

# Pulickel M Ajayan

## List of Publications by Year in Descending Order

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

464  
papers

47,025  
citations

106  
h-index

210  
g-index

486  
ext. papers

55,045  
ext. citations

12.5  
avg, IF

7.62  
L-index

#	Paper	IF	Citations
464	Quantum Materials Manufacturing.. <i>Advanced Materials</i> , <b>2022</b> , e2109892	24	1
463	Direct Ink Writing: A 3D Printing Technology for Diverse Materials.. <i>Advanced Materials</i> , <b>2022</b> , e2108855	24	35
462	Generation of intense phase-stable femtosecond hard X-ray pulse pairs.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119, e2119616119	11.5	1
461	Liquid metal-tailored gluten network for protein-based e-skin.. <i>Nature Communications</i> , <b>2022</b> , 13, 1206	17.4	7
460	Oxygen Reduction Reaction with Manganese Oxide Nanospheres in Microbial Fuel Cells.. <i>ACS Omega</i> , <b>2022</b> , 7, 11777-11787	3.9	0
459	3D Printed Materials in Water Treatment Applications. <i>Advanced Sustainable Systems</i> , <b>2022</b> , 6, 2100282	5.9	3
458	Photo Rechargeable Li-Ion Batteries Using Nanorod Heterostructure Electrodes ( <i>Small</i> 51/2021). <i>Small</i> , <b>2021</b> , 17, 2170270	11	
457	Friction of magnetene, a non-van der Waals 2D material. <i>Science Advances</i> , <b>2021</b> , 7, eabk2041	14.3	4
456	Photo Rechargeable Li-Ion Batteries Using Nanorod Heterostructure Electrodes. <i>Small</i> , <b>2021</b> , e2105029	11	4
455	Edge-Mediated Annihilation of Vacancy Clusters in Monolayer Molybdenum Diselenide (MoSe) under Electron Beam Irradiation. <i>Small</i> , <b>2021</b> , e2105194	11	0
454	Graphene Confers Ultralow Friction on Nanogear Cogs. <i>Small</i> , <b>2021</b> , 17, e2104487	11	1
453	3D-printed silica with nanoscale resolution. <i>Nature Materials</i> , <b>2021</b> , 20, 1506-1511	27	19
452	Gas-Phase Fluorination of Hexagonal Boron Nitride. <i>Advanced Materials</i> , <b>2021</b> , e2106084	24	2
451	Corrosion Resistance of Sulfur-Selenium Alloy Coatings. <i>Advanced Materials</i> , <b>2021</b> , e2104467	24	3
450	Amine-Functionalized Carbon Nanodot Electrocatalysts Converting Carbon Dioxide to Methane. <i>Advanced Materials</i> , <b>2021</b> , e2105690	24	11
449	Atomic Layers of Graphene for Microbial Corrosion Prevention. <i>ACS Nano</i> , <b>2021</b> , 15, 447-454	16.7	7
448	Transformation of One-Dimensional Linear Polymers into Two-Dimensional Covalent Organic Frameworks Through Sequential Reversible and Irreversible Chemistries. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 413-419	9.6	7

447	Determining Quasiparticle Bandgap of Two-Dimensional Transition Metal Dichalcogenides by Observation of Hot Carrier Relaxation Dynamics. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 585-591	6.4	1
446	Thermodynamics of order and randomness in dopant distributions inferred from atomically resolved imaging. <i>Npj Computational Materials</i> , <b>2021</b> , 7,	10.9	1
445	Deformation resilient cement structures using 3D-printed molds. <i>IScience</i> , <b>2021</b> , 24, 102174	6.1	2
444	Investigating phase transitions from local crystallographic analysis based on statistical learning of atomic environments in 2D MoS <sub>2</sub> -ReS <sub>2</sub> . <i>Applied Physics Reviews</i> , <b>2021</b> , 8, 011409	17.3	1
443	Rapid, Ambient Temperature Synthesis of Imine Covalent Organic Frameworks Catalyzed by Transition-Metal Nitrates. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 3394-3400	9.6	7
442	Mapping Modified Electronic Levels in the Moiré Patterns in MoS/WSe Using Low-Loss EELS. <i>Nano Letters</i> , <b>2021</b> , 21, 4071-4077	11.5	4
441	Pure Crystalline Covalent Organic Framework Aerogels. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 4216-4224	9.6	17
440	HCl-Based Hydrothermal Etching Strategy toward Fluoride-Free MXenes. <i>Advanced Materials</i> , <b>2021</b> , 33, e2101015	24	22
439	Covalent Organic Frameworks for Batteries. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2100505	15.6	35
438	Oxygenation of Diamond Surfaces via Hummer's Method. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 4977-4987	9.6	1
437	Achieving High-Quality Freshwater from a Self-Sustainable Integrated Solar Redox-Flow Desalination Device. <i>Small</i> , <b>2021</b> , 17, e2100490	11	9
436	Interferometric 4D-STEM for Lattice Distortion and Interlayer Spacing Measurements of Bilayer and Trilayer 2D Materials. <i>Small</i> , <b>2021</b> , 17, e2100388	11	3
435	Metal Oxide Catalysts for the Synthesis of Covalent Organic Frameworks and One-Step Preparation of Covalent Organic Framework-Based Composites. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 6158-6165	9.6	6
434	Damage-tolerant 3D-printed ceramics via conformal coating. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	5
433	Super-elasticity at 4 K of covalently crosslinked polyimide aerogels with negative Poisson's ratio. <i>Nature Communications</i> , <b>2021</b> , 12, 4092	17.4	10
432	Materials science perspective of multifunctional materials derived from collagen. <i>International Materials Reviews</i> , <b>2021</b> , 66, 160-187	16.1	7
431	3D-Bioprinted Inflammation Modulating Polymer Scaffolds for Soft Tissue Repair. <i>Advanced Materials</i> , <b>2021</b> , 33, e2003778	24	6
430	Free-standing SnS/carbonized cellulose film as durable anode for lithium-ion batteries. <i>Carbohydrate Polymers</i> , <b>2021</b> , 255, 117400	10.3	13

429	Strong coupling and pressure engineering in WSe <sub>2</sub> /MoSe <sub>2</sub> heterobilayers. <i>Nature Physics</i> , <b>2021</b> , 17, 92-98	6.2	56
428	Carrier-specific dynamics in 2H-MoTe observed by femtosecond soft x-ray absorption spectroscopy using an x-ray free-electron laser. <i>Structural Dynamics</i> , <b>2021</b> , 8, 014501	3.2	5
427	Light-Assisted Rechargeable Lithium Batteries: Organic Molecules for Simultaneous Energy Harvesting and Storage. <i>Nano Letters</i> , <b>2021</b> , 21, 907-913	11.5	18
426	Fiber-reinforced monolithic supercapacitors with interdigitated interfaces. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 11033-11041	13	1
425	Zn <sup>2+</sup> -Intercalated V <sub>2</sub> O <sub>5</sub> ·nH <sub>2</sub> O derived from V <sub>2</sub> CTx MXene for hyper-stable zinc-ion storage. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 17994-18005	13	10
424	Substitution of copper atoms into defect-rich molybdenum sulfides and their electrocatalytic activity. <i>Nanoscale Advances</i> , <b>2021</b> , 3, 1747-1757	5.1	2
423	Structural Defects Modulate Electronic and Nanomechanical Properties of 2D Materials. <i>ACS Nano</i> , <b>2021</b> , 15, 2520-2531	16.7	15
422	Manganese buffer induced high-performance disordered MnVO cathodes in zinc batteries. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 3954-3964	35.4	21
421	Highly efficient photoelectric effect in halide perovskites for regenerative electron sources. <i>Nature Communications</i> , <b>2021</b> , 12, 673	17.4	9
420	Mxene Synthesis: HCl-Based Hydrothermal Etching Strategy toward Fluoride-Free MXenes (Adv. Mater. 27/2021). <i>Advanced Materials</i> , <b>2021</b> , 33, 2170209	24	2
419	One-Dimensional Hollow Structures of 2O-PdS <sub>2</sub> Decorated Carbon for Water Electrolysis. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 8715-8720	6.1	1
418	Designing a sustainable fluorescent targeting probe for superselective nucleus imaging. <i>Carbon</i> , <b>2021</b> , 180, 48-55	10.4	11
417	Patterning, Transfer, and Tensile Testing of Covalent Organic Framework Films with Nanoscale Thickness. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 6724-6730	9.6	1
416	Apparent Ferromagnetism in Exfoliated Ultrathin Pyrite Sheets. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 18927-18935	3.8	8
415	Regulation of functional groups on graphene quantum dots directs selective CO to CH conversion. <i>Nature Communications</i> , <b>2021</b> , 12, 5265	17.4	16
414	Structure, Properties and Applications of Two-Dimensional Hexagonal Boron Nitride. <i>Advanced Materials</i> , <b>2021</b> , 33, e2101589	24	42
413	The modulating effect of N coordination on single-atom catalysts researched by Pt-N-C model through both experimental study and DFT simulation. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 91, 160-167	9.1	11
412	A reactive molecular dynamics study of the hydrogenation of diamond surfaces. <i>Computational Materials Science</i> , <b>2021</b> , 200, 110859	3.2	0

411	Magnetite-Functionalized Plumbagin for Therapeutic Applications. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 1361-1372	8.3	2
410	Seawater electrolysis for hydrogen production: a solution looking for a problem?. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 4831-4839	35.4	31
409	Nanosupercapacitors with fractal structures: searching designs to push the limit. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 17400-17414	13	1
408	Emerging Phases of Layered Metal Chalcogenides.. <i>Small</i> , <b>2021</b> , e2105215	11	1
407	Manipulation on active electronic states of metastable phase $\delta$ -NiMoO for large current density hydrogen evolution. <i>Nature Communications</i> , <b>2021</b> , 12, 5960	17.4	11
406	Multifunctional Bio-Nanocomposite Coatings for Perishable Fruits. <i>Advanced Materials</i> , <b>2020</b> , 32, e1908291	24	39
405	Improving the Catalytic Activity of Carbon-Supported Single Atom Catalysts by Polynary Metal or Heteroatom Doping. <i>Small</i> , <b>2020</b> , 16, e1906782	11	46
404	Synthetic Engineering of Morphology and Electronic Band Gap in Lateral Heterostructures of Monolayer Transition Metal Dichalcogenides. <i>ACS Nano</i> , <b>2020</b> , 14, 6323-6330	16.7	14
403	2D Electrets of Ultrathin MoO with Apparent Piezoelectricity. <i>Advanced Materials</i> , <b>2020</b> , 32, e2000006	24	22
402	Remote Lightening and Ultrafast Transition: Intrinsic Modulation of Exciton Spatiotemporal Dynamics in Monolayer MoS. <i>ACS Nano</i> , <b>2020</b> , 14, 6897-6905	16.7	8
401	Extraction of Two-Dimensional Aluminum Alloys from Decagonal Quasicrystals. <i>ACS Nano</i> , <b>2020</b> , 14, 7435-7443	16.7	11
400	Graphene-incorporated aluminum with enhanced thermal and mechanical properties for solar heat collectors. <i>AIP Advances</i> , <b>2020</b> , 10, 065016	1.5	7
399	Reactive 3D Printing of Shape-Programmable Liquid Crystal Elastomer Actuators. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 28692-28699	9.5	32
398	Exploring the Possibility of $\delta$ -Phase Arsenic-Phosphorus Polymorph Monolayer as Anode Materials for Sodium-Ion Batteries. <i>Advanced Theory and Simulations</i> , <b>2020</b> , 3, 2000023	3.5	8
397	Correlating the three-dimensional atomic defects and electronic properties of two-dimensional transition metal dichalcogenides. <i>Nature Materials</i> , <b>2020</b> , 19, 867-873	27	58
396	Self-assembly of 0D/2D homostructure for enhanced hydrogen evolution. <i>Materials Today</i> , <b>2020</b> , 36, 83-90	21.8	13
395	Strategies for Dendrite-Free Anode in Aqueous Rechargeable Zinc Ion Batteries. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001599	21.8	158
394	Bio-Nanocomposite Coatings: Multifunctional Bio-Nanocomposite Coatings for Perishable Fruits (Adv. Mater. 26/2020). <i>Advanced Materials</i> , <b>2020</b> , 32, 2070199	24	

393	Etching-Doping Sedimentation Equilibrium Strategy: Accelerating Kinetics on Hollow Rh-Doped CoFe-Layered Double Hydroxides for Water Splitting. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2003556	15.6	64
392	Bioderived Molecular Electrodes for Next-Generation Energy-Storage Materials. <i>ChemSusChem</i> , <b>2020</b> , 13, 2186-2204	8.3	16
391	2D Materials: Emerging Applications of Elemental 2D Materials (Adv. Mater. 7/2020). <i>Advanced Materials</i> , <b>2020</b> , 32, 2070052	24	3
390	A solvent-assisted ligand exchange approach enables metal-organic frameworks with diverse and complex architectures. <i>Nature Communications</i> , <b>2020</b> , 11, 927	17.4	44
389	FIB-Patterned Nano-Supercapacitors: Minimized Size with Ultrahigh Performances. <i>Advanced Materials</i> , <b>2020</b> , 32, e1908072	24	11
388	Spontaneous self-intercalation of copper atoms into transition metal dichalcogenides. <i>Science Advances</i> , <b>2020</b> , 6, eaay4092	14.3	24
387	Graphene Supported MoS Structures with High Defect Density for an Efficient HER Electrocatalysts. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 12629-12638	9.5	49
386	Influence of channel thickness on charge transport behavior of multi-layer indium selenide (InSe) field-effect transistors. <i>2D Materials</i> , <b>2020</b> , 7, 025030	5.9	4
385	Fatigue of graphene. <i>Nature Materials</i> , <b>2020</b> , 19, 405-411	27	59
384	Conversion of non-van der Waals solids to 2D transition-metal chalcogenides. <i>Nature</i> , <b>2020</b> , 577, 492-496	50.4	76
383	Localized Ostwald Ripening Guided Dissolution/Regrowth to Ancient Chinese Coin-shaped VO <sub>2</sub> Nanoplates with Enhanced Mass Transfer for Zinc Ion Storage. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2000472	15.6	42
382	A Low-Cost and High-Efficiency Integrated Device toward Solar-Driven Water Splitting. <i>ACS Nano</i> , <b>2020</b> , 14, 5426-5434	16.7	14
381	Three-Dimensional Extrusion Printing of Porous Scaffolds Using Storable Ceramic Inks. <i>Tissue Engineering - Part C: Methods</i> , <b>2020</b> , 26, 292-305	2.9	4
380	Dynamic mechanical analysis in materials science: The Novice's Tale <b>2020</b> , 1,		3
379	Additive manufacturing of polymer-based structures by extrusion technologies <b>2020</b> , 1,		9
378	Emerging Applications of Elemental 2D Materials. <i>Advanced Materials</i> , <b>2020</b> , 32, e1904302	24	159
377	Nanotechnology Research and Development in Upstream Oil and Gas. <i>Energy Technology</i> , <b>2020</b> , 8, 1901216	31.6	17
376	Facile synthesis of highly fluorescent free-standing films comprising graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) nanolayers. <i>New Journal of Chemistry</i> , <b>2020</b> , 44, 2644-2651	3.6	17

375	Nonlinear Dark-Field Imaging of One-Dimensional Defects in Monolayer Dichalcogenides. <i>Nano Letters</i> , <b>2020</b> , 20, 284-291	11.5	21
374	Atomic-Level Alloying of Sulfur and Selenium for Advanced Lithium Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 1005-1013	9.5	8
373	Full-color fluorescent carbon quantum dots. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	133
372	Scale-Enhanced Magnetism in Exfoliated Atomically Thin Magnetite Sheets. <i>Small</i> , <b>2020</b> , 16, e2004208	11	6
371	CoO Quantum Dots Anchored on Reduced Graphene Oxide Aerogels for Lithium-Ion Storage. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 10369-10379	5.6	5
370	Lateral Monolayer MoSe <sub>2</sub> -WSe <sub>2</sub> p-n Heterojunctions with Giant Built-In Potentials. <i>Small</i> , <b>2020</b> , 16, e2002263		29
369	Sustainable Synthesis of N-Doped Hollow Porous Carbon Spheres via a Spray-Drying Method for Lithium-Sulfur Storage with Ultralong Cycle Life. <i>Batteries and Supercaps</i> , <b>2020</b> , 3, 1201-1208	5.6	16
368	Immunogenicity of Externally Activated Nanoparticles for Cancer Therapy. <i>Cancers</i> , <b>2020</b> , 12,	6.6	2
367	Rational Design of Ni-Based Electrocatalysts by Modulation of Iron Ions and Carbon Nanotubes for Enhanced Oxygen Evolution Reaction. <i>Advanced Sustainable Systems</i> , <b>2020</b> , 4, 2000227	5.9	1
366	Nature-Inspired Purpurin Polymer for Li-Ion Batteries: Mechanistic Insights into Energy Storage via Solid-State NMR and Computational Studies. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 17939-17948	3.8	5
365	Hexagonal Boron Nitride for Sulfur Corrosion Inhibition. <i>ACS Nano</i> , <b>2020</b> , 14, 14809-14819	16.7	21
364	Multifunctional nanocoated membranes for high-rate electrothermal desalination of hypersaline waters. <i>Nature Nanotechnology</i> , <b>2020</b> , 15, 1025-1032	28.7	28
363	Simultaneous Observation of Carrier-Specific Redistribution and Coherent Lattice Dynamics in 2H-MoTe <sub>2</sub> with Femtosecond Core-Level Spectroscopy. <i>ACS Nano</i> , <b>2020</b> , 14, 15829-15840	16.7	15
362	Directly Exfoliated Ultrathin Silicon Nanosheets for Enhanced Photocatalytic Hydrogen Production. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 8668-8674	6.4	4
361	Spontaneous Emission of Plasmon-Exciton Polaritons Revealed by Ultrafast Nonradiative Decays. <i>Laser and Photonics Reviews</i> , <b>2020</b> , 14, 2000233	8.3	5
360	Bioderived Molecular Electrodes for Next-Generation Energy-Storage Materials. <i>ChemSusChem</i> , <b>2020</b> , 13, 2106	8.3	
359	Precursor-Transformation Strategy Preparation of CuP Nanodots-Decorated CoP Nanowires Hybrid Catalysts for Boosting pH-Universal Electrocatalytic Hydrogen Evolution. <i>Small</i> , <b>2019</b> , 15, e1904681	11	19
358	Structural, Optical and Thermal Behavior investigation of 2D Bi <sub>2</sub> Te <sub>3</sub> /Sb <sub>2</sub> Te <sub>3</sub> in-plane Heterostructures via Aberration Corrected STEM and EELS. <i>Microscopy and Microanalysis</i> , <b>2019</b> , 25, 2012-2013	9.5	1

357	Selective Selenium-Substituted Metallic MoTe <sub>2</sub> toward Ternary Atomic Layers with Tunable Semiconducting Character. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 24927-24933	3.8	7
356	Metal-Oxide-Mediated Subtractive Manufacturing of Two-Dimensional Carbon Nitride for High-Efficiency and High-Yield Photocatalytic H Evolution. <i>ACS Nano</i> , <b>2019</b> , 13, 11294-11302	16.7	66
355	Interfacial States and Fano-Feshbach Resonance in Graphene-Silicon Vertical Junction. <i>Nano Letters</i> , <b>2019</b> , 19, 6765-6771	11.5	2
354	Etching of transition metal dichalcogenide monolayers into nanoribbon arrays. <i>Nanoscale Horizons</i> , <b>2019</b> , 4, 689-696	10.8	7
353	Strain-Induced Structural Deformation Study of 2D Mo <sub>x</sub> W <sub>(1-x)</sub> S <sub>2</sub> . <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1801262	4.6	9
352	Nb <sub>2</sub> O <sub>5</sub> /reduced Graphene Oxide Nanocomposite Anode for High Power Hybrid Supercapacitor Applications. <i>ChemistrySelect</i> , <b>2019</b> , 4, 1098-1102	1.8	16
351	Doping Nanoscale Graphene Domains Improves Magnetism in Hexagonal Boron Nitride. <i>Advanced Materials</i> , <b>2019</b> , 31, e1805778	24	40
350	Revisiting the Role of Active Sites for Hydrogen Evolution Reaction through Precise Defect Adjusting. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1901290	15.6	37
349	Boxception: Impact Resistance Structure Using 3D Printing. <i>Advanced Engineering Materials</i> , <b>2019</b> , 21, 1900167	3.5	6
348	Electric Double Layer Field-Effect Transistors Using Two-Dimensional (2D) Layers of Copper Indium Selenide (CuIn <sub>7</sub> Se <sub>11</sub> ). <i>Electronics (Switzerland)</i> , <b>2019</b> , 8, 645	2.6	6
347	Water-Soluble Defect-Rich MoS Ultrathin Nanosheets for Enhanced Hydrogen Evolution. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 3282-3289	6.4	31
346	High-Lithium-Affinity Chemically Exfoliated 2D Covalent Organic Frameworks. <i>Advanced Materials</i> , <b>2019</b> , 31, e1901640	24	123
345	Atomically dispersed platinum supported on curved carbon supports for efficient electrocatalytic hydrogen evolution. <i>Nature Energy</i> , <b>2019</b> , 4, 512-518	62.3	419
344	Interface and defect engineering of hybrid nanostructures toward an efficient HER catalyst. <i>Nanoscale</i> , <b>2019</b> , 11, 12489-12496	7.7	18
343	Ultrafast Excitonic Behavior in Two-Dimensional Metal Semiconductor Heterostructure. <i>ACS Photonics</i> , <b>2019</b> , 6, 1379-1386	6.3	17
342	Fiber Reinforced Layered Dielectric Nanocomposite. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1900056	15.6	36
341	High-K dielectric sulfur-selenium alloys. <i>Science Advances</i> , <b>2019</b> , 5, eaau9785	14.3	8
340	Two-Dimensional Amorphous Cr <sub>2</sub> O <sub>3</sub> Modified Metallic Electrodes for Hydrogen Evolution Reaction. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2019</b> , 13, 1900025	2.5	11



339	Direct Ink Writing of Cement Structures Modified with Nanoscale Additive. <i>Advanced Engineering Materials</i> , <b>2019</b> , 21, 1801380	3.5	10
338	Low Contact Barrier in 2H/1T' MoTe In-Plane Heterostructure Synthesized by Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 12777-12785	9.5	38
337	Direct Cation Exchange in Monolayer MoS <sub>2</sub> via Recombination-Enhanced Migration. <i>Physical Review Letters</i> , <b>2019</b> , 122, 106101	7.4	16
336	Super-elasticity of three-dimensionally cross-linked graphene materials all the way to deep cryogenic temperatures. <i>Science Advances</i> , <b>2019</b> , 5, eaav2589	14.3	53
335	Deep eutectic solvents for cathode recycling of Li-ion batteries. <i>Nature Energy</i> , <b>2019</b> , 4, 339-345	62.3	199
334	Reflux pretreatment-mediated sonication: A new universal route to obtain 2D quantum dots. <i>Materials Today</i> , <b>2019</b> , 22, 17-24	21.8	7
333	Low Loss EELS of Lateral MoS <sub>2</sub> /WS <sub>2</sub> Heterostructures. <i>Microscopy and Microanalysis</i> , <b>2019</b> , 25, 640-641	0.5	1
332	Determining the 3D Atomic Coordinates and Crystal Defects in 2D Materials with Picometer Precision. <i>Microscopy and Microanalysis</i> , <b>2019</b> , 25, 404-405	0.5	
331	Li-Breathing Air Batteries Catalyzed by MnNiFe/Laser-Induced Graphene Catalysts. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1901035	4.6	15
330	Phonon-Suppressed Auger Scattering of Charge Carriers in Defective Two-Dimensional Transition Metal Dichalcogenides. <i>Nano Letters</i> , <b>2019</b> , 19, 6078-6086	11.5	27
329	Made From Henna! A Fast-Charging, High-Capacity, and Recyclable Tetrakislawsonone Cathode Material for Lithium Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 13836-13844	8.3	22
328	Sustainable Synthesis of Bright Green Fluorescent Nitrogen-Doped Carbon Quantum Dots from Alkali Lignin. <i>ChemSusChem</i> , <b>2019</b> , 12, 4202-4210	8.3	46
327	Strong Effect of B-Site Substitution on the Reactivity of Layered Perovskite Oxides Probed via Isopropanol Conversion <b>2019</b> , 1, 230-236		7
326	Sublimation-Vapor Phase Pseudomorphic Transformation of Template-Directed MOFs for Efficient Oxygen Evolution Reaction. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1903875	15.6	28
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308	Emerging Carbon-Based Heterogeneous Catalysts for Electrochemical Reduction of Carbon Dioxide into Value-Added Chemicals. <i>Advanced Materials</i> , <b>2019</b> , 31, e1804257	24	134
307	Tracking Structural Self-Reconstruction and Identifying True Active Sites toward Cobalt Oxychloride Precatalyst of Oxygen Evolution Reaction. <i>Advanced Materials</i> , <b>2019</b> , 31, e1805127	24	126
306	Polytypism in ultrathin tellurium. <i>2D Materials</i> , <b>2019</b> , 6, 015013	5.9	48
305	Oxidizing Vacancies in Nitrogen-Doped Carbon Enhance Air-Cathode Activity. <i>Advanced Materials</i> , <b>2019</b> , 31, e1803339	24	39
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172	Three-Dimensional Porous Sponges from Collagen Biowastes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 14836-44	9.5	23
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169	CoNi <sub>2</sub> S <sub>4</sub> -Graphene-2D-MoSe <sub>2</sub> as an Advanced Electrode Material for Supercapacitors. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600341	21.8	120
168	Defects Engineered Monolayer MoS <sub>2</sub> for Improved Hydrogen Evolution Reaction. <i>Nano Letters</i> , <b>2016</b> , 16, 1097-103	11.5	794
167	Strain Rate Dependent Shear Plasticity in Graphite Oxide. <i>Nano Letters</i> , <b>2016</b> , 16, 1127-31	11.5	32
166	Incorporation of Nitrogen Defects for Efficient Reduction of CO <sub>2</sub> via Two-Electron Pathway on Three-Dimensional Graphene Foam. <i>Nano Letters</i> , <b>2016</b> , 16, 466-70	11.5	351
165	Indentation Tests Reveal Geometry-Regulated Stiffening of Nanotube Junctions. <i>Nano Letters</i> , <b>2016</b> , 16, 232-6	11.5	12
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162	Surface functionalization of two-dimensional metal chalcogenides by Lewis acid-base chemistry. <i>Nature Nanotechnology</i> , <b>2016</b> , 11, 465-71	28.7	150
161	Controllable Codoping of Nitrogen and Sulfur in Graphene for Highly Efficient Li-Oxygen Batteries and Direct Methanol Fuel Cells. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 1737-1745	9.6	113
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157	Electrocatalysts: Mass and Charge Transfer Coenhanced Oxygen Evolution Behaviors in CoFe-Layered Double Hydroxide Assembled on Graphene (Adv. Mater. Interfaces 7/2016). <i>Advanced Materials Interfaces</i> , <b>2016</b> , 3,	4.6	3
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154	Exfoliated 2D Transition Metal Disulfides for Enhanced Electrocatalysis of Oxygen Evolution Reaction in Acidic Medium. <i>Advanced Materials Interfaces</i> , <b>2016</b> , 3, 1500669	4.6	104
153	Mass and Charge Transfer Coenhanced Oxygen Evolution Behaviors in CoFe-Layered Double Hydroxide Assembled on Graphene. <i>Advanced Materials Interfaces</i> , <b>2016</b> , 3, 1500782	4.6	113
152	Surface Tension Components Based Selection of Cosolvents for Efficient Liquid Phase Exfoliation of 2D Materials. <i>Small</i> , <b>2016</b> , 12, 2741-9	11	93
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150	Interphase Induced Dynamic Self-Stiffening in Graphene-Based Polydimethylsiloxane Nanocomposites. <i>Small</i> , <b>2016</b> , 12, 3723-31	11	28
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36	Novel Liquid Precursor-Based Facile Synthesis of Large-Area Continuous, Single, and Few-Layer Graphene Films. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 3457-3461	9.6	209
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