Vinayak P Dravid

List of Publications by Year in descending order

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ΜΙΝΙΑΥΑΚ Ρ. ΠΡΑΙΛΙΟ

#	Article	IF	CITATIONS
1	Highly sensitive and ultra-rapid antigen-based detection of SARS-CoV-2 using nanomechanical sensor platform. Biosensors and Bioelectronics, 2022, 195, 113647.	10.1	34
2	The emergence of valency in colloidal crystals through electron equivalents. Nature Materials, 2022, 21, 580-587.	27.5	37
3	Thermoelectric Performance of the 2D Bi ₂ Si ₂ Te ₆ Semiconductor. Journal of the American Chemical Society, 2022, 144, 1445-1454.	13.7	37
4	Combustion Synthesis and Polymer Doping of Metal Oxides for High-Performance Electronic Circuitry. Accounts of Chemical Research, 2022, 55, 429-441.	15.6	6
5	Extraordinary role of Zn in enhancing thermoelectric performance of Ga-doped n-type PbTe. Energy and Environmental Science, 2022, 15, 368-375.	30.8	107
6	Low Thermal Conductivity in Heteroanionic Materials with Layers of Homoleptic Polyhedra. Journal of the American Chemical Society, 2022, 144, 2569-2579.	13.7	13
7	Synergistic defect- and interfacial-engineering of a Bi ₂ S ₃ -based nanoplate network for high-performance photoelectrochemical solar water splitting. Journal of Materials Chemistry A, 2022, 10, 7830-7840.	10.3	13
8	Resonance Couplings in Si@MoS ₂ Core–Shell Architectures. Small, 2022, 18, e2200413.	10.0	8
9	Ingrained: An Automated Framework for Fusing Atomic cale Image Simulations into Experiments. Small, 2022, 18, e2102960.	10.0	12
10	Valence Disproportionation of GeS in the PbS Matrix Forms Pb ₅ Ge ₅ S ₁₂ Inclusions with Conduction Band Alignment Leading to High n-Type Thermoelectric Performance. Journal of the American Chemical Society, 2022, 144, 7402-7413.	13.7	24
11	High Thermoelectric Performance in Chalcopyrite Cu _{1–<i>x</i>} Ag _{<i>x</i>} GaTe ₂ –ZnTe: Nontrivial Band Structure and Dynamic Doping Effect. Journal of the American Chemical Society, 2022, 144, 9113-9125.	13.7	29
12	Effects of the Encapsulation Membrane in Operando Scanning Transmission Electron Microscopy. Nano Letters, 2022, 22, 4137-4144.	9.1	8
13	Direct Patterning of Optoelectronic Nanostructures Using Encapsulated Layered Transition Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2022, 14, 23775-23784.	8.0	8
14	Polymer-Mediated Particle Coarsening within Hollow Silica Shell Nanoreactors. Chemistry of Materials, 2022, 34, 5094-5102.	6.7	2
15	Stability, metallicity, and magnetism in niobium silicide nanofilms. Physical Review Materials, 2022, 6, .	2.4	1
16	Synthetic Tuning of Domain Stoichiometry in Nanobody–Enzyme Megamolecules. Bioconjugate Chemistry, 2021, 32, 143-152.	3.6	6
17	Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. Angewandte Chemie, 2021, 133, 272-277.	2.0	7
18	Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. Angewandte Chemie - International Edition, 2021, 60, 268-273.	13.8	28

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19	Raspberry-like mesoporous Co-doped TiO ₂ nanospheres for a high-performance formaldehyde gas sensor. Journal of Materials Chemistry A, 2021, 9, 6529-6537.	10.3	33
20	Nanoscale chromatin imaging and analysis platform bridges 4D chromatin organization with molecular function. Science Advances, 2021, 7, .	10.3	37
21	Mapping Grains, Boundaries, and Defects in 2D Covalent Organic Framework Thin Films. Chemistry of Materials, 2021, 33, 1341-1352.	6.7	25
22	Dissociation of GaSb in n-Type PbTe: off-Centered Gallium Atom and Weak Electron–Phonon Coupling Provide High Thermoelectric Performance. Chemistry of Materials, 2021, 33, 1842-1851.	6.7	23
23	P ₂ S ₅ Reactive Flux Method for the Rapid Synthesis of Mono- and Bimetallic 2D Thiophosphates M _{2–<i>x</i>} M′ _{<i>x</i>} P ₂ S ₆ . Inorganic Chemistry, 2021, 60, 3502-3513.	4.0	18
24	Revealing High-Temperature Reduction Dynamics of High-Entropy Alloy Nanoparticles <i>via In Situ</i> Transmission Electron Microscopy. Nano Letters, 2021, 21, 1742-1748.	9.1	26
25	Quasi-Two-Dimensional Heterostructures (K <i>M</i> _{1–Â<i>x</i>} Te)(LaTe ₃) (<i>M</i> = Mn and Zn) with Charge Density Waves. Chemistry of Materials, 2021, 33, 2155-2164.	6.7	2
26	Fluoridation of HfO2. Inorganic Chemistry, 2021, 60, 4463-4474.	4.0	7
27	Implications of doping on microstructure, processing, and thermoelectric performance: The case of PbSe. Journal of Materials Research, 2021, 36, 1272-1284.	2.6	8
28	A Bidirectional Nanomodification Approach for Synthesizing Hierarchically Architected Mixed Oxide Electrodes for Oxygen Evolution. Small, 2021, 17, e2007287.	10.0	3
29	Ultralow Thermal Conductivity in Diamondoid Structures and High Thermoelectric Performance in (Cu _{1–<i>x</i>} Ag _{<i>x</i>})(ln _{1–<i>y</i>} Ga _{<i>y</i>})Te< Journal of the American Chemical Society, 2021, 143, 5978-5989.	sub1827 <td>ıb>49</td>	ıb>49
30	First-Principles Hydrothermal Synthesis Design to Optimize Conditions and Increase the Yield of Quaternary Heteroanionic Oxychalcogenides. Chemistry of Materials, 2021, 33, 2726-2741.	6.7	15
31	Synthesis, Characterization, and Simulation of Four-Armed Megamolecules. Biomacromolecules, 2021, 22, 2363-2372.	5.4	4
32	Structural defects in transition metal dichalcogenide core-shell architectures. Applied Physics Letters, 2021, 118, .	3.3	8
33	Making the most of your electrons: Challenges and opportunities in characterizing hybrid interfaces with STEM. Materials Today, 2021, 50, 100-115.	14.2	13
34	Shedding Light on the Stability and Structure–Property Relationships of Two-Dimensional Hybrid Lead Bromide Perovskites. Chemistry of Materials, 2021, 33, 5085-5107.	6.7	29
35	Valley-selective optical Stark effect of exciton-polaritons in a monolayer semiconductor. Nature Communications, 2021, 12, 4530.	12.8	22
36	Degeneration Behavior of Cu Nanowires under Carbon Dioxide Environment: An <i>In Situ</i> / <i>Operando</i> Study. Nano Letters, 2021, 21, 6813-6819.	9.1	18

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37	Galvanic Transformation Dynamics in Heterostructured Nanoparticles. Advanced Functional Materials, 2021, 31, 2105866.	14.9	7
38	High-Performance MoC Electrocatalyst for Hydrogen Evolution Reaction Enabled by Surface Sulfur Substitution. ACS Applied Materials & amp; Interfaces, 2021, 13, 40705-40712.	8.0	51
39	Hidden Complexity in the Chemistry of Ammonolysis-Derived "γ-Mo ₂ Nâ€ŧ An Overlooked Oxynitride Hydride. Chemistry of Materials, 2021, 33, 6671-6684.	6.7	8
40	Polycrystalline SnSe with a thermoelectric figure of merit greater than the single crystal. Nature Materials, 2021, 20, 1378-1384.	27.5	340
41	Spatial Mapping of Electrostatic Fields in 2D Heterostructures. Nano Letters, 2021, 21, 7131-7137.	9.1	2
42	Elucidating and Mitigating High-Voltage Interfacial Chemomechanical Degradation of Nickel-Rich Lithium-Ion Battery Cathodes via Conformal Graphene Coating. ACS Applied Energy Materials, 2021, 4, 11069-11079.	5.1	13
43	Mechanistic Investigation of Molybdenum Disulfide Defect Photoluminescence Quenching by Adsorbed Metallophthalocyanines. Journal of the American Chemical Society, 2021, 143, 17153-17161.	13.7	12
44	Tuning of Optical Phonons in α-MoO ₃ –VO ₂ Multilayers. ACS Applied Materials & Interfaces, 2021, 13, 48981-48987.	8.0	22
45	Mixed Metal Thiophosphate Fe _{2–<i>x</i>} Co _{<i>x</i>} P ₂ S ₆ : Role of Structural Evolution and Anisotropy. Inorganic Chemistry, 2021, 60, 17268-17275.	4.0	8
46	Perovskite-like K ₃ TiOF ₅ Exhibits (3 + 1)-Dimensional Commensurate Structure Induced by Octahedrally Coordinated Potassium Ions. Journal of the American Chemical Society, 2021, 143, 18907-18916.	13.7	4
47	CeO _{2â^'x} quantum dots with massive oxygen vacancies as efficient catalysts for the synthesis of dimethyl carbonate. Chemical Communications, 2020, 56, 403-406.	4.1	28
48	Discordant nature of Cd in PbSe: off-centering and core–shell nanoscale CdSe precipitates lead to high thermoelectric performance. Energy and Environmental Science, 2020, 13, 200-211.	30.8	57
49	Au@MoS ₂ @WS ₂ Core–Shell Architectures: Combining Vapor Phase and Solution-Based Approaches. Journal of Physical Chemistry C, 2020, 124, 2627-2633.	3.1	7
50	Homopolymer self-assembly of poly(propylene sulfone) hydrogels via dynamic noncovalent sulfone–sulfone bonding. Nature Communications, 2020, 11, 4896.	12.8	21
51	<i>In Situ</i> Oxidation Studies of High-Entropy Alloy Nanoparticles. ACS Nano, 2020, 14, 15131-15143.	14.6	71
52	Oriented LiMn ₂ O ₄ Particle Fracture from Delithiation-Driven Surface Stress. ACS Applied Materials & Interfaces, 2020, 12, 49182-49191.	8.0	20
53	Revealing nanoscale mineralization pathways of hydroxyapatite using in situ liquid cell transmission electron microscopy. Science Advances, 2020, 6, .	10.3	61
54	Enhancing nanostructured nickel-rich lithium-ion battery cathodes via surface stabilization. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, 063210.	2.1	8

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55	Magnetic Nanostructure-Loaded Bicontinuous Nanospheres Support Multicargo Intracellular Delivery and Oxidation-Responsive Morphological Transitions. ACS Applied Materials & Interfaces, 2020, 12, 55584-55595.	8.0	15
56	Lithography-free IR polarization converters via orthogonal in-plane phonons in α-MoO3 flakes. Nature Communications, 2020, 11, 5771.	12.8	54
57	Ultrathin Silica oated Iron Oxide Nanoparticles: Sizeâ€Property Correlation. ChemistrySelect, 2020, 5, 8929-8934.	1.5	1
58	High Thermoelectric Performance in the New Cubic Semiconductor AgSnSbSe ₃ by High-Entropy Engineering. Journal of the American Chemical Society, 2020, 142, 15187-15198.	13.7	108
59	Large-area optoelectronic-grade InSe thin films via controlled phase evolution. Applied Physics Reviews, 2020, 7, .	11.3	17
60	Halide perovskite nanocrystal arrays: Multiplexed synthesis and size-dependent emission. Science Advances, 2020, 6, .	10.3	51
61	Ultralow thermal conductivity in diamondoid lattices: high thermoelectric performance in chalcopyrite Cu _{0.8+y} Ag _{0.2} In _{1â^'y} Te ₂ . Energy and Environmental Science, 2020, 13, 3693-3705.	30.8	52
62	Large and Externally Positioned Ligand-Coated Nanopatches Facilitate the Adhesion-Dependent Regenerative Polarization of Host Macrophages. Nano Letters, 2020, 20, 7272-7280.	9.1	21
63	Independent Tuning of Nanoâ€Ligand Frequency and Sequences Regulates the Adhesion and Differentiation of Stem Cells. Advanced Materials, 2020, 32, 2004300.	21.0	30
64	Quantifying leakage fields at ionic grain boundaries using off-axis electron holography. Journal of Applied Physics, 2020, 128, .	2.5	2
65	OHM Sponge: A Versatile, Efficient, and Ecofriendly Environmental Remediation Platform. Industrial & Engineering Chemistry Research, 2020, 59, 10945-10954.	3.7	18
66	<i>In Situ</i> Magnetic Control of Macroscale Nanoligand Density Regulates the Adhesion and Differentiation of Stem Cells. Nano Letters, 2020, 20, 4188-4196.	9.1	32
67	Frequency-Agile Low-Temperature Solution-Processed Alumina Dielectrics for Inorganic and Organic Electronics Enhanced by Fluoride Doping. Journal of the American Chemical Society, 2020, 142, 12440-12452.	13.7	27
68	Ultralow Thermal Conductivity and Thermoelectric Properties of Rb2Bi8Se13. Chemistry of Materials, 2020, 32, 3561-3569.	6.7	23
69	Efficient, stable silicon tandem cells enabled by anion-engineered wide-bandgap perovskites. Science, 2020, 368, 155-160.	12.6	420
70	Remote Manipulation of Slidable Nanoâ€Ligand Switch Regulates the Adhesion and Regenerative Polarization of Macrophages. Advanced Functional Materials, 2020, 30, 2001446.	14.9	27
71	Contrasting SnTe–NaSbTe ₂ and SnTe–NaBiTe ₂ Thermoelectric Alloys: High Performance Facilitated by Increased Cation Vacancies and Lattice Softening. Journal of the American Chemical Society, 2020, 142, 12524-12535.	13.7	51
72	Solid-Phase Synthesis of Megamolecules. Journal of the American Chemical Society, 2020, 142, 4534-4538.	13.7	9

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73	Direct Visualization of Electric-Field-Induced Structural Dynamics in Monolayer Transition Metal Dichalcogenides. ACS Nano, 2020, 14, 1569-1576.	14.6	23
74	Single-Crystal Polycationic Polymers Obtained by Single-Crystal-to-Single-Crystal Photopolymerization. Journal of the American Chemical Society, 2020, 142, 6180-6187.	13.7	50
75	Thermoelectric transport enhancement of Te-rich bismuth antimony telluride (Bi0.5Sb1.5Te3+x) through controlled porosity. Journal of Materiomics, 2020, 6, 532-544.	5.7	36
76	Chain-End Functionalized Polymers for the Controlled Synthesis of Sub-2 nm Particles. Journal of the American Chemical Society, 2020, 142, 7350-7355.	13.7	17
77	Understanding the thermally activated charge transport in NaPb _m SbQ _{m+2} (Q) Tj ETQ carrier scattering. Energy and Environmental Science, 2020, 13, 1509-1518.	q1 1 0.784 30.8	4314 rgBT /○ 63
78	Exploring the Factors Affecting the Mechanical Properties of 2D Hybrid Organic–Inorganic Perovskites. ACS Applied Materials & Interfaces, 2020, 12, 20440-20447.	8.0	47
79	Topology of transition metal dichalcogenides: the case of the core–shell architecture. Nanoscale, 2020, 12, 23897-23919.	5.6	14
80	Nonlinear Band Gap Tunability in Selenium–Tellurium Alloys and Its Utilization in Solar Cells. ACS Energy Letters, 2019, 4, 2137-2143.	17.4	49
81	Simultaneous Bottomâ€Up Interfacial and Bulk Defect Passivation in Highly Efficient Planar Perovskite Solar Cells using Nonconjugated Smallâ€Molecule Electrolytes. Advanced Materials, 2019, 31, e1903239.	21.0	89
82	Self-Passivation of 2D Ruddlesden–Popper Perovskite by Polytypic Surface Pbl2 Encapsulation. Nano Letters, 2019, 19, 6109-6117.	9.1	31
83	Ultralow Thermal Conductivity and High-Temperature Thermoelectric Performance in n-Type K _{2.5} Bi _{8.5} Se ₁₄ . Chemistry of Materials, 2019, 31, 5943-5952.	6.7	25
84	High Thermoelectric Performance in PbSe–NaSbSe ₂ Alloys from Valence Band Convergence and Low Thermal Conductivity. Advanced Energy Materials, 2019, 9, 1901377.	19.5	54
85	Biomimetic Magnetic Nanostructures: A Theranostic Platform Targeting Lipid Metabolism and Immune Response in Lymphoma. ACS Nano, 2019, 13, 10301-10311.	14.6	14
86	Shape regulation of high-index facet nanoparticles by dealloying. Science, 2019, 365, 1159-1163.	12.6	108
87	Unconventional Defects in a Quasi-One-Dimensional KMn ₆ Bi ₅ . Nano Letters, 2019, 19, 7476-7486.	9.1	6
88	High Figure of Merit in Gallium-Doped Nanostructured n-Type PbTe- <i>x</i> GeTe with Midgap States. Journal of the American Chemical Society, 2019, 141, 16169-16177.	13.7	76
89	Antiferromagnetic Semiconductor BaFMn _{0.5} Te with Unique Mn Ordering and Red Photoluminescence. Journal of the American Chemical Society, 2019, 141, 17421-17430.	13.7	10
90	MoS2-capped CuxS nanocrystals: a new heterostructured geometry of transition metal dichalcogenides for broadband optoelectronics. Materials Horizons, 2019, 6, 587-594.	12.2	18

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91	Sodium storage in hard carbon with curved graphene platelets as the basic structural units. Journal of Materials Chemistry A, 2019, 7, 3327-3335.	10.3	113
92	Origin of Intrinsically Low Thermal Conductivity in Talnakhite Cu _{17.6} Fe _{17.6} S ₃₂ Thermoelectric Material: Correlations between Lattice Dynamics and Thermal Transport. Journal of the American Chemical Society, 2019, 141, 10905-10914.	13.7	50
93	Particle analogs of electrons in colloidal crystals. Science, 2019, 364, 1174-1178.	12.6	91
94	Stimuli-Responsive DNA-Linked Nanoparticle Arrays as Programmable Surfaces. Nano Letters, 2019, 19, 4535-4542.	9.1	12
95	Magnetic Nanostructure-Coated Thermoresponsive Hydrogel Nanoconstruct As a Smart Multimodal Theranostic Platform. ACS Biomaterials Science and Engineering, 2019, 5, 3049-3059.	5.2	17
96	Ethylenediammonium-Based "Hollow―Pb/Sn Perovskites with Ideal Band Gap Yield Solar Cells with Higher Efficiency and Stability. Journal of the American Chemical Society, 2019, 141, 8627-8637.	13.7	93
97	Computational strategies for design and discovery of nanostructured thermoelectrics. Npj Computational Materials, 2019, 5, .	8.7	39
98	Spatial Mapping of Hotâ€Spots at Lateral Heterogeneities in Monolayer Transition Metal Dichalcogenides. Advanced Materials, 2019, 31, 1808244.	21.0	16
99	Quantifying Polymer Chain Orientation in Strong and Tough Nanofibers with Low Crystallinity: Toward Next Generation Nanostructured Superfibers. ACS Nano, 2019, 13, 4893-4927.	14.6	55
100	Interface and heterostructure design in polyelemental nanoparticles. Science, 2019, 363, 959-964.	12.6	171
101	Uniaxial Expansion of the 2D Ruddlesden–Popper Perovskite Family for Improved Environmental Stability. Journal of the American Chemical Society, 2019, 141, 5518-5534.	13.7	193
102	Probing Electrochemically Induced Structural Evolution and Oxygen Redox Reactions in Layered Lithium Iridate. Chemistry of Materials, 2019, 31, 4341-4352.	6.7	26
103	Design Strategy for High-Performance Thermoelectric Materials: The Prediction of Electron-Doped KZrCuSe ₃ . Chemistry of Materials, 2019, 31, 3018-3024.	6.7	23
104	Enhancement of Thermoelectric Performance for n-Type PbS through Synergy of Gap State and Fermi Level Pinning. Journal of the American Chemical Society, 2019, 141, 6403-6412.	13.7	67
105	Structural analysis of the initial lithiation of NiO thin film electrodes. Physical Chemistry Chemical Physics, 2019, 21, 8897-8905.	2.8	13
106	Enhanced Density-of-States Effective Mass and Strained Endotaxial Nanostructures in Sb-Doped Pb _{0.97} Cd _{0.03} Te Thermoelectric Alloys. ACS Applied Materials & Interfaces, 2019, 11, 9197-9204.	8.0	66
107	A Bismuth Metal–Organic Framework as a Contrast Agent for X-ray Computed Tomography. ACS Applied Bio Materials, 2019, 2, 1197-1203.	4.6	68
108	Probing Strain-Induced Band Gap Modulation in 2D Hybrid Organic–Inorganic Perovskites. ACS Energy Letters. 2019. 4. 796-802.	17.4	47

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109	Mapping Hot Spots at Heterogeneities of Few-Layer Ti ₃ C ₂ MXene Sheets. ACS Nano, 2019, 13, 3301-3309.	14.6	29
110	All-Scale Hierarchically Structured p-Type PbSe Alloys with High Thermoelectric Performance Enabled by Improved Band Degeneracy. Journal of the American Chemical Society, 2019, 141, 4480-4486.	13.7	87
111	(Cu _{<i>x</i>} Zn _{1–<i>x</i>}) _{0.456} In _{1.084} Ge _{0.46(O ≤i>x ≤): A Complex, Ordered, Anion-Deficient Fluorite with Unusual Site-Specific Cation Mixing. Inorganic Chemistry, 2019, 58, 15610-15617.}	>O _{3 4.0}	 2
112	Colloidal Crystal "Alloys― Journal of the American Chemical Society, 2019, 141, 20443-20450.	13.7	20
113	Phase engineering and optical properties of 2D MoSe2: Promise and pitfalls. Materials Chemistry and Physics, 2019, 225, 219-226.	4.0	13
114	Polymer Analog Memristive Synapse with Atomic-Scale Conductive Filament for Flexible Neuromorphic Computing System. Nano Letters, 2019, 19, 839-849.	9.1	139
115	Strain-Induced Metastable Phase Stabilization in Ga ₂ O ₃ Thin Films. ACS Applied Materials & Interfaces, 2019, 11, 5536-5543.	8.0	42
116	Cu-Substituted NiF ₂ as a Cathode Material for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 647-654.	8.0	36
117	Unique [Mn ₆ Bi ₅] ^{â^²} Nanowires in KMn ₆ Bi ₅ : A Quasi-One-Dimensional Antiferromagnetic Metal. Journal of the American Chemical Society, 2018, 140, 4391-4400.	13.7	26
118	Intrinsic Transport in 2D Heterostructures Mediated through h-BN Tunneling Contacts. Nano Letters, 2018, 18, 2990-2998.	9.1	39
119	Remote Control of Heterodimeric Magnetic Nanoswitch Regulates the Adhesion and Differentiation of Stem Cells. Journal of the American Chemical Society, 2018, 140, 5909-5913.	13.7	67
120	Optically Active 1D MoS ₂ Nanobelts. ACS Applied Materials & Interfaces, 2018, 10, 6799-6804.	8.0	23
121	Micromachined Chip Scale Thermal Sensor for Thermal Imaging. ACS Nano, 2018, 12, 1760-1767.	14.6	19
122	High Thermoelectric Performance in SnTe–AgSbTe ₂ Alloys from Lattice Softening, Giant Phonon–Vacancy Scattering, and Valence Band Convergence. ACS Energy Letters, 2018, 3, 705-712.	17.4	151
123	Nitric Oxide-Delivering High-Density Lipoprotein-like Nanoparticles as a Biomimetic Nanotherapy for Vascular Diseases. ACS Applied Materials & Interfaces, 2018, 10, 6904-6916.	8.0	42
124	Magnetic lipid nanocapsules (MLNCs): self-assembled lipid-based nanoconstruct for non-invasive theranostic applications. Journal of Materials Chemistry B, 2018, 6, 1026-1034.	5.8	20
125	Building superlattices from individual nanoparticles via template-confined DNA-mediated assembly. Science, 2018, 359, 669-672.	12.6	195
126	Largeâ€5cale Fabrication of MoS ₂ Ribbons and Their Lightâ€Induced Electronic/Thermal Properties: Dichotomies in the Structural and Defect Engineering. Advanced Functional Materials, 2018, 28, 1704863.	14.9	25

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127	Pulsed Laser Deposition and Characterization of Heteroepitaxial LiMn ₂ O ₄ /La _{0.5} Sr _{0.5} CoO ₃ Bilayer Thin Films as Model Lithium Ion Battery Cathodes. ACS Applied Nano Materials, 2018, 1, 642-653.	5.0	18
128	One-Pot Green Synthesis of Fe ₃ O ₄ /MoS ₂ 0D/2D Nanocomposites and Their Application in Noninvasive Point-of-Care Glucose Diagnostics. ACS Applied Nano Materials, 2018, 1, 1949-1958.	5.0	33
129	DNA-Mediated Size-Selective Nanoparticle Assembly for Multiplexed Surface Encoding. Nano Letters, 2018, 18, 2645-2649.	9.1	30
130	Thin Film RuO ₂ Lithiation: Fast Lithiumâ€lon Diffusion along the Interface. Advanced Functional Materials, 2018, 28, 1805723.	14.9	11
131	Chemical Insights into PbSe– <i>x</i> %HgSe: High Power Factor and Improved Thermoelectric Performance by Alloying with Discordant Atoms. Journal of the American Chemical Society, 2018, 140, 18115-18123.	13.7	80
132	Understanding the Effect of Interlayers at the Thiophosphate Solid Electrolyte/Lithium Interface for All-Solid-State Li Batteries. Chemistry of Materials, 2018, 30, 8747-8756.	6.7	75
133	Morphological Engineering of Winged Au@MoS ₂ Heterostructures for Electrocatalytic Hydrogen Evolution. Nano Letters, 2018, 18, 7104-7110.	9.1	96
134	Dual Alloying Strategy to Achieve a High Thermoelectric Figure of Merit and Lattice Hardening in p-Type Nanostructured PbTe. ACS Energy Letters, 2018, 3, 2593-2601.	17.4	37
135	Stretching and Breaking of Ultrathin 2D Hybrid Organic–Inorganic Perovskites. ACS Nano, 2018, 12, 10347-10354.	14.6	60
136	Design Rules for Templateâ€Confined DNAâ€Mediated Nanoparticle Assembly. Small, 2018, 14, e1802742.	10.0	13
137	Abrupt Thermal Shock of (NH ₄) ₂ Mo ₃ S ₁₃ Leads to Ultrafast Synthesis of Porous Ensembles of MoS ₂ Nanocrystals for High Gain Photodetectors. ACS Applied Materials & Interfaces, 2018, 10, 38193-38200.	8.0	5
138	An In Situ Reversible Heterodimeric Nanoswitch Controlled by Metalâ€Ion–Ligand Coordination Regulates the Mechanosensing and Differentiation of Stem Cells. Advanced Materials, 2018, 30, e1803591.	21.0	44
139	Conversion of Single Crystal (NH4)2Mo3S13·H2O to Isomorphic Pseudocrystals of MoS2Nanoparticles. Chemistry of Materials, 2018, 30, 3847-3853.	6.7	14
140	Absence of Nanostructuring in NaPb _{<i>m</i>} SbTe _{<i>m</i>+2} : Solid Solutions with High Thermoelectric Performance in the Intermediate Temperature Regime. Journal of the American Chemical Society, 2018, 140, 7021-7031.	13.7	27
141	Controlled synthesis of 2D MX2 (M = Mo, W; X = S, Se) heterostructures and alloys. Journal of Applied Physics, 2018, 123, 204304.	2.5	15
142	Windowless Observation of Evaporation-Induced Coarsening of Au–Pt Nanoparticles in Polymer Nanoreactors. Journal of the American Chemical Society, 2018, 140, 7213-7221.	13.7	10
143	Thermal conductivity in Bi _{0.5} Sb _{1.5} Te _{3+ <i>x</i>} and the role of dense dislocation arrays at grain boundaries. Science Advances, 2018, 4, eaar5606.	10.3	143
144	Magnetic Manipulation of Reversible Nanocaging Controls <i>In Vivo</i> Adhesion and Polarization of Macrophages. ACS Nano, 2018, 12, 5978-5994.	14.6	67

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145	Multistates and Polyamorphism in Phase-Change K ₂ Sb ₈ Se ₁₃ . Journal of the American Chemical Society, 2018, 140, 9261-9268.	13.7	12
146	Exchange Coupling in Soft Magnetic Nanostructures and Its Direct Effect on Their Theranostic Properties. ACS Applied Materials & Interfaces, 2018, 10, 27233-27243.	8.0	26
147	Revealing the Effects of Electrode Crystallographic Orientation on Battery Electrochemistry <i>via</i> the Anisotropic Lithiation and Sodiation of ReS ₂ . ACS Nano, 2018, 12, 7875-7882.	14.6	28
148	<i>In Situ</i> Observation of Resistive Switching in an Asymmetric Graphene Oxide Bilayer Structure. ACS Nano, 2018, 12, 7335-7342.	14.6	36
149	Soft phonon modes from off-center Ge atoms lead to ultralow thermal conductivity and superior thermoelectric performance in n-type PbSe–GeSe. Energy and Environmental Science, 2018, 11, 3220-3230.	30.8	115
150	Site-Specific Positioning and Patterning of MoS ₂ Monolayers: The Role of Au Seeding. ACS Nano, 2018, 12, 8970-8976.	14.6	50
151	Out-of-Plane Mechanical Properties of 2D Hybrid Organic–Inorganic Perovskites by Nanoindentation. ACS Applied Materials & Interfaces, 2018, 10, 22167-22173.	8.0	64
152	Nanoparticle@MoS ₂ Core–Shell Architecture: Role of the Core Material. Chemistry of Materials, 2018, 30, 4675-4682.	6.7	31
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