

Zheng Liu

List of Publications by Citations

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466
papers

53,464
citations

110
h-index

223
g-index

506
ext. papers

61,821
ext. citations

13.1
avg, IF

7.72
L-index

#	Paper	IF	Citations
466	Ordered nanoporous arrays of carbon supporting high dispersions of platinum nanoparticles. <i>Nature</i> , 2001 , 412, 169-72	50.4	2251
465	Synthesis of New, Nanoporous Carbon with Hexagonally Ordered Mesosstructure. <i>Journal of the American Chemical Society</i> , 2000 , 122, 10712-10713	16.4	2131
464	Graphene quantum dots derived from carbon fibers. <i>Nano Letters</i> , 2012 , 12, 844-9	11.5	1779
463	Vertical and in-plane heterostructures from WS ₂ /MoS ₂ monolayers. <i>Nature Materials</i> , 2014 , 13, 1135-4227		1580
462	Sulfur-doped graphene as an efficient metal-free cathode catalyst for oxygen reduction. <i>ACS Nano</i> , 2012 , 6, 205-11	16.7	1580
461	Large-pore apertures in a series of metal-organic frameworks. <i>Science</i> , 2012 , 336, 1018-23	33.3	1425
460	Intrinsic structural defects in monolayer molybdenum disulfide. <i>Nano Letters</i> , 2013 , 13, 2615-22	11.5	1418
459	Large-area vapor-phase growth and characterization of MoS(2) atomic layers on a SiO(2) substrate. <i>Small</i> , 2012 , 8, 966-71	11	1394
458	Vapour phase growth and grain boundary structure of molybdenum disulphide atomic layers. <i>Nature Materials</i> , 2013 , 12, 754-9	27	1384
457	Direct laser writing of micro-supercapacitors on hydrated graphite oxide films. <i>Nature Nanotechnology</i> , 2011 , 6, 496-500	28.7	1161
456	A library of atomically thin metal chalcogenides. <i>Nature</i> , 2018 , 556, 355-359	50.4	812
455	In-plane heterostructures of graphene and hexagonal boron nitride with controlled domain sizes. <i>Nature Nanotechnology</i> , 2013 , 8, 119-24	28.7	687
454	Synthesis and characterization of chiral mesoporous silica. <i>Nature</i> , 2004 , 429, 281-4	50.4	682
453	One-pot synthesis of protein-embedded metal-organic frameworks with enhanced biological activities. <i>Nano Letters</i> , 2014 , 14, 5761-5	11.5	585
452	Chemical vapor deposition growth of crystalline monolayer MoSe ₂ . <i>ACS Nano</i> , 2014 , 8, 5125-31	16.7	566
451	Graphene oxide: structural analysis and application as a highly transparent support for electron microscopy. <i>ACS Nano</i> , 2009 , 3, 2547-56	16.7	559
450	Graphene-antenna sandwich photodetector. <i>Nano Letters</i> , 2012 , 12, 3808-13	11.5	540

449	Gated tunability and hybridization of localized plasmons in nanostructured graphene. <i>ACS Nano</i> , 2013 , 7, 2388-95	16.7	534
448	High phase-purity 1T'-MoS- and 1T'-MoSe-layered crystals. <i>Nature Chemistry</i> , 2018 , 10, 638-643	17.6	510
447	Flexible Sensing Electronics for Wearable/Attachable Health Monitoring. <i>Small</i> , 2017 , 13, 1602790	11	491
446	Active tunable absorption enhancement with graphene nanodisk arrays. <i>Nano Letters</i> , 2014 , 14, 299-304	11.5	477
445	Open and closed edges of graphene layers. <i>Physical Review Letters</i> , 2009 , 102, 015501	7.4	476
444	Tunable band gap photoluminescence from atomically thin transition-metal dichalcogenide alloys. <i>ACS Nano</i> , 2013 , 7, 4610-6	16.7	442
443	Fracture toughness of graphene. <i>Nature Communications</i> , 2014 , 5, 3782	17.4	433
442	Plasmonic hot electron induced structural phase transition in a MoS2 monolayer. <i>Advanced Materials</i> , 2014 , 26, 6467-71	24	429
441	New Porous Crystals of Extended Metal-Catecholates. <i>Chemistry of Materials</i> , 2012 , 24, 3511-3513	9.6	423
440	Ultrathin high-temperature oxidation-resistant coatings of hexagonal boron nitride. <i>Nature Communications</i> , 2013 , 4, 2541	17.4	418
439	Direct growth of graphene/hexagonal boron nitride stacked layers. <i>Nano Letters</i> , 2011 , 11, 2032-7	11.5	413
438	Two-Step Growth of Two-Dimensional WSe2/MoSe2 Heterostructures. <i>Nano Letters</i> , 2015 , 15, 6135-41	11.5	401
437	Direct laser-patterned micro-supercapacitors from paintable MoS2 films. <i>Small</i> , 2013 , 9, 2905-10	11	401
436	Superstructured Assembly of Nanocarbons: Fullerenes, Nanotubes, and Graphene. <i>Chemical Reviews</i> , 2015 , 115, 7046-117	68.1	381
435	Band gap engineering and layer-by-layer mapping of selenium-doped molybdenum disulfide. <i>Nano Letters</i> , 2014 , 14, 442-9	11.5	378
434	High-Electron-Mobility and Air-Stable 2D Layered PtSe FETs. <i>Advanced Materials</i> , 2017 , 29, 1604230	24	368
433	Room-temperature ferroelectricity in CuInP2S6 ultrathin flakes. <i>Nature Communications</i> , 2016 , 7, 12357	17.4	355
432	Strain and structure heterogeneity in MoS2 atomic layers grown by chemical vapour deposition. <i>Nature Communications</i> , 2014 , 5, 5246	17.4	352

- 431 Extraordinarily Strong Interlayer Interaction in 2D Layered PtS₂. *Advanced Materials*, **2016**, 28, 2399-407 24 322
- 430 Synthesis and photoresponse of large GaSe atomic layers. *Nano Letters*, **2013**, 13, 2777-81 11.5 319
- 429 PdSe: Pentagonal Two-Dimensional Layers with High Air Stability for Electronics. *Journal of the American Chemical Society*, **2017**, 139, 14090-14097 16.4 318
- 428 Plasmon-induced doping of graphene. *ACS Nano*, **2012**, 6, 10222-8 16.7 317
- 427 Large-area synthesis of monolayer and few-layer MoSe₂ films on SiO₂ substrates. *Nano Letters*, **2014**, 14, 2419-25 11.5 312
- 426 Building 3D structures of vanadium pentoxide nanosheets and application as electrodes in supercapacitors. *Nano Letters*, **2013**, 13, 5408-13 11.5 311
- 425 Weaving of organic threads into a crystalline covalent organic framework. *Science*, **2016**, 351, 365-9 33.3 307
- 424 An iron-based green approach to 1-h production of single-layer graphene oxide. *Nature Communications*, **2015**, 6, 5716 17.4 302
- 423 Ultrathin 2D Photocatalysts: Electronic-Structure Tailoring, Hybridization, and Applications. *Advanced Materials*, **2018**, 30, 1704548 24 298
- 422 Ultrahigh Thermal Conductive yet Superflexible Graphene Films. *Advanced Materials*, **2017**, 29, 1700589 24 289
- 421 Highly Sensitive Detection of Polarized Light Using Anisotropic 2D ReS₂. *Advanced Functional Materials*, **2016**, 26, 1169-1177 15.6 286
- 420 Facile synthesis and characterization of novel mesoporous and mesorelief oxides with gyroidal structures. *Journal of the American Chemical Society*, **2004**, 126, 865-75 16.4 283
- 419 Very High Surface Area Microporous Carbon with a Three-Dimensional Nano-Array Structure: Synthesis and Its Molecular Structure. *Chemistry of Materials*, **2001**, 13, 4413-4415 9.6 274
- 418 Atomically thin noble metal dichalcogenide: a broadband mid-infrared semiconductor. *Nature Communications*, **2018**, 9, 1545 17.4 267
- 417 Black Phosphorus Nanosheets: Synthesis, Characterization and Applications. *Small*, **2016**, 12, 3480-502 11 267
- 416 Two-dimensional heterostructures: fabrication, characterization, and application. *Nanoscale*, **2014**, 6, 12250-72 7.7 266
- 415 Template synthesis of asymmetrically mesostructured platinum networks. *Journal of the American Chemical Society*, **2001**, 123, 1246-7 16.4 257
- 414 Flexible Capacitive Tactile Sensor Based on Micropatterned Dielectric Layer. *Small*, **2016**, 12, 5042-5048 11 256

413	Growth of bilayer graphene on insulating substrates. <i>ACS Nano</i> , 2011 , 5, 8187-92	16.7	243
412	Bottom-up approach toward single-crystalline VO ₂ -graphene ribbons as cathodes for ultrafast lithium storage. <i>Nano Letters</i> , 2013 , 13, 1596-601	11.5	235
411	Graphene-network-backboned architectures for high-performance lithium storage. <i>Advanced Materials</i> , 2013 , 25, 3979-84	24	232
410	MoS ₂ /TiO ₂ Edge-On Heterostructure for Efficient Photocatalytic Hydrogen Evolution. <i>Advanced Energy Materials</i> , 2016 , 6, 1600464	21.8	226
409	Defect-Rich Bi O Cl Nanotubes Self-Accelerating Charge Separation for Boosting Photocatalytic CO Reduction. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 14847-14851	16.4	219
408	Boron- and Nitrogen-Substituted Graphene Nanoribbons as Efficient Catalysts for Oxygen Reduction Reaction. <i>Chemistry of Materials</i> , 2015 , 27, 1181-1186	9.6	202
407	High-quality monolayer superconductor NbSe grown by chemical vapour deposition. <i>Nature Communications</i> , 2017 , 8, 394	17.4	199
406	Binary and ternary atomic layers built from carbon, boron, and nitrogen. <i>Advanced Materials</i> , 2012 , 24, 4878-95	24	197
405	Two-dimensional non-volatile programmable p-n junctions. <i>Nature Nanotechnology</i> , 2017 , 12, 901-906	28.7	196
404	TEM Studies of Platinum Nanowires Fabricated in Mesoporous Silica MCM-41. <i>Angewandte Chemie - International Edition</i> , 2000 , 39, 3107-3110	16.4	190
403	Defect-Tailoring Mediated Electron-Hole Separation in Single-Unit-Cell Bi O Br Nanosheets for Boosting Photocatalytic Hydrogen Evolution and Nitrogen Fixation. <i>Advanced Materials</i> , 2019 , 31, e1807576	24	188
402	Synergistic Gating of Electro-Iono-Photoactive 2D Chalcogenide Neuristors: Coexistence of Hebbian and Homeostatic Synaptic Metaplasticity. <i>Advanced Materials</i> , 2018 , 30, e1800220	24	188
401	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, 13840-7	16.4	188
400	High-Yield Exfoliation of Ultrathin Two-Dimensional Ternary Chalcogenide Nanosheets for Highly Sensitive and Selective Fluorescence DNA Sensors. <i>Journal of the American Chemical Society</i> , 2015 , 137, 10430-6	16.4	187
399	Three-dimensional metal-graphene-nanotube multifunctional hybrid materials. <i>ACS Nano</i> , 2013 , 7, 58-64	16.7	185
398	Electrical performance of monolayer MoS ₂ field-effect transistors prepared by chemical vapor deposition. <i>Applied Physics Letters</i> , 2013 , 102, 193107	3.4	182
397	Complex zeolite structure solved by combining powder diffraction and electron microscopy. <i>Nature</i> , 2006 , 444, 79-81	50.4	182
396	High Mobility 2D Palladium Diselenide Field-Effect Transistors with Tunable Ambipolar Characteristics. <i>Advanced Materials</i> , 2017 , 29, 1602969	24	180

395	Isolated single atom cobalt in BiOBr atomic layers to trigger efficient CO photoreduction. <i>Nature Communications</i> , 2019 , 10, 2840	17.4	177
394	Controlled Synthesis of High-Quality Monolayered $\text{E}n\text{2Se3}$ via Physical Vapor Deposition. <i>Nano Letters</i> , 2015 , 15, 6400-5	11.5	169
393	Direct chemical conversion of graphene to boron- and nitrogen- and carbon-containing atomic layers. <i>Nature Communications</i> , 2014 , 5, 3193	17.4	169
392	Temperature-dependent phonon shifts in monolayer MoS2 . <i>Applied Physics Letters</i> , 2013 , 103, 093102	3.4	167
391	Visualization and quantification of transition metal atomic mixing in Mo1-xWxS2 single layers. <i>Nature Communications</i> , 2013 , 4, 1351	17.4	165
390	Thickness-dependent morphologies of gold on n-layer graphenes. <i>Journal of the American Chemical Society</i> , 2010 , 132, 944-6	16.4	159
389	A Catalytic Reaction Inside a Single-Walled Carbon Nanotube. <i>Advanced Materials</i> , 2008 , 20, 1443-1449	24	159
388	Using the plasmon linewidth to calculate the time and efficiency of electron transfer between gold nanorods and graphene. <i>ACS Nano</i> , 2013 , 7, 11209-17	16.7	158
387	High thermal conductivity of suspended few-layer hexagonal boron nitride sheets. <i>Nano Research</i> , 2014 , 7, 1232-1240	10	157
386	Superlong Single-Crystal Metal-Organic Framework Nanotubes. <i>Journal of the American Chemical Society</i> , 2018 , 140, 15393-15401	16.4	153
385	Lithiation-induced amorphization of Pd3P2S8 for highly efficient hydrogen evolution. <i>Nature Catalysis</i> , 2018 , 1, 460-468	36.5	153
384	Bandgap engineering of two-dimensional semiconductor materials. <i>Npj 2D Materials and Applications</i> , 2020 , 4,	8.8	152
383	Atomically-thin Bi2MoO6 nanosheets with vacancy pairs for improved photocatalytic CO2 reduction. <i>Nano Energy</i> , 2019 , 61, 54-59	17.1	150
382	Individual Water-Filled Single-Walled Carbon Nanotubes as Hydroelectric Power Converters. <i>Advanced Materials</i> , 2008 , 20, 1772-1776	24	148
381	Ultrathin two-dimensional materials for photo- and electrocatalytic hydrogen evolution. <i>Materials Today</i> , 2018 , 21, 749-770	21.8	147
380	Electrically switchable Berry curvature dipole in the monolayer topological insulator WTe2 . <i>Nature Physics</i> , 2018 , 14, 900-906	16.2	143
379	Freestanding atomically-thin two-dimensional materials beyond graphene meeting photocatalysis: Opportunities and challenges. <i>Nano Energy</i> , 2017 , 35, 79-91	17.1	142
378	Large-Area and High-Quality 2D Transition Metal Telluride. <i>Advanced Materials</i> , 2017 , 29, 1603471	24	140

377	Twisting bilayer graphene superlattices. <i>ACS Nano</i> , 2013 , 7, 2587-94	16.7	139
376	Visualizing and identifying single atoms using electron energy-loss spectroscopy with low accelerating voltage. <i>Nature Chemistry</i> , 2009 , 1, 415-8	17.6	138
375	Construction of a 2D Graphene-Like MoS ₂ /C ₃ N ₄ Heterojunction with Enhanced Visible-Light Photocatalytic Activity and Photoelectrochemical Activity. <i>Chemistry - A European Journal</i> , 2016 , 22, 4764-73	14.8	135
374	Single-Atom Iron Catalysts on Overhang-Eave Carbon Cages for High-Performance Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 7384-7389	16.4	134
373	Discovery of a new type of topological Weyl fermion semimetal state in MoWTe. <i>Nature Communications</i> , 2016 , 7, 13643	17.4	134
372	A Synthetic Route for Crystals of Woven Structures, Uniform Nanocrystals, and Thin Films of Imine Covalent Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2017 , 139, 13166-13172	16.4	131
371	Growth and Optical Properties of High-Quality Monolayer WS ₂ on Graphite. <i>ACS Nano</i> , 2015 , 9, 4056-63	16.7	129
370	An HREM study of channel structures in mesoporous silica SBA-15 and platinum wires produced in the channels. <i>ChemPhysChem</i> , 2001 , 2, 229-31	3.2	125
369	Fast Photoresponse from 1T Tin Diselenide Atomic Layers. <i>Advanced Functional Materials</i> , 2016 , 26, 137-145	14.5	125
368	Tandem Nitrogen Functionalization of Porous Carbon: Toward Immobilizing Highly Active Palladium Nanoclusters for Dehydrogenation of Formic Acid. <i>ACS Catalysis</i> , 2017 , 7, 2720-2724	13.1	121
367	Porous Ionic Membrane Based Flexible Humidity Sensor and its Multifunctional Applications. <i>Advanced Science</i> , 2017 , 4, 1600404	13.6	120
366	Mesoscopic constructs of ordered and oriented metal-organic frameworks on plasmonic silver nanocrystals. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2199-202	16.4	120
365	Cobalt-Modulated Molybdenum-Dinitrogen Interaction in MoS for Catalyzing Ammonia Synthesis. <i>Journal of the American Chemical Society</i> , 2019 , 141, 19269-19275	16.4	119
364	Exfoliation at the liquid/air interface to assemble reduced graphene oxide ultrathin films for a flexible noncontact sensing device. <i>Advanced Materials</i> , 2015 , 27, 1370-5	24	119
363	Ultrasensitive 2D Bi O Se Phototransistors on Silicon Substrates. <i>Advanced Materials</i> , 2019 , 31, e1804945	24	119
362	3R MoS with Broken Inversion Symmetry: A Promising Ultrathin Nonlinear Optical Device. <i>Advanced Materials</i> , 2017 , 29, 1701486	24	118
361	Sulfur-Impregnated, Sandwich-Type, Hybrid Carbon Nanosheets with Hierarchical Porous Structure for High-Performance Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2014 , 4, 1301988	21.8	117
360	Imaging the atomic structure of activated carbon. <i>Journal of Physics Condensed Matter</i> , 2008 , 20, 362201	11.8	117

359	Characterization of chiral mesoporous materials by transmission electron microscopy. <i>Small</i> , 2005 , 1, 233-7	11	117
358	Bismuth vacancy mediated single unit cell Bi ₂ WO ₆ nanosheets for boosting photocatalytic oxygen evolution. <i>Applied Catalysis B: Environmental</i> , 2018 , 238, 119-125	21.8	116
357	Multilayer-Folded Graphene Ribbon Film with Ultrahigh Areal Capacitance and High Rate Performance for Compressible Supercapacitors. <i>Advanced Functional Materials</i> , 2018 , 28, 1800597	15.6	112
356	Direct observation of ultrafast plasmonic hot electron transfer in the strong coupling regime. <i>Light: Science and Applications</i> , 2019 , 8, 9	16.7	109
355	Tellurium-Assisted Low-Temperature Synthesis of MoS ₂ and WS ₂ Monolayers. <i>ACS Nano</i> , 2015 , 9, 11658-1667	16.7	107
354	A Single-Crystal Open-Capsule Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2019 , 141, 7906-7916	16.4	106
353	Stacking-Dependent Interlayer Coupling in Trilayer MoS ₂ with Broken Inversion Symmetry. <i>Nano Letters</i> , 2015 , 15, 8155-61	11.5	106
352	Fermi arc electronic structure and Chern numbers in the type-II Weyl semimetal candidate Mo _x W _{1-x} Te ₂ . <i>Physical Review B</i> , 2016 , 94,	3.3	106
351	Nonlinear photoresponse of type-II Weyl semimetals. <i>Nature Materials</i> , 2019 , 18, 476-481	27	104
350	Lyotropic Liquid Crystal of Polyacrylonitrile-Grafted Graphene Oxide and Its Assembled Continuous Strong Nacre-Mimetic Fibers. <i>Macromolecules</i> , 2013 , 46, 6931-6941	5.5	101
349	Boron nitride-graphene nanocapacitor and the origins of anomalous size-dependent increase of capacitance. <i>Nano Letters</i> , 2014 , 14, 1739-44	11.5	100
348	Chemical Vapor Deposition of High-Quality and Atomically Layered ReS ₂ . <i>Small</i> , 2015 , 11, 5423-9	11	99
347	Narrow bandgap oxide nanoparticles coupled with graphene for high performance mid-infrared photodetection. <i>Nature Communications</i> , 2018 , 9, 4299	17.4	98
346	Recent advances in ternary two-dimensional materials: synthesis, properties and applications. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 22855-22876	13	97
345	Electrical transport properties of polycrystalline monolayer molybdenum disulfide. <i>ACS Nano</i> , 2014 , 8, 7930-7	16.7	96
344	Highly Stretchable Graphene Fibers with Ultrafast Electrothermal Response for Low-Voltage Wearable Heaters. <i>Advanced Electronic Materials</i> , 2017 , 3, 1600425	6.4	94
343	Controlled Synthesis of Organic/Inorganic van der Waals Solid for Tunable Light-Matter Interactions. <i>Advanced Materials</i> , 2015 , 27, 7800-8	24	94
342	Architecting a Stable High-Energy Aqueous Al-Ion Battery. <i>Journal of the American Chemical Society</i> , 2020 , 142, 15295-15304	16.4	94

341	Versatile Electronic Skins for Motion Detection of Joints Enabled by Aligned Few-Walled Carbon Nanotubes in Flexible Polymer Composites. <i>Advanced Functional Materials</i> , 2017 , 27, 1606604	15.6	92
340	The first zeolite with three-dimensional intersecting straight-channel system of 12-membered rings. <i>Journal of the American Chemical Society</i> , 2001 , 123, 5370-1	16.4	92
339	Periodic Organic-Inorganic Halide Perovskite Microplatelet Arrays on Silicon Substrates for Room-Temperature Lasing. <i>Advanced Science</i> , 2016 , 3, 1600137	13.6	89
338	Tailoring MoS Exciton-Plasmon Interaction by Optical Spin-Orbit Coupling. <i>ACS Nano</i> , 2017 , 11, 1165-1171	16.7	88
337	Metal-Semiconductor Phase-Transition in WSe Te Monolayer. <i>Advanced Materials</i> , 2017 , 29, 1603991	24	88
336	Coaxially stacked coronene columns inside single-walled carbon nanotubes. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 4853-7	16.4	87
335	Hierarchical Sandwich-Like Structure of Ultrafine N-Rich Porous Carbon Nanospheres Grown on Graphene Sheets as Superior Lithium-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 10324-33	9.5	87
334	Monolayers of WxMo1-xS2 alloy heterostructure with in-plane composition variations. <i>Applied Physics Letters</i> , 2015 , 106, 063113	3.4	86
333	Novel Pd ₂ Se ₃ Two-Dimensional Phase Driven by Interlayer Fusion in Layered PdSe ₂ . <i>Physical Review Letters</i> , 2017 , 119, 016101	7.4	86
332	Self-gating in semiconductor electrocatalysis. <i>Nature Materials</i> , 2019 , 18, 1098-1104	27	84
331	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> , 2017 , 29, 1701909	24	81
330	Defect engineering in atomically-thin bismuth oxychloride towards photocatalytic oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 14144-14151	13	81
329	Spatial Charge Storage within Honeycomb-Carbon Frameworks for Ultrafast Supercapacitors with High Energy and Power Densities. <i>Advanced Energy Materials</i> , 2017 , 7, 1700668	21.8	80
328	Band engineering for novel two-dimensional atomic layers. <i>Small</i> , 2015 , 11, 1868-84	11	79
327	Bismuth Vacancy-Tuned Bismuth Oxybromide Ultrathin Nanosheets toward Photocatalytic CO Reduction. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 30786-30792	9.5	79
326	Humidity Sensors: Porous Ionic Membrane Based Flexible Humidity Sensor and its Multifunctional Applications (Adv. Sci. 5/2017). <i>Advanced Science</i> , 2017 , 4,	13.6	78
325	Improving Polysulfides Adsorption and Redox Kinetics by the Co N Nanoparticle/N-Doped Carbon Composites for Lithium-Sulfur Batteries. <i>Small</i> , 2019 , 15, e1901454	11	77
324	Auto-optimizing Hydrogen Evolution Catalytic Activity of ReS through Intrinsic Charge Engineering. <i>ACS Nano</i> , 2018 , 12, 4486-4493	16.7	77

323	Identification of active atomic defects in a monolayered tungsten disulphide nanoribbon. <i>Nature Communications</i> , 2011 , 2, 213	17.4	77
322	Three-dimensional low symmetry mesoporous silica structures templated from tetra-headgroup rigid bolaform quaternary ammonium surfactant. <i>Journal of the American Chemical Society</i> , 2005 , 127, 6780-7	16.4	77
321	Van der Waals p π Junction Based on an Organic-Inorganic Heterostructure. <i>Advanced Functional Materials</i> , 2015 , 25, 5865-5871	15.6	76
320	Synthesis of reduced graphene oxide-Fe ₃ O ₄ multifunctional freestanding membranes and their temperature dependent electronic transport properties. <i>Carbon</i> , 2012 , 50, 1338-1345	10.4	76
319	Interpenetrating interfaces for efficient perovskite solar cells with high operational stability and mechanical robustness. <i>Nature Communications</i> , 2021 , 12, 973	17.4	75
318	Origin of giant negative piezoelectricity in a layered van der Waals ferroelectric. <i>Science Advances</i> , 2019 , 5, eaav3780	14.3	74
317	Imaging the dynamic behaviour of individual retinal chromophores confined inside carbon nanotubes. <i>Nature Nanotechnology</i> , 2007 , 2, 422-5	28.7	74
316	A solid with a hierarchical tetramodal micro-meso-macro pore size distribution. <i>Nature Communications</i> , 2013 , 4, 2015	17.4	73
315	Racemic Helical Mesoporous Silica Formation by Achiral Anionic Surfactant. <i>Chemistry of Materials</i> , 2006 , 18, 241-243	9.6	73
314	Novel approaches to synthesize self-supported ultrathin carbon nanowire arrays templated by MCM-41. <i>Chemical Communications</i> , 2003 , 2726-7	5.8	72
313	Engineering grain boundaries at the 2D limit for the hydrogen evolution reaction. <i>Nature Communications</i> , 2020 , 11, 57	17.4	72
312	Van der Waals negative capacitance transistors. <i>Nature Communications</i> , 2019 , 10, 3037	17.4	71
311	Ultra-narrow WS ₂ nanoribbons encapsulated in carbon nanotubes. <i>Journal of Materials Chemistry</i> , 2011 , 21, 171-180		69
310	Brick-and-mortar-sandwiched porous carbon building constructed by metal-organic framework and graphene: Ultrafast charge/discharge rate up to 2 V s ⁻¹ for supercapacitors. <i>Nano Energy</i> , 2016 , 30, 84-92	17.1	69
309	Engineering covalently bonded 2D layered materials by self-intercalation. <i>Nature</i> , 2020 , 581, 171-177	50.4	68
308	Single-Nanoparticle Plasmonic Electro-optic Modulator Based on MoS Monolayers. <i>ACS Nano</i> , 2017 , 11, 9720-9727	16.7	68
307	Dynamics of carbon nanotube growth from fullerenes. <i>Nano Letters</i> , 2007 , 7, 2428-34	11.5	67
306	Atomic structure and dynamic behaviour of truly one-dimensional ionic chains inside carbon nanotubes. <i>Nature Materials</i> , 2014 , 13, 1050-4	27	66

305	Temperature Dependence of Anisotropic Thermal-Conductivity Tensor of Bulk Black Phosphorus. <i>Advanced Materials</i> , 2017 , 29, 1603297	24	65
304	Broadband Anisotropic Photoresponse of the "Hydrogen Atom" Version Type-II Weyl Semimetal Candidate TaIrTe. <i>ACS Nano</i> , 2018 , 12, 4055-4061	16.7	64
303	In-grown structure of NiFe mixed metal oxides and CNT hybrid catalysts for oxygen evolution reaction. <i>Chemical Communications</i> , 2016 , 52, 1439-42	5.8	64
302	Fabrication of a Spherical Superstructure of Carbon Nanorods. <i>Advanced Materials</i> , 2019 , 31, e1900440	24	63
301	Tunable electronics in large-area atomic layers of boron-nitrogen-carbon. <i>Nano Letters</i> , 2013 , 13, 3476-81	11.5	63
300	ZnO tetrapods designed as multiterminal Zn sensors to distinguish false responses and increase sensitivity. <i>Nano Letters</i> , 2008 , 8, 652-5	11.5	63
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