

# Vinayak P Dravid

## 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.

184 papers	6,406 citations	41 h-index	73 g-index
193 ext. papers	8,093 ext. citations	13.4 avg, IF	6.16 L-index

#	Paper	IF	Citations
184	The emergence of valency in colloidal crystals through electron equivalents.. <i>Nature Materials</i> , <b>2022</b> , ,	27	10
183	Thermoelectric Performance of the 2D BiSiTe Semiconductor.. <i>Journal of the American Chemical Society</i> , <b>2022</b> ,	16.4	7
182	Extraordinary role of Zn in enhancing thermoelectric performance of Ga-doped n-type PbTe. <i>Energy and Environmental Science</i> , <b>2022</b> , 15, 368-375	35.4	12
181	Highly sensitive and ultra-rapid antigen-based detection of SARS-CoV-2 using nanomechanical sensor platform. <i>Biosensors and Bioelectronics</i> , <b>2022</b> , 195, 113647	11.8	6
180	Synergistic defect- and interfacial-engineering of a Bi <sub>2</sub> S <sub>3</sub> -based nanoplate network for high-performance photoelectrochemical solar water splitting. <i>Journal of Materials Chemistry A</i> , <b>2022</b> , 10, 7830-7840	13	0
179	Resonance Couplings in Si@MoS Core-Shell Architectures.. <i>Small</i> , <b>2022</b> , e2200413	11	2
178	Ingrained: An Automated Framework for Fusing Atomic-Scale Image Simulations into Experiments.. <i>Small</i> , <b>2022</b> , e2102960	11	2
177	Perovskite-like KTiOF Exhibits (3 + 1)-Dimensional Commensurate Structure Induced by Octahedrally Coordinated Potassium Ions. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 18907-18916	16.4	0
176	Mechanistic Investigation of Molybdenum Disulfide Defect Photoluminescence Quenching by Adsorbed Metallophthalocyanines. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 17153-17161	16.4	2
175	Tuning of Optical Phonons in HfO <sub>2</sub> /VO <sub>2</sub> Multilayers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 48981-48987	9.5	4
174	Mixed Metal Thiophosphate FeCoPS: Role of Structural Evolution and Anisotropy. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 17268-17275	5.1	2
173	Quasi-Two-Dimensional Heterostructures (KMn <sub>1-x</sub> Te)(LaTe <sub>3</sub> ) (M = Mn and Zn) with Charge Density Waves. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 2155-2164	9.6	1
172	Fluoridation of HfO <sub>2</sub> . <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 4463-4474	5.1	3
171	Implications of doping on microstructure, processing, and thermoelectric performance: The case of PbSe. <i>Journal of Materials Research</i> , <b>2021</b> , 36, 1272-1284	2.5	3
170	A Bidirectional Nanomodification Approach for Synthesizing Hierarchically Architected Mixed Oxide Electrodes for Oxygen Evolution. <i>Small</i> , <b>2021</b> , 17, e2007287	11	1
169	Ultralow Thermal Conductivity in Diamondoid Structures and High Thermoelectric Performance in (CuAg)(InGa)Te. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 5978-5989	16.4	15
168	First-Principles Hydrothermal Synthesis Design to Optimize Conditions and Increase the Yield of Quaternary Heteroanionic Oxychalcogenides. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 2726-2741	9.6	1

167	Synthesis, Characterization, and Simulation of Four-Armed Megamolecules. <i>Biomacromolecules</i> , <b>2021</b> , 22, 2363-2372	6.9	1
166	Structural defects in transition metal dichalcogenide core-shell architectures. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 223103	3.4	4
165	Making the Most of your Electrons: Challenges and Opportunities in Characterizing Hybrid Interfaces with STEM.. <i>Materials Today</i> , <b>2021</b> , 50, 100-115	21.8	3
164	Shedding Light on the Stability and Structure-Property Relationships of Two-Dimensional Hybrid Lead Bromide Perovskites. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 5085-5107	9.6	9
163	Valley-selective optical Stark effect of exciton-polaritons in a monolayer semiconductor. <i>Nature Communications</i> , <b>2021</b> , 12, 4530	17.4	3
162	Synthetic Tuning of Domain Stoichiometry in Nanobody-Enzyme Megamolecules. <i>Bioconjugate Chemistry</i> , <b>2021</b> , 32, 143-152	6.3	2
161	Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 272-277	3.6	6
160	Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 268-273	16.4	11
159	Raspberry-like mesoporous Co-doped TiO <sub>2</sub> nanospheres for a high-performance formaldehyde gas sensor. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 6529-6537	13	8
158	Nanoscale chromatin imaging and analysis platform bridges 4D chromatin organization with molecular function. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	13
157	Mapping Grains, Boundaries, and Defects in 2D Covalent Organic Framework Thin Films.. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 1341-1352	9.6	8
156	Dissociation of GaSb in n-Type PbTe: off-Centered Gallium Atom and Weak Electron-Phonon Coupling Provide High Thermoelectric Performance. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 1842-1851	9.6	11
155	PS Reactive Flux Method for the Rapid Synthesis of Mono- and Bimetallic 2D Thiophosphates MM'PS. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 3502-3513	5.1	8
154	Revealing High-Temperature Reduction Dynamics of High-Entropy Alloy Nanoparticles Transmission Electron Microscopy. <i>Nano Letters</i> , <b>2021</b> , 21, 1742-1748	11.5	8
153	Degeneration Behavior of Cu Nanowires under Carbon Dioxide Environment: An / Study. <i>Nano Letters</i> , <b>2021</b> , 21, 6813-6819	11.5	2
152	High-Performance MoC Electrocatalyst for Hydrogen Evolution Reaction Enabled by Surface Sulfur Substitution. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 40705-40712	9.5	7
151	Hidden Complexity in the Chemistry of Ammonolysis-Derived [Mo <sub>2</sub> N <sub>2</sub> ] An Overlooked Oxynitride Hydride. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 6671-6684	9.6	2
150	Polycrystalline SnSe with a thermoelectric figure of merit greater than the single crystal. <i>Nature Materials</i> , <b>2021</b> , 20, 1378-1384	27	79

149	Spatial Mapping of Electrostatic Fields in 2D Heterostructures. <i>Nano Letters</i> , <b>2021</b> , 21, 7131-7137	11.5	1
148	Quantifying leakage fields at ionic grain boundaries using off-axis electron holography. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 214301	2.5	1
147	OHM Sponge: A Versatile, Efficient, and Ecofriendly Environmental Remediation Platform. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 10945-10954	3.9	8
146	Magnetic Control of Macroscale Nanoligand Density Regulates the Adhesion and Differentiation of Stem Cells. <i>Nano Letters</i> , <b>2020</b> , 20, 4188-4196	11.5	15
145	Frequency-Agile Low-Temperature Solution-Processed Alumina Dielectrics for Inorganic and Organic Electronics Enhanced by Fluoride Doping. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 12440-12452	16.4	14
144	Ultralow Thermal Conductivity and Thermoelectric Properties of Rb <sub>2</sub> Bi <sub>8</sub> Se <sub>13</sub> . <i>Chemistry of Materials</i> , <b>2020</b> , 32, 3561-3569	9.6	14
143	Efficient, stable silicon tandem cells enabled by anion-engineered wide-bandgap perovskites. <i>Science</i> , <b>2020</b> , 368, 155-160	33.3	240
142	Remote Manipulation of Slidable Nano-Ligand Switch Regulates the Adhesion and Regenerative Polarization of Macrophages. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2001446	15.6	20
141	Contrasting SnTe-NaSbTe and SnTe-NaBiTe Thermoelectric Alloys: High Performance Facilitated by Increased Cation Vacancies and Lattice Softening. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 12524-12535	16.4	21
140	Solid-Phase Synthesis of Megamolecules. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 4534-4538	16.4	3
139	Direct Visualization of Electric-Field-Induced Structural Dynamics in Monolayer Transition Metal Dichalcogenides. <i>ACS Nano</i> , <b>2020</b> , 14, 1569-1576	16.7	15
138	Single-Crystal Polycationic Polymers Obtained by Single-Crystal-to-Single-Crystal Photopolymerization. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 6180-6187	16.4	18
137	Thermoelectric transport enhancement of Te-rich bismuth antimony telluride (Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3+x</sub> ) through controlled porosity. <i>Journal of Materiomics</i> , <b>2020</b> , 6, 532-544	6.7	19
136	Chain-End Functionalized Polymers for the Controlled Synthesis of Sub-2 nm Particles. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 7350-7355	16.4	11
135	Understanding the thermally activated charge transport in NaPbmSbQm+2 (Q = S, Se, Te) thermoelectrics: weak dielectric screening leads to grain boundary dominated charge carrier scattering. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 1509-1518	35.4	40
134	Topology of transition metal dichalcogenides: the case of the core-shell architecture. <i>Nanoscale</i> , <b>2020</b> , 12, 23897-23919	7.7	8
133	CeO quantum dots with massive oxygen vacancies as efficient catalysts for the synthesis of dimethyl carbonate. <i>Chemical Communications</i> , <b>2020</b> , 56, 403-406	5.8	14
132	Discordant nature of Cd in PbSe: off-centering and core-shell nanoscale CdSe precipitates lead to high thermoelectric performance. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 200-211	35.4	36

131	[emailprotected]2@WS2 Core-Shell Architectures: Combining Vapor Phase and Solution-Based Approaches. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 2627-2633	3.8	4
130	Homopolymer self-assembly of poly(propylene sulfone) hydrogels via dynamic noncovalent sulfone-sulfone bonding. <i>Nature Communications</i> , <b>2020</b> , 11, 4896	17.4	10
129	Oxidation Studies of High-Entropy Alloy Nanoparticles. <i>ACS Nano</i> , <b>2020</b> , 14, 15131-15143	16.7	22
128	Oriented LiMnO Particle Fracture from Delithiation-Driven Surface Stress. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 49182-49191	9.5	7
127	Revealing nanoscale mineralization pathways of hydroxyapatite using in situ liquid cell transmission electron microscopy. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	24
126	Enhancing nanostructured nickel-rich lithium-ion battery cathodes via surface stabilization. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 063210	2.9	5
125	Magnetic Nanostructure-Loaded Bicontinuous Nanospheres Support Multicargo Intracellular Delivery and Oxidation-Responsive Morphological Transitions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 55584-55595	9.5	6
124	Lithography-free IR polarization converters via orthogonal in-plane phonons in $\text{HfMoO}_4$ flakes. <i>Nature Communications</i> , <b>2020</b> , 11, 5771	17.4	19
123	Ultrathin Silica-Coated Iron Oxide Nanoparticles: Size-Property Correlation. <i>ChemistrySelect</i> , <b>2020</b> , 5, 8929-8934	1.8	0
122	High Thermoelectric Performance in the New Cubic Semiconductor $\text{AgSnSbSe}$ by High-Entropy Engineering. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 15187-15198	16.4	40
121	Large-area optoelectronic-grade InSe thin films via controlled phase evolution. <i>Applied Physics Reviews</i> , <b>2020</b> , 7, 041402	17.3	3
120	Halide perovskite nanocrystal arrays: Multiplexed synthesis and size-dependent emission. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	25
119	Ultralow thermal conductivity in diamondoid lattices: high thermoelectric performance in chalcopyrite $\text{Cu}_{0.8+\text{y}}\text{Ag}_{0.2}\text{In}_{1-\text{y}}\text{Te}_2$ . <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 3693-3705	35.4	19
118	Large and Externally Positioned Ligand-Coated Nanopatches Facilitate the Adhesion-Dependent Regenerative Polarization of Host Macrophages. <i>Nano Letters</i> , <b>2020</b> , 20, 7272-7280	11.5	8
117	Independent Tuning of Nano-Ligand Frequency and Sequences Regulates the Adhesion and Differentiation of Stem Cells. <i>Advanced Materials</i> , <b>2020</b> , 32, e2004300	24	18
116	Exploring the Factors Affecting the Mechanical Properties of 2D Hybrid Organic-Inorganic Perovskites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 20440-20447	9.5	22
115	Biomimetic Magnetic Nanostructures: A Theranostic Platform Targeting Lipid Metabolism and Immune Response in Lymphoma. <i>ACS Nano</i> , <b>2019</b> , 13, 10301-10311	16.7	10
114	Shape regulation of high-index facet nanoparticles by dealloying. <i>Science</i> , <b>2019</b> , 365, 1159-1163	33.3	62

113	Unconventional Defects in a Quasi-One-Dimensional KMnBi. <i>Nano Letters</i> , <b>2019</b> , 19, 7476-7486	11.5	3
112	High Figure of Merit in Gallium-Doped Nanostructured n-Type PbTe-GeTe with Midgap States. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 16169-16177	16.4	44
111	Antiferromagnetic Semiconductor BaFMnTe with Unique Mn Ordering and Red Photoluminescence. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 17421-17430	16.4	5
110	MoS <sub>2</sub> -capped Cu <sub>x</sub> S nanocrystals: a new heterostructured geometry of transition metal dichalcogenides for broadband optoelectronics. <i>Materials Horizons</i> , <b>2019</b> , 6, 587-594	14.4	13
109	Sodium storage in hard carbon with curved graphene platelets as the basic structural units. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 3327-3335	13	76
108	Origin of Intrinsically Low Thermal Conductivity in Tl <sub>2</sub> Te Thermoelectric Material: Correlations between Lattice Dynamics and Thermal Transport. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 10905-10914	16.4	29
107	Particle analogs of electrons in colloidal crystals. <i>Science</i> , <b>2019</b> , 364, 1174-1178	33.3	62
106	Stimuli-Responsive DNA-Linked Nanoparticle Arrays as Programmable Surfaces. <i>Nano Letters</i> , <b>2019</b> , 19, 4535-4542	11.5	7
105	Magnetic Nanostructure-Coated Thermoresponsive Hydrogel Nanoconstruct As a Smart Multimodal Theranostic Platform. <i>ACS Biomaterials Science and Engineering</i> , <b>2019</b> , 5, 3049-3059	5.5	12
104	Ethylenediammonium-Based "Hollow" Pb/Sn Perovskites with Ideal Band Gap Yield Solar Cells with Higher Efficiency and Stability. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 8627-8637	16.4	67
103	Computational strategies for design and discovery of nanostructured thermoelectrics. <i>Npj Computational Materials</i> , <b>2019</b> , 5,	10.9	27
102	Spatial Mapping of Hot-Spots at Lateral Heterogeneities in Monolayer Transition Metal Dichalcogenides. <i>Advanced Materials</i> , <b>2019</b> , 31, e1808244	24	7
101	Quantifying Polymer Chain Orientation in Strong and Tough Nanofibers with Low Crystallinity: Toward Next Generation Nanostructured Superfibers. <i>ACS Nano</i> , <b>2019</b> , 13, 4893-4927	16.7	32
100	Interface and heterostructure design in polyelemental nanoparticles. <i>Science</i> , <b>2019</b> , 363, 959-964	33.3	116
99	Uniaxial Expansion of the 2D Ruddlesden-Popper Perovskite Family for Improved Environmental Stability. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 5518-5534	16.4	133
98	Probing Electrochemically Induced Structural Evolution and Oxygen Redox Reactions in Layered Lithium Iridate. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 4341-4352	9.6	20
97	Design Strategy for High-Performance Thermoelectric Materials: The Prediction of Electron-Doped KZrCuSe <sub>3</sub> . <i>Chemistry of Materials</i> , <b>2019</b> , 31, 3018-3024	9.6	11
96	Enhancement of Thermoelectric Performance for n-Type PbS through Synergy of Gap State and Fermi Level Pinning. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 6403-6412	16.4	48



95	Structural analysis of the initial lithiation of NiO thin film electrodes. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 8897-8905	3.6	4
94	Enhanced Density-of-States Effective Mass and Strained Endotaxial Nanostructures in Sb-Doped PbCdTe Thermoelectric Alloys. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 9197-9204	9.5	46
93	A Bismuth Metal-Organic Framework as a Contrast Agent for X-ray Computed Tomography.. <i>ACS Applied Bio Materials</i> , <b>2019</b> , 2, 1197-1203	4.1	40
92	Nonlinear Band Gap Tunability in Selenium/Tellurium Alloys and Its Utilization in Solar Cells. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2137-2143	20.1	15
91	Simultaneous Bottom-Up Interfacial and Bulk Defect Passivation in Highly Efficient Planar Perovskite Solar Cells using Nonconjugated Small-Molecule Electrolytes. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903239	24	59
90	Self-Passivation of 2D Ruddlesden-Popper Perovskite by Polytypic Surface PbI Encapsulation. <i>Nano Letters</i> , <b>2019</b> , 19, 6109-6117	11.5	24
89	Ultralow Thermal Conductivity and High-Temperature Thermoelectric Performance in n-Type K <sub>2.5</sub> Bi <sub>8.5</sub> Se <sub>14</sub> . <i>Chemistry of Materials</i> , <b>2019</b> , 31, 5943-5952	9.6	15
88	High Thermoelectric Performance in PbSe <sub>1-x</sub> Sb <sub>x</sub> Se <sub>2</sub> Alloys from Valence Band Convergence and Low Thermal Conductivity. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901377	21.8	42
87	Probing Strain-Induced Band Gap Modulation in 2D Hybrid Organic/Inorganic Perovskites. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 796-802	20.1	34
86	Mapping Hot Spots at Heterogeneities of Few-Layer TiC MXene Sheets. <i>ACS Nano</i> , <b>2019</b> , 13, 3301-3309	16.7	16
85	All-Scale Hierarchically Structured p-Type PbSe Alloys with High Thermoelectric Performance Enabled by Improved Band Degeneracy. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 4480-4486	16.4	62
84	(CuZn)InGeO (0 01): A Complex, Ordered, Anion-Deficient Fluorite with Unusual Site-Specific Cation Mixing. <i>Inorganic Chemistry</i> , <b>2019</b> , 58, 15610-15617	5.1	2
83	Colloidal Crystal "Alloys". <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 20443-20450	16.4	11
82	Phase engineering and optical properties of 2D MoSe <sub>2</sub> : Promise and pitfalls. <i>Materials Chemistry and Physics</i> , <b>2019</b> , 225, 219-226	4.4	6
81	Polymer Analog Memristive Synapse with Atomic-Scale Conductive Filament for Flexible Neuromorphic Computing System. <i>Nano Letters</i> , <b>2019</b> , 19, 839-849	11.5	84
80	Strain-Induced Metastable Phase Stabilization in GaO Thin Films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 5536-5543	9.5	25
79	Cu-Substituted NiF as a Cathode Material for Li-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 647-654	9.5	24
78	Unique [MnBi] Nanowires in KMnBi: A Quasi-One-Dimensional Antiferromagnetic Metal. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 4391-4400	16.4	14

77	Intrinsic Transport in 2D Heterostructures Mediated through h-BN Tunneling Contacts. <i>Nano Letters</i> , <b>2018</b> , 18, 2990-2998	11.5	30
76	Remote Control of Heterodimeric Magnetic Nanoswitch Regulates the Adhesion and Differentiation of Stem Cells. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 5909-5913	16.4	50
75	Optically Active 1D MoS Nanobelts. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 6799-6804	9.5	19
74	Micromachined Chip Scale Thermal Sensor for Thermal Imaging. <i>ACS Nano</i> , <b>2018</b> , 12, 1760-1767	16.7	11
73	High Thermoelectric Performance in SnTe/AgSbTe <sub>2</sub> Alloys from Lattice Softening, Giant Phonon/Vacancy Scattering, and Valence Band Convergence. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 705-712	20.1	90
72	Nitric Oxide-Delivering High-Density Lipoprotein-like Nanoparticles as a Biomimetic Nanotherapy for Vascular Diseases. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 6904-6916	9.5	28
71	Magnetic lipid nanocapsules (MLNCs): self-assembled lipid-based nanoconstruct for non-invasive theranostic applications. <i>Journal of Materials Chemistry B</i> , <b>2018</b> , 6, 1026-1034	7.3	11
70	Building superlattices from individual nanoparticles via template-confined DNA-mediated assembly. <i>Science</i> , <b>2018</b> , 359, 669-672	33.3	145
69	Large-Scale Fabrication of MoS <sub>2</sub> Ribbons and Their Light-Induced Electronic/Thermal Properties: Dichotomies in the Structural and Defect Engineering. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1704863	15.6	21
68	Pulsed Laser Deposition and Characterization of Heteroepitaxial LiMn <sub>2</sub> O <sub>4</sub> /La <sub>0.5</sub> Sr <sub>0.5</sub> CoO <sub>3</sub> Bilayer Thin Films as Model Lithium Ion Battery Cathodes. <i>ACS Applied Nano Materials</i> , <b>2018</b> , 1, 642-653	5.6	14
67	One-Pot Green Synthesis of Fe <sub>3</sub> O <sub>4</sub> /MoS <sub>2</sub> 0D/2D Nanocomposites and Their Application in Noninvasive Point-of-Care Glucose Diagnostics. <i>ACS Applied Nano Materials</i> , <b>2018</b> , 1, 1949-1958	5.6	27
66	DNA-Mediated Size-Selective Nanoparticle Assembly for Multiplexed Surface Encoding. <i>Nano Letters</i> , <b>2018</b> , 18, 2645-2649	11.5	27
65	Multistates and Polyamorphism in Phase-Change KSbSe. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 9261-9268	16.4	6
64	Exchange Coupling in Soft Magnetic Nanostructures and Its Direct Effect on Their Theranostic Properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 27233-27243	9.5	19
63	Revealing the Effects of Electrode Crystallographic Orientation on Battery Electrochemistry via the Anisotropic Lithiation and Sodiation of ReS. <i>ACS Nano</i> , <b>2018</b> , 12, 7875-7882	16.7	21
62	In Situ Observation of Resistive Switching in an Asymmetric Graphene Oxide Bilayer Structure. <i>ACS Nano</i> , <b>2018</b> , 12, 7335-7342	16.7	25
61	Soft phonon modes from off-center Ge atoms lead to ultralow thermal conductivity and superior thermoelectric performance in n-type PbSe <sub>1-x</sub> Te <sub>x</sub> . <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 3220-3230	35.4	75
60	Site-Specific Positioning and Patterning of MoS Monolayers: The Role of Au Seeding. <i>ACS Nano</i> , <b>2018</b> , 12, 8970-8976	16.7	33



59	Out-of-Plane Mechanical Properties of 2D Hybrid Organic-Inorganic Perovskites by Nanoindentation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 22167-22173	9.5	44
58	Nanoparticle@MoS <sub>2</sub> Core/Shell Architecture: Role of the Core Material. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 4675-4682	9.6	21
57	Thin Film RuO <sub>2</sub> Lithiation: Fast Lithium-Ion Diffusion along the Interface. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1805723	15.6	7
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