Jun Lou

List of Publications by Year in descending order

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357	46,069	96	207
papers	citations	h-index	g-index
365	365	365	45062 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	Strong Edge Stress in Molecularly Thin Organic–Inorganic Hybrid Ruddlesden–Popper Perovskites and Modulations of Their Edge Electronic Properties. ACS Nano, 2022, 16, 261-270.	14.6	7
2	Pathways of Exciton Triggered Hotâ€Carrier Injection at Plasmonic Metalâ^Transition Metal Dichalcogenide Interface. Advanced Optical Materials, 2022, 10, 2100070.	7. 3	5
3	In Situ Synthesis of Lead-Free Halide Perovskite–COF Nanocomposites as Photocatalysts for Photoinduced Polymerization in Both Organic and Aqueous Phases. , 2022, 4, 464-471.		63
4	Ultrafast Pump–Probe Microscopy on 2D Transition Metal Dichalcogenides. Advanced Photonics Research, 2022, 3, .	3.6	3
5	An electrochemically stable homogeneous glassy electrolyte formed at room temperature for all-solid-state sodium batteries. Nature Communications, 2022, 13, .	12.8	62
6	High-Energy All-Solid-State Organic–Lithium Batteries Based on Ceramic Electrolytes. ACS Energy Letters, 2021, 6, 201-207.	17.4	37
7	Probing interface strength in nanocomposites and hybrid nanomaterials. , 2021, , 209-240.		1
8	Role of Biochar in Improving Sandy Soil Water Retention and Resilience to Drought. Water (Switzerland), 2021, 13, 407.	2.7	44
9	Strong and flaw-insensitive two-dimensional covalent organic frameworks. Matter, 2021, 4, 1017-1028.	10.0	23
10	Quantitative in-situ study of strength-governed interfacial failure between h-BN and polymer-derived ceramic. Acta Materialia, 2021, 210, 116832.	7.9	2
11	Phosphorous-doped bimetallic sulfides embedded in heteroatom-doped carbon nanoarrays for flexible all-solid-state supercapacitors. Science China Materials, 2021, 64, 2439-2453.	6.3	19
12	A Molecularâ€Level Interface Design Enabled Highâ€Strength and Highâ€Toughness Carbon Nanotube Buckypaper. Macromolecular Materials and Engineering, 2021, 306, 2100244.	3.6	5
13	Intrinsic toughening and stable crack propagation in hexagonal boron nitride. Nature, 2021, 594, 57-61.	27.8	105
14	Selective membranes in water and wastewater treatment: Role of advanced materials. Materials Today, 2021, 50, 516-532.	14.2	106
15	Microstructure engineering of solid-state composite cathode via solvent-assisted processing. Joule, 2021, 5, 1845-1859.	24.0	42
16	Minimizing the Water Effect in Synthesis of High-Quality Monolayer MoS ₂ Nanosheets: Implications for Electronic and Optoelectronic Devices. ACS Applied Nano Materials, 2021, 4, 8094-8100.	5.0	2
17	Plasmon damping and charge transfer pathways in Au@MoSe2 nanostructures. Materials Today Nano, 2021, 15, 100131.	4.6	11
18	Synthesis and tailored properties of covalent organic framework thin films and heterostructures. Materials Today, 2021, 51, 427-448.	14.2	24

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19	Mechanical Anisotropy in Two-Dimensional Selenium Atomic Layers. Nano Letters, 2021, 21, 8043-8050.	9.1	12
20	CVD growth of high-quality and large-area continuous h-BN thin films directly on stainless-steel as protective coatings. Materials Today Nano, 2021, 16, 100135.	4.6	9
21	3D-printed silica with nanoscale resolution. Nature Materials, 2021, 20, 1506-1511.	27.5	93
22	Nitrogen and sulfur co-doped porous carbon fibers film for flexible symmetric all-solid-state supercapacitors. Carbon, 2020, 158, 456-464.	10.3	72
23	Synthesis of the hybrid CdS/Au flower-like nanomaterials and their SERS application. Sensors and Actuators B: Chemical, 2020, 304, 127218.	7.8	24
24	Enhanced plant antioxidant capacity and biodegradation of phenol by immobilizing peroxidase on amphoteric nitrogen-doped carbon dots. Catalysis Communications, 2020, 134, 105847.	3.3	22
25	Enhanced bioaccumulation efficiency and tolerance for Cd (â;) in Arabidopsis thaliana by amphoteric nitrogen-doped carbon dots. Ecotoxicology and Environmental Safety, 2020, 190, 110108.	6.0	21
26	Plasmonic-Induced Luminescence of MoSe ₂ Monolayers in a Scanning Tunneling Microscope. ACS Photonics, 2020, 7, 3061-3070.	6.6	10
27	High performance hierarchically nanostructured graphene oxide/covalent organic framework hybrid membranes for stable organic solvent nanofiltration. Applied Materials Today, 2020, 20, 100791.	4.3	23
28	Tunable friction of monolayer MoS2 by control of interfacial chemistry. Extreme Mechanics Letters, 2020, 41, 100996.	4.1	3
29	Lateral Monolayer MoSe ₂ –WSe ₂ p–n Heterojunctions with Giant Builtâ€In Potentials. Small, 2020, 16, e2002263.	10.0	50
30	Mechanical testing of two-dimensional materials: a brief review. International Journal of Smart and Nano Materials, 2020, $11,207-246$.	4.2	20
31	Towards controlled synthesis of 2D crystals by chemical vapor deposition (CVD). Materials Today, 2020, 40, 132-139.	14.2	79
32	Perovskiteâ€Derivative Valleytronics. Advanced Materials, 2020, 32, e2004111.	21.0	19
33	Multifunctional nanocoated membranes for high-rate electrothermal desalination of hypersaline waters. Nature Nanotechnology, 2020, 15, 1025-1032.	31.5	88
34	Near Degeneracy of Magnetic Phases in Two-Dimensional Chromium Telluride with Enhanced Perpendicular Magnetic Anisotropy. ACS Nano, 2020, 14, 15256-15266.	14.6	35
35	A Hybrid Metal–Organic Framework–Reduced Graphene Oxide Nanomaterial for Selective Removal of Chromate from Water in an Electrochemical Process. Environmental Science &	10.0	78
36	Spontaneous Emission of Plasmonâ€Exciton Polaritons Revealed by Ultrafast Nonradiative Decays. Laser and Photonics Reviews, 2020, 14, 2000233.	8.7	8

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37	Uncovering topographically hidden features in 2D MoSe2 with correlated potential and optical nanoprobes. Npj 2D Materials and Applications, 2020, 4, .	7.9	24
38	Enhanced performance of in-plane transition metal dichalcogenides monolayers by configuring local atomic structures. Nature Communications, 2020, 11, 2253.	12.8	112
39	Remote Lightening and Ultrafast Transition: Intrinsic Modulation of Exciton Spatiotemporal Dynamics in Monolayer MoS ₂ . ACS Nano, 2020, 14, 6897-6905.	14.6	17
40	Strengthening the interface between individual aramid fibers and polymer at room and elevated temperatures. Materials Today Communications, 2020, 24, 101254.	1.9	5
41	Hydrogen bonding sewing interface. RSC Advances, 2020, 10, 17438-17443.	3.6	3
42	Lithium-conducting covalent-organic-frameworks as artificial solid-electrolyte-interphase on silicon anode for high performance lithium ion batteries. Nano Energy, 2020, 72, 104657.	16.0	93
43	Ag doped urchin-like α-MnO2 toward efficient and bifunctional electrocatalysts for Li-O2 batteries. Nano Research, 2020, 13, 2356-2364.	10.4	27
44	Conversion of non-van der Waals solids to 2D transition-metal chalcogenides. Nature, 2020, 577, 492-496.	27.8	145
45	A Low-Cost and High-Efficiency Integrated Device toward Solar-Driven Water Splitting. ACS Nano, 2020, 14, 5426-5434.	14.6	36
46	Biomolecular sensing by surface-enhanced Raman scattering of monolayer Janus transition metal dichalcogenide. Nanoscale, 2020, 12, 10723-10729.	5.6	27
47	Size and Crystal Orientation-Dependent Thermal Behaviors of ZnO Nanobelts. Journal of Physical Chemistry C, 2020, 124, 27222-27229.	3.1	2
48	High Current Enabled Stable Lithium Anode for Ultralong Cycling Life of Lithium–Oxygen Batteries. ACS Applied Materials & M	8.0	21
49	Leadâ€Free Double Perovskite Cs ₂ SnX ₆ : Facile Solution Synthesis and Excellent Stability. Small, 2019, 15, e1901650.	10.0	56
50	Mesoporous Mn2O3 rods as a highly efficient catalyst for Li-O2 battery. Journal of Power Sources, 2019, 435, 226833.	7.8	29
51	Thermoelectric measurements of high-resistance Janus monolayer transition-metal dichalcogenide. Review of Scientific Instruments, 2019, 90, 105110.	1.3	2
52	Artificial Solid Electrolyte Interphase Coating to Reduce Lithium Trapping in Silicon Anode for High Performance Lithiumâ€on Batteries. Advanced Materials Interfaces, 2019, 6, 1901187.	3.7	54
53	Leadâ€Free Perovskites: Leadâ€Free Double Perovskite Cs ₂ SnX ₆ : Facile Solution Synthesis and Excellent Stability (Small 39/2019). Small, 2019, 15, 1970211.	10.0	2
54	Strain-controlled optical transmittance tuning of three-dimensional carbon nanotube architectures. Journal of Materials Chemistry C, 2019, 7, 1927-1933.	5.5	3

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55	Cobalt-Modulated Molybdenum–Dinitrogen Interaction in MoS ₂ for Catalyzing Ammonia Synthesis. Journal of the American Chemical Society, 2019, 141, 19269-19275.	13.7	189
56	Defectâ€Engineeringâ€Enabled Highâ€Efficiency Allâ€Inorganic Perovskite Solar Cells. Advanced Materials, 2019, 31, e1903448.	21.0	143
57	Ultrahighly Enhanced Performance of Single Cadmium Selenide Nanobelt by Plasmonic Gold Particles. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900454.	1.8	5
58	Quantum plasmonic control of trions in a picocavity with monolayer WS ₂ . Science Advances, 2019, 5, eaau8763.	10.3	39
59	Optimal structuring of nitrogen-doped hybrid-dimensional nanocarbons for high-performance flexible solid-state supercapacitors. Journal of Materials Chemistry A, 2019, 7, 7501-7515.	10.3	13
60	Doping Nanoscale Graphene Domains Improves Magnetism in Hexagonal Boron Nitride. Advanced Materials, 2019, 31, e1805778.	21.0	69
61	Elastic and â€ [~] transparent bone' as an electrochemical separator. Materials Today Chemistry, 2019, 12, 132-138.	3.5	6
62	<i>Boxception</i> : Impact Resistance Structure Using 3D Printing. Advanced Engineering Materials, 2019, 21, 1900167.	3.5	12
63	Self-supported multidimensional Ni–Fe phosphide networks with holey nanosheets for high-performance all-solid-state supercapacitors. Journal of Materials Chemistry A, 2019, 7, 17386-17399.	10.3	72
64	Probing the Effect of Chemical Dopant Phase on Photoluminescence of Monolayer MoS ₂ Using in Situ Raman Microspectroscopy. Journal of Physical Chemistry C, 2019, 123, 15738-15743.	3.1	11
65	A Critical Review on Enhancement of Photocatalytic Hydrogen Production by Molybdenum Disulfide: From Growth to Interfacial Activities. Small, 2019, 15, e1900578.	10.0	69
66	Integrated nanocomposite of LiMn2O4/graphene/carbon nanotubes with pseudocapacitive properties as superior cathode for aqueous hybrid capacitors. Journal of Electroanalytical Chemistry, 2019, 842, 74-81.	3.8	38
67	A printed, recyclable, ultra-strong, and ultra-tough graphite structural material. Materials Today, 2019, 30, 17-25.	14.2	83
68	High-K dielectric sulfur-selenium alloys. Science Advances, 2019, 5, eaau9785.	10.3	13
69	Room-Temperature Magnetic Order in Air-Stable Ultrathin Iron Oxide. Nano Letters, 2019, 19, 3777-3781.	9.1	40
70	Taming Active Material-Solid Electrolyte Interfaces with Organic Cathode for All-Solid-State Batteries. Joule, 2019, 3, 1349-1359.	24.0	70
71	Discovering superior basal plane active two-dimensional catalysts for hydrogen evolution. Materials Today, 2019, 25, 28-34.	14.2	58
72	Low Contact Barrier in 2H/1T′ MoTe ₂ In-Plane Heterostructure Synthesized by Chemical Vapor Deposition. ACS Applied Materials & Samp; Interfaces, 2019, 11, 12777-12785.	8.0	70

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73	Bio-derived ultrathin membrane for solar driven water purification. Nano Energy, 2019, 60, 567-575.	16.0	116
74	Monolayer MoS ₂ Nanoribbon Transistors Fabricated by Scanning Probe Lithography. Nano Letters, 2019, 19, 2092-2098.	9.1	64
75	Potassium gluconate-derived N/S Co-doped carbon nanosheets as superior electrode materials for supercapacitors and sodium-ion batteries. Journal of Power Sources, 2019, 414, 308-316.	7.8	87
76	Mechanically Assisted Selfâ€Healing of Ultrathin Gold Nanowires. Small, 2018, 14, 1704085.	10.0	19
77	Graphene oxide based membrane intercalated by nanoparticles for high performance nanofiltration application. Chemical Engineering Journal, 2018, 347, 12-18.	12.7	143
78	Mechanical Properties of Ultralow Density Graphene Oxide/Polydimethylsiloxane Foams. MRS Advances, 2018, 3, 61-66.	0.9	2
79	High performance graphene oxide nanofiltration membrane prepared by electrospraying for wastewater purification. Carbon, 2018, 130, 487-494.	10.3	144
80	Direct Assessment of the Toxicity of Molybdenum Disulfide Atomically Thin Film and Microparticles via Cytotoxicity and Patch Testing. Small, 2018, 14, e1702600.	10.0	21
81	A fast and zero-biased photodetector based on GaTe–InSe vertical 2D p–n heterojunction. 2D Materials, 2018, 5, 025008.	4.4	81
82	High stiffness polymer composite with tunable transparency. Materials Today, 2018, 21, 475-482.	14.2	27
83	Li7P3S11 solid electrolyte coating silicon for high-performance lithium-ion batteries. Electrochimica Acta, 2018, 276, 325-332.	5.2	18
84	A large-area free-standing graphene oxide multilayer membrane with high stability for nanofiltration applications. Chemical Engineering Journal, 2018, 345, 536-544.	12.7	136
85	New paradigm in advanced composite and nanocomposite design. Reinforced Plastics, 2018, 62, 263-265.	0.1	3
86	Atomic Layered Titanium Sulfide Quantum Dots as Electrocatalysts for Enhanced Hydrogen Evolution Reaction. Advanced Materials Interfaces, 2018, 5, 1700895.	3.7	30
87	Flexible all-solid-state supercapacitors based on freestanding, binder-free carbon nanofibers@polypyrrole@graphene film. Chemical Engineering Journal, 2018, 334, 184-190.	12.7	113
88	High-performance red phosphorus/carbon nanofibers/graphene free-standing paper anode for sodium ion batteries. Journal of Materials Chemistry A, 2018, 6, 1574-1581.	10.3	65
89	â€~Unzipping' of twin lamella in nanotwinned nickel nanowires under flexural bending. Materials Research Letters, 2018, 6, 13-21.	8.7	8
90	Multiscale Geometric Design Principles Applied to 3D Printed Schwarzites. Advanced Materials, 2018, 30, 1704820.	21.0	76

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91	2D heterostructure comprised of metallic 1T-MoS2/Monolayer O-g-C3N4 towards efficient photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2018, 220, 379-385.	20.2	231
92	Near-Field Coupled Integrable Two-Dimensional InSe Photosensor on Optical Fiber. ACS Nano, 2018, 12, 12571-12577.	14.6	19
93	Quaternary Alloys: Thermally Induced 2D Alloyâ€Heterostructure Transformation in Quaternary Alloys (Adv. Mater. 45/2018). Advanced Materials, 2018, 30, 1870344.	21.0	2
94	Ultra-Stiff Graphene Foams as Three-Dimensional Conductive Fillers for Epoxy Resin. ACS Nano, 2018, 12, 11219-11228.	14.6	37
95	Enhanced Cycling Performance of Li–O ₂ Battery by Using a Li ₃ PO ₄ -Protected Lithium Anode in DMSO-Based Electrolyte. ACS Applied Energy Materials, 2018, 1, 5511-5517.	5.1	20
96	Hierarchical layer-by-layer porous FeCo ₂ S ₄ @Ni(OH) ₂ arrays for all-solid-state asymmetric supercapacitors. Journal of Materials Chemistry A, 2018, 6, 20480-20490.	10.3	102
97	Spatially-Resolved Photoluminescence of Monolayer MoS ₂ under Controlled Environment for Ambient Optoelectronic Applications. ACS Applied Nano Materials, 2018, 1, 6226-6235.	5.0	23
98	Facile Fabrication of Nitrogenâ€Doped Porous Carbon as Superior Anode Material for Potassiumâ€lon Batteries. Advanced Energy Materials, 2018, 8, 1802386.	19.5	393
99	Interconnecting Bone Nanoparticles by Ovalbumin Molecules to Build a Three-Dimensional Low-Density and Tough Material. ACS Applied Materials & Samp; Interfaces, 2018, 10, 41757-41762.	8.0	9
100	Composites with carbon nanotubes and graphene: An outlook. Science, 2018, 362, 547-553.	12.6	662
101	High-performing and stable electricity generation by ceramic fuel cells operating in dry methane over 1000 hours. Journal of Power Sources, 2018, 401, 322-328.	7.8	25
102	Thermally Induced 2D Alloyâ€Heterostructure Transformation in Quaternary Alloys. Advanced Materials, 2018, 30, e1804218.	21.0	29
103	Laminated Object Manufacturing of 3Dâ€Printed Laserâ€Induced Graphene Foams. Advanced Materials, 2018, 30, e1707416.	21.0	172
104	Prediction of Enhanced Catalytic Activity for Hydrogen Evolution Reaction in Janus Transition Metal Dichalcogenides. Nano Letters, 2018, 18, 3943-3949.	9.1	267
105	Synergetic photoluminescence enhancement of monolayer MoS ₂ <i>via</i> surface plasmon resonance and defect repair. RSC Advances, 2018, 8, 23591-23598.	3.6	10
106	Directional sensing based on flexible aligned carbon nanotube film nanocomposites. Nanoscale, 2018, 10, 14938-14946.	5.6	37
107	Toughening Graphene by Integrating Carbon Nanotubes. ACS Nano, 2018, 12, 7901-7910.	14.6	52
108	Quantum plasmonic hot-electron injection in lateral WSe2/MoSe2 heterostructures. Physical Review B, 2018, 98, .	3.2	31

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109	Enhanced heterogeneous activation of peroxydisulfate by S, N co-doped graphene via controlling S, N functionalization for the catalytic decolorization of dyes in water. Chemosphere, 2018, 210, 120-128.	8.2	25
110	Aligned-SWCNT film laminated nanocomposites: Role of the film on mechanical and electrical properties. Carbon, 2018, 139, 680-687.	10.3	22
111	Ultrafast probes of electron–hole transitions between two atomic layers. Nature Communications, 2018, 9, 1859.	12.8	30
112	Quantitative in situ fracture testing of tin oxide nanowires for lithium ion battery applications. Nano Energy, 2018, 53, 277-285.	16.0	17
113	Underwater adhesive using solid–liquid polymer mixes. Materials Today Chemistry, 2018, 9, 149-157.	3.5	25
114	Achieving Selfâ€Stiffening and Laser Healing by Interconnecting Graphene Oxide Sheets with Amineâ€Functionalized Ovalbumin. Advanced Materials Interfaces, 2018, 5, 1800932.	3.7	5
115	Poly-albumen: Bio-derived structural polymer from polymerized egg white. Materials Today Chemistry, 2018, 9, 73-79.	3.5	7
116	Sandwichâ€Like FeCl ₃ @C as Highâ€Performance Anode Materials for Potassiumâ€lon Batteries. Advanced Materials Interfaces, 2018, 5, 1800606.	3.7	53
117	Core-shell structured carbon nanofibers yarn@polypyrrole@graphene for high performance all-solid-state fiber supercapacitors. Carbon, 2018, 138, 264-270.	10.3	110
118	Surface enhanced resonant Raman scattering in hybrid MoSe ₂ @Au nanostructures. Optics Express, 2018, 26, 29411.	3.4	20
119	Impact of carbon nanotube defects on fracture mechanisms in ceramic nanocomposites. Carbon, 2017, 115, 402-408.	10.3	36
120	Electrospinning fabrication and in situ mechanical investigation of individual graphene nanoribbon reinforced carbon nanofiber. Carbon, 2017, 114, 717-723.	10.3	36
121	In situ mechanical investigation of carbon nanotube–graphene junction in three-dimensional carbon nanostructures. Nanoscale, 2017, 9, 2916-2924.	5.6	41
122	Opto-valleytronic imaging of atomically thin semiconductors. Nature Nanotechnology, 2017, 12, 329-334.	31.5	55
123	Growth of Molybdenum Carbide–Graphene Hybrids from Molybdenum Disulfide Atomic Layer Template. Advanced Materials Interfaces, 2017, 4, 1600866.	3.7	14
124	Two dimensional heterostructure: perfect platform for exploring interface interaction. Science Bulletin, 2017, 62, 381-382.	9.0	4
125	Three-Dimensional Rebar Graphene. ACS Applied Materials & Interfaces, 2017, 9, 7376-7384.	8.0	46
126	High Toughness in Ultralow Density Graphene Oxide Foam. Advanced Materials Interfaces, 2017, 4, 1700030.	3.7	20

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127	Direct growth of MoS ₂ single crystals on polyimide substrates. 2D Materials, 2017, 4, 021028.	4.4	39
128	High Efficiency Photocatalytic Water Splitting Using 2D αâ€Fe ₂ O ₃ /gâ€C ₃ N ₄ Zâ€6cheme Catalysts. Advanced Energy Materials, 2017, 7, 1700025.	/ 19.5	664
129	Structural Reinforcement through Liquid Encapsulation. Advanced Materials Interfaces, 2017, 4, 1600781.	3.7	8
130	Temperature-Dependent Plasmon–Exciton Interactions in Hybrid Au/MoSe ₂ Nanostructures. ACS Photonics, 2017, 4, 1653-1660.	6.6	51
131	High Strain Tolerant EMI Shielding Using Carbon Nanotube Network Stabilized Rubber Composite. Advanced Materials Technologies, 2017, 2, 1700078.	5.8	153
132	Synthesis of Highâ€Quality Graphene and Hexagonal Boron Nitride Monolayer Inâ€Plane Heterostructure on Cu–Ni Alloy. Advanced Science, 2017, 4, 1700076.	11.2	76
133	Three-Dimensional Printed Graphene Foams. ACS Nano, 2017, 11, 6860-6867.	14.6	172
134	Chemically interconnected light-weight 3D-carbon nanotube solid network. Carbon, 2017, 119, 142-149.	10.3	20
135	Synthesis of large-scale atomic-layer SnS2 through chemical vapor deposition. Nano Research, 2017, 10, 2386-2394.	10.4	124
136	Selfâ€Stiffening Behavior of Reinforced Carbon Nanotubes Spheres. Advanced Engineering Materials, 2017, 19, 1600756.	3.5	8
137	Enhancing Mechanical Properties of Nanocomposites Using Interconnected Carbon Nanotubes (<i>i</i> iCNT) as Reinforcement. Advanced Engineering Materials, 2017, 19, 1600499.	3.5	7
138	Role of Atomic Layer Functionalization in Building Scalable Bottom-Up Assembly of Ultra-Low Density Multifunctional Three-Dimensional Nanostructures. ACS Nano, 2017, 11, 806-813.	14.6	14
139	Three-dimensional mesostructures as high-temperature growth templates, electronic cellular scaffolds, and self-propelled microrobots. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9455-E9464.	7.1	129
140	A flexible solar cell/supercapacitor integrated energy device. Nano Energy, 2017, 42, 181-186.	16.0	92
141	Unveiling Active Sites for the Hydrogen Evolution Reaction on Monolayer MoS ₂ . Advanced Materials, 2017, 29, 1701955.	21.0	249
142	Gold Nanoparticles and g ₃ N ₄ â€Intercalated Graphene Oxide Membrane for Recyclable Surface Enhanced Raman Scattering. Advanced Functional Materials, 2017, 27, 1701714.	14.9	129
143	Nature Inspired Strategy to Enhance Mechanical Properties via Liquid Reinforcement. Advanced Materials Interfaces, 2017, 4, 1700240.	3.7	30
144	Self-optimizing, highly surface-active layeredÂmetal dichalcogenide catalysts for hydrogen evolution. Nature Energy, 2017, 2, .	39.5	336

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145	Janus Monolayer Transition-Metal Dichalcogenides. ACS Nano, 2017, 11, 8192-8198.	14.6	1,001
146	Lightweight Hexagonal Boron Nitride Foam for CO ₂ Absorption. ACS Nano, 2017, 11, 8944-8952.	14.6	56
147	"Ductile―Fracture of Metallic Glass Nanolaminates. Advanced Materials Interfaces, 2017, 4, 1700510.	3.7	24
148	Highly Enhanced Photoluminescence of Monolayer MoS ₂ with Selfâ€Assembled Au Nanoparticle Arrays. Advanced Materials Interfaces, 2017, 4, 1700739.	3.7	41
149	Toward a Mechanistic Understanding of Vertical Growth of van der Waals Stacked 2D Materials: A Multiscale Model and Experiments. ACS Nano, 2017, 11, 12780-12788.	14.6	89
150	Large In-Plane and Vertical Piezoelectricity in Janus Transition Metal Dichalchogenides. ACS Nano, 2017, 11, 8242-8248.	14.6	599
151	Brittle Fracture of 2D MoSe ₂ . Advanced Materials, 2017, 29, 1604201.	21.0	138
152	Characterization of tin(II) sulfide defects/vacancies and correlation with their photocurrent. Nano Research, 2017, 10, 218-228.	10.4	8
153	High performance agar/graphene oxide composite aerogel for methylene blue removal. Carbohydrate Polymers, 2017, 155, 345-353.	10.2	251
154	The impact of core-shell nanotube structures on fracture in ceramic nanocomposites. Acta Materialia, 2017, 122, 82-91.	7.9	11
155	Quantification of Electron Beam Heating Effect in TEM. Microscopy and Microanalysis, 2017, 23, 1766-1767.	0.4	4
156	In-situ Thermal Testing on Nanostructures in TEM. Microscopy and Microanalysis, 2016, 22, 770-771.	0.4	0
157	Exfoliated 2D Transition Metal Disulfides for Enhanced Electrocatalysis of Oxygen Evolution Reaction in Acidic Medium. Advanced Materials Interfaces, 2016, 3, 1500669.	3.7	136
158	Surface Tension Components Based Selection of Cosolvents for Efficient Liquid Phase Exfoliation of 2D Materials. Small, 2016, 12, 2741-2749.	10.0	128
159	Interphase Induced Dynamic Selfâ€Stiffening in Grapheneâ€Based Polydimethylsiloxane Nanocomposites. Small, 2016, 12, 3723-3731.	10.0	39
160	High-efficiency two-dimensional Ruddlesden–Popper perovskite solar cells. Nature, 2016, 536, 312-316.	27.8	2,767
161	Ultrafast Optical Microscopy of Single Monolayer Molybdenum Disulfide Flakes. Scientific Reports, 2016, 6, 21601.	3.3	35
162	Enabling Ultrasensitive Photo-detection Through Control of Interface Properties in Molybdenum Disulfide Atomic Layers. Scientific Reports, 2016, 6, 39465.	3.3	4

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163	Photoluminescence quenching in hybrid gold/MoSe ₂ nanosheets., 2016,,.		O
164	A metal-free electrocatalyst for carbon dioxide reduction to multi-carbon hydrocarbons and oxygenates. Nature Communications, 2016, 7, 13869.	12.8	505
165	Thickness-Dependent and Magnetic-Field-Driven Suppression of Antiferromagnetic Order in Thin V ₅ S ₈ Single Crystals. ACS Nano, 2016, 10, 5941-5946.	14.6	33
166	Strain-Induced Electronic Structure Changes in Stacked van der Waals Heterostructures. Nano Letters, 2016, 16, 3314-3320.	9.1	122
167	Excitonic Resonant Emission–Absorption of Surface Plasmons in Transition Metal Dichalcogenides for Chip-Level Electronic–Photonic Integrated Circuits. ACS Photonics, 2016, 3, 869-874.	6.6	21
168	Mechano-chemical stabilization of three-dimensional carbon nanotube aggregates. Carbon, 2016, 110, 27-33.	10.3	22
169	Investigation of hexagonal boron nitride as an atomically thin corrosion passivation coating in aqueous solution. Nanotechnology, 2016, 27, 364004.	2.6	42
170	Solid–Vapor Reaction Growth of Transitionâ€Metal Dichalcogenide Monolayers. Angewandte Chemie - International Edition, 2016, 55, 10656-10661.	13.8	27
171	Unveil the Sizeâ€Dependent Mechanical Behaviors of Individual CNT/SiC Composite Nanofibers by In Situ Tensile Tests in SEM. Small, 2016, 12, 4486-4491.	10.0	20
172	Solid–Vapor Reaction Growth of Transitionâ€Metal Dichalcogenide Monolayers. Angewandte Chemie, 2016, 128, 10814-10819.	2.0	17
173	Spiral Growth of SnSe ₂ Crystals by Chemical Vapor Deposition. Advanced Materials Interfaces, 2016, 3, 1600383.	3.7	55
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