS <sub>2</sub> supported Pd nanoparticles as highly active oxygen reduction electrocatalysts. <i>Nanoscale</i> , <b>2020</b> , 12, 18278-18288	7.7	6
78	Scanning Moiré Fringe Method: A Superior Approach to Perceive Defects, Interfaces, and Distortion in 2D Materials. <i>ACS Nano</i> , <b>2020</b> , 14, 6034-6042	16.7	6
77	Direct observation and catalytic role of mediator atom in 2D materials. <i>Science Advances</i> , <b>2020</b> , 6, eaba4942	14.5	5
76	Molecular Arrangements of Corannulene and Sumanene in Single-Walled Carbon Nanotubes. <i>ChemNanoMat</i> , <b>2018</b> , 4, 557-561	3.5	5

75	Elemental analysis down to the single atom with electron beams. <i>Comptes Rendus Physique</i> , <b>2014</b> , 15, 151-157	1.4	5
74	Single atom imaging and spectroscopy in nanostructured carbon materials. <i>MRS Bulletin</i> , <b>2012</b> , 37, 36-38 <sub>3,2</sub>		5
73	Polymorphic Phases of Metal Chlorides in the Confined 2D Space of Bilayer Graphene. <i>Advanced Materials</i> , <b>2021</b> , 33, e2105898	24	5
72	Spatially Resolved EELS on Carbon-Based Nanostructures <b>2001</b> , 201-232		5
71	STEM imaging artifacts with three-fold astigmatism in monolayer transition metal dichalcogenides. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 243102	3-4	4
70	Selective Growth of Two-Dimensional Heterostructures of Gallium Selenide on Monolayer Graphene and the Thickness Dependent p- and n-Type Nature. <i>ACS Applied Nano Materials</i> , <b>2018</b> , 1, 3293-3302 <sup>5,6</sup>		4
69	From a one-dimensional crystal to a one-dimensional liquid: A comprehensive dynamical study of C60 peapods. <i>Physical Review B</i> , <b>2013</b> , 87,	3-3	4
68	Chromatic Aberration Correction by Combination Concave Lens. <i>Microscopy and Microanalysis</i> , <b>2010</b> , 16, 116-117	0.5	4
67	Coupling and Decoupling of Bilayer Graphene Monitored by Electron Energy Loss Spectroscopy. <i>Nano Letters</i> , <b>2021</b> ,	11.5	4
66	Secondary electron imaging of monolayer materials inside a transmission electron microscope. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 063105	3-4	3
65	Performance and Application of Chromatic/Spherical Aberration-Corrected 30 kV Transmission Electron Microscope. <i>Microscopy and Microanalysis</i> , <b>2011</b> , 17, 1530-1531	0.5	3
64	Formation of Highly Doped Nanostripes in 2D Transition Metal Dichalcogenides via a Dislocation Climb Mechanism. <i>Advanced Materials</i> , <b>2021</b> , 33, e2007819	24	3
63	One-step synthesis of BaTiO <sub>3</sub> /CaTiO <sub>3</sub> core-shell nanocubes by hydrothermal reaction. <i>Journal of Asian Ceramic Societies</i> , <b>2021</b> , 9, 359-365	2.4	3
62	Performance of Low-kV Aberration-corrected STEM with Delta-corrector and CFEG in Ultrahigh Vacuum Environment. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 468-469	0.5	2
61	Individualized p-Doped Carbon Nanohorns. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 10624-10628	3.6	2
60	Development of a Monochromated and Aberration-Corrected Low-Voltage (S)TEM. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 351-352	0.5	2
59	HR-TEM study of atomic defects in carbon nanostructures. <i>AIP Conference Proceedings</i> , <b>2005</b> ,	0	2
58	Core-level spectroscopy on the valence state of encaged metal in metallofullerene-peapods. <i>AIP Conference Proceedings</i> , <b>2001</b> ,	0	2

57	Optoelectronic Properties of Atomically Thin MoWS Nanoflakes Probed by Spatially-Resolved Monochromated EELS.. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	2
56	Direct observation of atomic defects in carbon nanotubes and fullerenes <b>2008</b> , 1-2		2
55	Deciphering the Intense Postgap Absorptions of Monolayer Transition Metal Dichalcogenides. <i>ACS Nano</i> , <b>2021</b> , 15, 7783-7789	16.7	2
54	Distributions of hafnia and titania cores in EUV metal resists evaluated by scanning transmission electron microscopy and electron energy loss spectroscopy. <i>Applied Physics Express</i> , <b>2016</b> , 9, 111801	2.4	2
53	Two-dimensional iodine-monofluoride epitaxy on WSe <sub>2</sub> . <i>Npj 2D Materials and Applications</i> , <b>2021</b> , 5,	8.8	2
52	Imaging of isotope diffusion using atomic-scale vibrational spectroscopy.. <i>Nature</i> , <b>2022</b> , 603, 68-72	50.4	2
51	In Situ Observation of Structural Changes in Low-dimensional Materials by Means of TEM and STEM. <i>Microscopy and Microanalysis</i> , <b>2020</b> , 26, 88-89	0.5	1
50	Filling control of n-type and p-type dopant molecules in single-wall carbon nanotubes. <i>Applied Physics Express</i> , <b>2020</b> , 13, 065003	2.4	1
49	Electron-Beam-Induced Synthesis of Hexagonal 1 H-MoSe from Square $\sqrt{3}\sqrt{3}$ FeSe Decorated with Mo Adatoms. <i>Nano Letters</i> , <b>2018</b> , 18, 2016-2020	11.5	1
48	Carbon Nanomaterials: Unique TubeRing Interactions: Complexation of Single-Walled Carbon Nanotubes with Cycloparaphenyleneacetylenes (Small 26/2018). <i>Small</i> , <b>2018</b> , 14, 1870120	11	1
47	Doping Properties and Phase Transition in Single-Layer MoS <sub>2</sub> . <i>Microscopy and Microanalysis</i> , <b>2014</b> , 20, 1750-1751	0.5	1
46	A novel Pd <sub>2</sub> Se <sub>3</sub> two-dimensional phase driven by interlayer fusion in layered PdSe <sub>2</sub> . <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 1700-1701	0.5	1
45	Resolution Improvement in Aberration-Corrected Low- Voltage TEM with Monochromator at 60 kV. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 644, 012033	0.3	1
44	Aberration Corrected Off-Axis Electron Holography of Layered Transition Metal Dichalcogenides. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 1399-1400	0.5	1
43	Aberration corrected imaging of a carbon nanotube encapsulated Lindqvist Ion and correlation with Density Functional Theory. <i>Journal of Physics: Conference Series</i> , <b>2012</b> , 371, 012018	0.3	1
42	Development of 30-kV Cc/Cs Correction Tandem System. <i>Microscopy and Microanalysis</i> , <b>2011</b> , 17, 1184-1185	18.5	1
41	Advantage of Cc/Cs-corrected Imaging in 30 kV Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , <b>2012</b> , 18, 1514-1515	0.5	1
40	Correction of Spherical Aberration and Six-Fold Astigmatism Using Three Dodecapoles,. <i>Microscopy and Microanalysis</i> , <b>2009</b> , 15, 1458-1459	0.5	1

39	Electron-Induced Puncturing of Endohedral Metallofullerenes. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , <b>2006</b> , 14, 261-267	1.8	1
38	Radiation Damage of C60 Single Molecules Encapsulated in Carbon Nanotube. <i>Microscopy and Microanalysis</i> , <b>2006</b> , 12, 586-587	0.5	1
37	Direct Imaging of Irradiation-induced Atomic Defects in Carbon Nanotubes. <i>Materia Japan</i> , <b>2008</b> , 47, 646-646	0.1	1
36	Cross-Sectional Observations of Polymorphic FeGe Interphases. <i>Microscopy Microanalysis Microstructures</i> , <b>1996</b> , 7, 153-160		1
35	In-situ TEM observation of the growth process of carbon nanomaterials by laser irradiation. <i>Microscopy and Microanalysis</i> , <b>2021</b> , 27, 2344-2345	0.5	1
34	Ultra High Energy Resolution EELS Mapping using Aberration-corrected Low-voltage STEM Equipped with Monochromator. <i>Microscopy and Microanalysis</i> , <b>2016</b> , 22, 962-963	0.5	1
33	Discovery of pyridinic nitrogen defects and single atom spin in graphene <b>2016</b> , 386-387		1
32	Band-Gap Modification Induced in HgTe by Dimensional Constraint in Carbon Nanotubes: Effect of Nanotube Diameter on Microstructure. <i>Springer Proceedings in Physics</i> , <b>2008</b> , 213-216	0.2	1
31	Multiple 2D Phase Transformations in Monolayer Transition Metal Chalcogenides.. <i>Advanced Materials</i> , <b>2022</b> , e2200643	24	1
30	Low-Voltage TEM/STEM for Imaging and Spectroscopy of Low-Dimensional Materials. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 458-459	0.5	0
29	Tuning of photoluminescence intensity and Fermi level position of individual single-walled carbon nanotubes by molecule confinement. <i>Carbon</i> , <b>2022</b> , 186, 423-430	10.4	0
28	Embedment of Multiple Transition Metal Impurities into WS Monolayer for Bandstructure Modulation. <i>Small</i> , <b>2021</b> , 17, e2007171	11	0
27	Single Atom Spectroscopy in Low-Dimensional Materials using Low-voltage STEM. <i>Microscopy and Microanalysis</i> , <b>2016</b> , 22, 868-869	0.5	0
26	Photothermal synthesis of confined carbyne. <i>Carbon</i> , <b>2021</b> , 182, 348-353	10.4	0
25	In-situ derived highly active NiS <sub>2</sub> and MoS <sub>2</sub> nanosheets on NiMoO <sub>4</sub> microcuboids via controlled surface sulfidation for high-current-density hydrogen evolution reaction. <i>Electrochimica Acta</i> , <b>2021</b> , 389, 138733	6.7	0
24	Thermal management function of graphene under cryogenic temperature. <i>Carbon</i> , <b>2021</b> , 183, 970-976	10.4	0
23	Polymorphic Phases of Metal Chlorides in the Confined 2D Space of Bilayer Graphene (Adv. Mater. 52/2021). <i>Advanced Materials</i> , <b>2021</b> , 33, 2170415	24	0
22	Extreme Nanowires: The Smallest Crystals in the Smallest Nanotubes <b>2016</b> , 397-398		



21	Gap measurements via low-loss EELS on atomically thin $\text{Mo}_x\text{W}_{(1-x)}\text{S}_2$ nanoflakes <b>2016</b> , 540-541	
20	Highly Depth-sensitive TEM Imaging of Graphene by using Monochromatic Electron Source at Low Accelerating Voltage. <i>Microscopy and Microanalysis</i> , <b>2018</b> , 24, 1610-1611	0.5
19	Nanoscale Vibrational Spectroscopy of Graphene by Large-q EELS. <i>Microscopy and Microanalysis</i> , <b>2019</b> , 25, 612-613	0.5
18	Resolution Enhancement at Low-Accelerating-Voltage by Improvements of Diffraction Limit and Chromatic Aberration. <i>Microscopy and Microanalysis</i> , <b>2014</b> , 20, 380-381	0.5
17	Polymorphic Structures of One-Dimensional Ionic Crystals Confined in Carbon Nanotubes. <i>Microscopy and Microanalysis</i> , <b>2014</b> , 20, 1730-1731	0.5
16	Optical Spectroscopy at High Spatial Resolution with Fast Electrons. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 1528-1529	0.5
15	Atomic Imaging and Spectroscopy of Single Layered Materials. <i>Microscopy and Microanalysis</i> , <b>2012</b> , 18, 1522-1523	0.5
14	HR-TEM of Carbon Network, Towards Individual C-C Bond Imaging. <i>Microscopy and Microanalysis</i> , <b>2009</b> , 15, 122-123	0.5
13	Performance of Low-voltage Electron Microscope with New Aberration Correction System and Cold Field Emission Gun. <i>Microscopy and Microanalysis</i> , <b>2009</b> , 15, 1080-1081	0.5
12	In-Situ HR-TEM Characterizations on Individual Carbon Nanotubes During its Manipulation, Deformation and Growth. <i>Microscopy and Microanalysis</i> , <b>2009</b> , 15, 710-711	0.5
11	Recording, Processing and Extracting Information From Sequences of Spatially Resolved EELS Spectra. <i>Microscopy and Microanalysis</i> , <b>1997</b> , 3, 939-940	0.5
10	?????????????????????. <i>Materia Japan</i> , <b>2007</b> , 46, 259-264	0.1
9	Composition-structure correlations in strained $\text{Fe}_x\text{Mn}_{1-x}/\text{Ir}$ superlattices. <i>Journal of Applied Physics</i> , <b>2000</b> , 88, 4605	2.5
8	Valence Electron EELS Spectroscopy on Nanoparticle Surfaces. <i>Microscopy and Microanalysis</i> , <b>1999</b> , 5, 668-669	0.5
7	Tribological Properties of Ti/Tin Nanomultilayers. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 434, 57	
6	Atomic-Resolution Imaging of Graphene Using an Ultrahigh-vacuum Microscope with a High-brightness Electron Gun. <i>Microscopy and Microanalysis</i> , <b>2020</b> , 26, 2358-2359	0.5
5	Monochromated EELS to Probe the Local Optical Properties of Low-Dimensional Materials. <i>Microscopy and Microanalysis</i> , <b>2016</b> , 22, 950-951	0.5
4	Performances of aberration-corrected monochromatic low-voltage analytical electron microscope <b>2016</b> , 338-339	



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| 3 | Improvement of TEM Spatial Resolution at Low Accelerating Voltages (15-30 kV) with Monochromator. <i>Microscopy and Microanalysis</i> , <b>2016</b> , 22, 982-983  | 0.5 |
| 2 | 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> , <b>2018</b> , 24, 1576-1577 | 0.5 |
| 1 | Measurement of Optical Excitations in Low-Dimensional Materials by Using a Monochromated Electron Source. <i>Microscopy and Microanalysis</i> , <b>2018</b> , 24, 1574-1575  | 0.5 |