Pan Liu

List of Publications by Year in descending order

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267 papers 47,589 citations

98 h-index 213 g-index

277 all docs

277 docs citations

times ranked

277

40473 citing authors

#	Article	IF	CITATIONS
1	Photoluminescence from Chemically Exfoliated MoS ₂ . Nano Letters, 2011, 11, 5111-5116.	9.1	3,402
2	Enhanced catalytic activity in strained chemically exfoliated WS2 nanosheets for hydrogen evolution. Nature Materials, 2013, 12, 850-855.	27.5	2,326
3	Conducting MoS ₂ Nanosheets as Catalysts for Hydrogen Evolution Reaction. Nano Letters, 2013, 13, 6222-6227.	9.1	1,948
4	Homogeneously dispersed multimetal oxygen-evolving catalysts. Science, 2016, 352, 333-337.	12.6	1,948
5	Nanoporous metal/oxide hybrid electrodes for electrochemical supercapacitors. Nature Nanotechnology, 2011, 6, 232-236.	31.5	1,914
6	A precipitation-hardened high-entropy alloy with outstanding tensile properties. Acta Materialia, 2016, 102, 187-196.	7.9	1,665
7	Photochemical route for synthesizing atomically dispersed palladium catalysts. Science, 2016, 352, 797-800.	12.6	1,540
8	Deformation Twinning in Nanocrystalline Aluminum. Science, 2003, 300, 1275-1277.	12.6	1,058
9	Ultrastrong steel via minimal lattice misfit and high-density nanoprecipitation. Nature, 2017, 544, 460-464.	27.8	843
10	Efficient hydrogen production on MoNi4 electrocatalysts with fast water dissociation kinetics. Nature Communications, 2017, 8, 15437.	12.8	813
11	Fluorineâ€Free Synthesis of Highâ€Purity Ti ₃ C ₂ T _{<i>x</i>} (T=OH, O) via Alkali Treatment. Angewandte Chemie - International Edition, 2018, 57, 6115-6119.	13.8	809
12	Coherent Atomic and Electronic Heterostructures of Single-Layer MoS ₂ . ACS Nano, 2012, 6, 7311-7317.	14.6	806
13	Atomic origins of the high catalytic activity of nanoporous gold. Nature Materials, 2012, 11, 775-780.	27.5	803
14	Multifunctional Porous Graphene for Highâ€Efficiency Steam Generation by Heat Localization. Advanced Materials, 2015, 27, 4302-4307.	21.0	769
15	High Catalytic Activity of Nitrogen and Sulfur Coâ€Doped Nanoporous Graphene in the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2015, 54, 2131-2136.	13.8	760
16	Ductile CoCrFeNiMox high entropy alloys strengthened by hard intermetallic phases. Acta Materialia, 2016, 116, 332-342.	7.9	670
17	Nanoporous Graphene with Singleâ€Atom Nickel Dopants: An Efficient and Stable Catalyst for Electrochemical Hydrogen Production. Angewandte Chemie - International Edition, 2015, 54, 14031-14035.	13.8	628
18	Accelerated Hydrogen Evolution Kinetics on NiFeâ€Layered Double Hydroxide Electrocatalysts by Tailoring Water Dissociation Active Sites. Advanced Materials, 2018, 30, 1706279.	21.0	601

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19	Versatile nanoporous bimetallic phosphides towards electrochemical water splitting. Energy and Environmental Science, 2016, 9, 2257-2261.	30.8	535
20	Mechanical Behavior of Metallic Glasses: Microscopic Understanding of Strength and Ductility. Annual Review of Materials Research, 2008, 38, 445-469.	9.3	513
21	Engineering water dissociation sites in MoS ₂ nanosheets for accelerated electrocatalytic hydrogen production. Energy and Environmental Science, 2016, 9, 2789-2793.	30.8	503
22	Core–Shell‧tructured CNT@RuO ₂ Composite as a Highâ€Performance Cathode Catalyst for Rechargeable Li–O ₂ Batteries. Angewandte Chemie - International Edition, 2014, 53, 442-446.	13.8	495
23	Shock-Induced Localized Amorphization in Boron Carbide. Science, 2003, 299, 1563-1566.	12.6	483
24	Direct observation of local atomic order in a metallic glass. Nature Materials, 2011, 10, 28-33.	27.5	483
25	Fluorineâ€Free Synthesis of Highâ€Purity Ti ₃ C ₂ T _{<i>x</i>} (T=OH, O) via Alkali Treatment. Angewandte Chemie, 2018, 130, 6223-6227.	2.0	459
26	Atomically dispersed nickel–nitrogen–sulfur species anchored on porous carbon nanosheets for efficient water oxidation. Nature Communications, 2019, 10, 1392.	12.8	424
27	Efficient alkaline hydrogen evolution on atomically dispersed Ni–N _x Species anchored porous carbon with embedded Ni nanoparticles by accelerating water dissociation kinetics. Energy and Environmental Science, 2019, 12, 149-156.	30.8	416
28	Metallic Mesoporous Nanocomposites for Electrocatalysis. Journal of the American Chemical Society, 2004, 126, 6876-6877.	13.7	410
29	Nanoporous Metals for Catalytic and Optical Applications. MRS Bulletin, 2009, 34, 569-576.	3.5	378
30	An assessment on the future development of high-entropy alloys: Summary from a recent workshop. Intermetallics, 2015, 66, 67-76.	3.9	355
31	A hexagonal close-packed high-entropy alloy: The effect of entropy. Materials and Design, 2016, 96, 10-15.	7.0	322
32	A Layered P2†and O3â€Type Composite as a Highâ€Energy Cathode for Rechargeable Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2015, 54, 5894-5899.	13.8	321
33	Zincâ€Mediated Template Synthesis of Feâ€Nâ€C Electrocatalysts with Densely Accessible Feâ€N <i>_{<}</i> i> Active Sites for Efficient Oxygen Reduction. Advanced Materials, 2020, 32, e1907399.	21.0	319
34	Monolayer MoS ₂ Films Supported by 3D Nanoporous Metals for Highâ€Efficiency Electrocatalytic Hydrogen Production. Advanced Materials, 2014, 26, 8023-8028.	21.0	299
35	Fe ₂ O ₃ nanocrystals anchored onto graphene nanosheets as the anode material for low-cost sodium-ion batteries. Chemical Communications, 2014, 50, 1215-1217.	4.1	297
36	Grain rotation mediated by grain boundary dislocations in nanocrystalline platinum. Nature Communications, 2014, 5, 4402.	12.8	286

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37	A Phthalocyanineâ€Based Layered Twoâ€Dimensional Conjugated Metal–Organic Framework as a Highly Efficient Electrocatalyst for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2019, 58, 10677-10682.	13.8	278
38	Nanoporous Metals by Dealloying Multicomponent Metallic Glasses. Chemistry of Materials, 2008, 20, 4548-4550.	6.7	272
39	Bicontinuous Nanoporous Nâ€doped Graphene for the Oxygen Reduction Reaction. Advanced Materials, 2014, 26, 4145-4150.	21.0	261
40	Lithiophilic 3D Nanoporous Nitrogenâ€Doped Graphene for Dendriteâ€Free and Ultrahighâ€Rate Lithiumâ€Metal Anodes. Advanced Materials, 2019, 31, e1805334.	21.0	254
41	Nanoporous PdNi Bimetallic Catalyst with Enhanced Electrocatalytic Performances for Electro-oxidation and Oxygen Reduction Reactions. Advanced Functional Materials, 2011, 21, 4364-4370.	14.9	251
42	Enhanced Supercapacitor Performance of MnO ₂ by Atomic Doping. Angewandte Chemie - International Edition, 2013, 52, 1664-1667.	13.8	251
43	Wrinkled Nanoporous Gold Films with Ultrahigh Surface-Enhanced Raman Scattering Enhancement. ACS Nano, 2011, 5, 4407-4413.	14.6	249
44	Metal and Nonmetal Codoped 3D Nanoporous Graphene for Efficient Bifunctional Electrocatalysis and Rechargeable Zn–Air Batteries. Advanced Materials, 2019, 31, e1900843.	21.0	236
45	Unveiling Electronic Properties in Metal–Phthalocyanine-Based Pyrazine-Linked Conjugated Two-Dimensional Covalent Organic Frameworks. Journal of the American Chemical Society, 2019, 141, 16810-16816.	13.7	227
46	Environmentally stable interface of layered oxide cathodes for sodium-ion batteries. Nature Communications, 2017, 8, 135.	12.8	218
47	Nanostructured Materials as Catalysts: Nanoporousâ€Coldâ€Catalyzed Oxidation of Organosilanes with Water. Angewandte Chemie - International Edition, 2010, 49, 10093-10095.	13.8	215
48	Highâ€Quality Threeâ€Dimensional Nanoporous Graphene. Angewandte Chemie - International Edition, 2014, 53, 4822-4826.	13.8	215
49	High-performance symmetric sodium-ion batteries using a new, bipolar O3-type material, Na _{0.8} Ni _{0.4} Ti _{0.6} O ₂ . Energy and Environmental Science, 2015, 8, 1237-1244.	30.8	215
50	Nanoporous high-entropy alloys for highly stable and efficient catalysts. Journal of Materials Chemistry A, 2019, 7, 6499-6506.	10.3	215
51	Nanoporous Metal Enhanced Catalytic Activities of Amorphous Molybdenum Sulfide for Highâ€Efficiency Hydrogen Production. Advanced Materials, 2014, 26, 3100-3104.	21.0	204
52	Dynamic active-site generation of atomic iridium stabilized on nanoporous metal phosphides for water oxidation. Nature Communications, 2020, 11, 2701.	12.8	204
53	Approaching the Theoretical Elastic Strain Limit in Copper Nanowires. Nano Letters, 2011, 11, 3151-3155.	9.1	202
54	Li Storage in 3D Nanoporous Auâ€Supported Nanocrystalline Tin. Advanced Materials, 2011, 23, 2443-2447.	21.0	198

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55	3D Nanoporous Nitrogenâ€Doped Graphene with Encapsulated RuO ₂ Nanoparticles for Li–O ₂ Batteries. Advanced Materials, 2015, 27, 6137-6143.	21.0	195
56	Nanoscale phase separation in a fcc-based CoCrCuFeNiAl0.5 high-entropy alloy. Acta Materialia, 2015, 84, 145-152.	7.9	193
57	Atomic structure of amorphous shear bands in boron carbide. Nature Communications, 2013, 4, 2483.	12.8	190
58	Transmission electron microscopy characterization of dislocation structure in a face-centered cubic high-entropy alloy Al0.1CoCrFeNi. Acta Materialia, 2018, 144, 107-115.	7.9	187
59	Lithium-Doping Stabilized High-Performance P2â€"Na _{0.66} Li _{0.18} Fe _{0.12} Mn _{0.7} O ₂ Cathode for Sodium Ion Batteries. Journal of the American Chemical Society, 2019, 141, 6680-6689.	13.7	187
60	Hyperpolarized Xe NMR signal advancement by metal-organic framework entrapment in aqueous solution. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17558-17563.	7.1	175
61	Atomicâ€Sized Pores Enhanced Electrocatalysis of TaS ₂ Nanosheets for Hydrogen Evolution. Advanced Materials, 2016, 28, 8945-8949.	21.0	167
62	3D Nanoporous Metal Phosphides toward Highâ€Efficiency Electrochemical Hydrogen Production. Advanced Materials, 2016, 28, 2951-2955.	21.0	163
63	Chemically exfoliated ReS ₂ nanosheets. Nanoscale, 2014, 6, 12458-12462.	5.6	160
64	Microstructure characterization of Cu-rich nanoprecipitates in a Fe–2.5 Cu–1.5 Mn–4.0 Ni–1.0 Al multicomponent ferritic alloy. Acta Materialia, 2013, 61, 2133-2147.	7.9	153
65	Selfâ€Grown Oxyâ€Hydroxide@ Nanoporous Metal Electrode for Highâ€Performance Supercapacitors. Advanced Materials, 2014, 26, 269-272.	21.0	152
66	In situ atomic-scale observation of continuous and reversible lattice deformation beyond the elastic limit. Nature Communications, 2013, 4, 2413.	12.8	147
67	Fabrication of large-scale nanoporous nickel with a tunable pore size for energy storage. Journal of Power Sources, 2014, 247, 896-905.	7.8	140
68	Bicontinuous nanotubular graphene–polypyrrole hybrid for high performance flexible supercapacitors. Nano Energy, 2016, 19, 391-400.	16.0	137
69	Ruthenium/nitrogen-doped carbon as an electrocatalyst for efficient hydrogen evolution in alkaline solution. Journal of Materials Chemistry A, 2017, 5, 25314-25318.	10.3	136
70	Lithium intercalation into bilayer graphene. Nature Communications, 2019, 10, 275.	12.8	136
71	Highâ€Resolution Electrochemical Mapping of the Hydrogen Evolution Reaction on Transitionâ€Metal Dichalcogenide Nanosheets. Angewandte Chemie - International Edition, 2020, 59, 3601-3608.	13.8	136
72	<i>InÂSitu</i> Observation of Dislocation Behavior in Nanometer Grains. Physical Review Letters, 2010, 105, 135501.	7.8	135

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73	Localized surface plasmon resonance of nanoporous gold. Applied Physics Letters, 2011, 98, .	3.3	135
74	3D nanoporous iridium-based alloy microwires for efficient oxygen evolution in acidic media. Nano Energy, 2019, 59, 146-153.	16.0	134
75	Effect of Chemical Doping on Cathodic Performance of Bicontinuous Nanoporous Graphene for Liâ€O ₂ Batteries. Advanced Energy Materials, 2016, 6, 1501870.	19.5	132
76	Twinning and stacking fault formation during tensile deformation of nanocrystalline Ni. Scripta Materialia, 2006, 54, 1685-1690.	5.2	130
77	Direct dynamic atomic mechanisms of strain-induced grain rotation in nanocrystalline, textured, columnar-structured thin gold films. Scripta Materialia, 2011, 64, 343-346.	5.2	130
78	A Highâ€Voltage and Ultralongâ€Life Sodium Full Cell for Stationary Energy Storage. Angewandte Chemie - International Edition, 2015, 54, 11701-11705.	13.8	126
79	Reversible anionic redox activity in Na ₃ RuO ₄ cathodes: a prototype Na-rich layered oxide. Energy and Environmental Science, 2018, 11, 299-305.	30.8	126
80	Structure Reâ€determination and Superconductivity Observation of Bulk 1T MoS ₂ . Angewandte Chemie - International Edition, 2018, 57, 1232-1235.	13.8	126
81	Three-dimensional bicontinuous nanoporous materials by vapor phase dealloying. Nature Communications, 2018, 9, 276.	12.8	123
82	Monodispersed hierarchical Co ₃ O ₄ spheres intertwined with carbon nanotubes for use as anode materials in sodium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 13805.	10.3	122
83	Enhanced mechanical properties of nanocrystalline boron carbide by nanoporosity and interface phases. Nature Communications, 2012, 3, 1052.	12.8	119
84	A Coreâ€Shell Nanoporous Ptâ€Cu Catalyst with Tunable Composition and High Catalytic Activity. Advanced Functional Materials, 2013, 23, 4156-4162.	14.9	118
85	Correlation between Local Structure Order and Spatial Heterogeneity in a Metallic Glass. Physical Review Letters, 2017, 119, 215501.	7.8	116
86	Spatial heterogeneity as the structure feature for structure–property relationship of metallic glasses. Nature Communications, 2018, 9, 3965.	12.8	115
87	Tracking the sliding of grain boundaries at the atomic scale. Science, 2022, 375, 1261-1265.	12.6	115
88	Regulating Infrared Photoresponses in Reduced Graphene Oxide Phototransistors by Defect and Atomic Structure Control. ACS Nano, 2013, 7, 6310-6320.	14.6	112
89	Surface coating of lithium–manganese-rich layered oxides with delaminated MnO2 nanosheets as cathode materials for Li-ion batteries. Journal of Materials Chemistry A, 2014, 2, 4422.	10.3	112
90	Correlation between Chemical Dopants and Topological Defects in Catalytically Active Nanoporous Graphene. Advanced Materials, 2016, 28, 10644-10651.	21.0	110

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91	New twinning route in face-centered cubic nanocrystalline metals. Nature Communications, 2017, 8, 2142.	12.8	110
92	Quantum Dots of 1T Phase Transitional Metal Dichalcogenides Generated <i>via</i> Electrochemical Li Intercalation. ACS Nano, 2018, 12, 308-316.	14.6	110
93	Three-dimensional nanoporous gold for electrochemical supercapacitors. Scripta Materialia, 2011, 64, 923-926.	5.2	109
94	Atomic Observation of Catalysis-Induced Nanopore Coarsening of Nanoporous Gold. Nano Letters, 2014, 14, 1172-1177.	9.1	109
95	Quantitative Evidence of Crossover toward Partial Dislocation Mediated Plasticity in Copper Single Crystalline Nanowires. Nano Letters, 2012, 12, 4045-4049.	9.1	108
96	Ultrastable Silicon Anode by Three-Dimensional Nanoarchitecture Design. ACS Nano, 2020, 14, 4374-4382.	14.6	107
97	Understanding sodium-ion diffusion in layered P2 and P3 oxides via experiments and first-principles calculations: a bridge between crystal structure and electrochemical performance. NPG Asia Materials, 2016, 8, e266-e266.	7.9	101
98	Chemical Vapor Deposition of Monolayer Mo1â^'xWxS2 Crystals with Tunable Band Gaps. Scientific Reports, 2016, 6, 21536.	3.3	101
99	Promoted oxygen reduction kinetics on nitrogen-doped hierarchically porous carbon by engineering proton-feeding centers. Energy and Environmental Science, 2020, 13, 2849-2855.	30.8	101
100	Three-dimensional bicontinuous nanoporous Au/polyaniline hybrid films for high-performance electrochemical supercapacitors. Journal of Power Sources, 2012, 197, 325-329.	7.8	100
101	The ultrastable kinetic behavior of an Au-based nanoglass. Acta Materialia, 2014, 79, 30-36.	7.9	97
102	Nanoporous metal by dealloying for electrochemical energy conversion and storage. MRS Bulletin, 2018, 43, 43-48.	3.5	96
103	Structural Determination and Nonlinear Optical Properties of New 1T‴-Type MoS ₂ Compound. Journal of the American Chemical Society, 2019, 141, 790-793.	13.7	95
104	A Highâ€Capacity, Lowâ€Cost Layered Sodium Manganese Oxide Material as Cathode for Sodiumâ€ion Batteries. ChemSusChem, 2014, 7, 2115-2119.	6.8	93
105	Dispersing Pt atoms onto nanoporous gold for high performance direct formic acid fuel cells. Chemical Science, 2014, 5, 403-409.	7.4	93
106	Microstructural characterization of boron-rich boron carbide. Acta Materialia, 2017, 136, 202-214.	7.9	91
107	Dualâ€Metal Interbonding as the Chemical Facilitator for Singleâ€Atom Dispersions. Advanced Materials, 2020, 32, e2003484.	21.0	90
108	Structure and mechanical properties of boron-rich boron carbides. Journal of the European Ceramic Society, 2017, 37, 4514-4523.	5.7	89

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109	Nanoporous metal based flexible asymmetric pseudocapacitors. Journal of Materials Chemistry A, 2014, 2, 10910-10916.	10.3	87
110	Synergistic alloying effect on microstructural evolution and mechanical properties of Cu precipitation-strengthened ferritic alloys. Acta Materialia, 2013, 61, 7726-7740.	7.9	85
111	Visualizing Under oordinated Surface Atoms on 3D Nanoporous Gold Catalysts. Advanced Materials, 2016, 28, 1753-1759.	21.0	85
112	High-energy-density nonaqueous MnO2@nanoporous gold based supercapacitors. Journal of Materials Chemistry A, 2013, 1, 9202.	10.3	84
113	Enhanced Superconductivity in Restacked TaS ₂ Nanosheets. Journal of the American Chemical Society, 2017, 139, 4623-4626.	13.7	84
114	Deformation stimulated precipitation of a single-phase CoCrFeMnNi high entropy alloy. Intermetallics, 2017, 85, 90-97.	3.9	82
115	Highly accessible and dense surface single metal FeN ₄ active sites for promoting the oxygen reduction reaction. Energy and Environmental Science, 2022, 15, 2619-2628.	30.8	82
116	Extraordinary tensile strength and ductility of scalable nanoporous graphene. Science Advances, 2019, 5, eaat6951.	10.3	78
117	Observation of superconductivity in 1T′-MoS ₂ nanosheets. Journal of Materials Chemistry C, 2017, 5, 10855-10860.	5 . 5	77
118	Size Effects in the Mechanical Properties of Bulk Bicontinuous Ta/Cu Nanocomposites Made by Liquid Metal Dealloying. Advanced Engineering Materials, 2016, 18, 46-50.	3.5	75
119	Cation-mixing stabilized layered oxide cathodes for sodium-ion batteries. Science Bulletin, 2018, 63, 376-384.	9.0	75
120	The atomic origin of nickel-doping-induced catalytic enhancement in MoS ₂ for electrochemical hydrogen production. Nanoscale, 2019, 11, 7123-7128.	5.6	75
121	Intercalation pseudocapacitance of amorphous titanium dioxide@nanoporous graphene for high-rate and large-capacity energy storage. Nano Energy, 2018, 49, 354-362.	16.0	74
122	Grain Boundary Sliding and Amorphization are Responsible for the Reverse Hall-Petch Relation in Superhard Nanocrystalline Boron Carbide. Physical Review Letters, 2018, 121, 145504.	7.8	73
123	Lowâ€Temperature Carbideâ€Mediated Growth of Bicontinuous Nitrogenâ€Doped Mesoporous Graphene as an Efficient Oxygen Reduction Electrocatalyst. Advanced Materials, 2018, 30, e1803588.	21.0	73
124	Three-Dimensional Nanoporous Co ₉ S ₄ P ₄ Pentlandite as a Bifunctional Electrocatalyst for Overall Neutral Water Splitting. ACS Applied Materials & Samp; Interfaces, 2019, 11, 3880-3888.	8.0	73
125	Coupling effect between ultra-small Mn 3 O 4 nanoparticles and porous carbon microrods for hybrid supercapacitors. Energy Storage Materials, 2017, 6, 53-60.	18.0	72
126	Enhance the thermal stability and glass forming ability of Al-based metallic glass by Ca minor-alloying. Intermetallics, 2012, 29, 35-40.	3.9	71

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127	Electroplated Thick Manganese Oxide Films with Ultrahigh Capacitance. Advanced Energy Materials, 2013, 3, 857-863.	19.5	70
128	Engineering the internal surfaces of three-dimensional nanoporous catalysts by surfactant-modified dealloying. Nature Communications, 2017, 8, 1066.	12.8	69
129	Super elastic strain limit in metallic glass films. Scientific Reports, 2012, 2, 852.	3.3	68
130	Effect of Residual Silver on Surface-Enhanced Raman Scattering of Dealloyed Nanoporous Gold. Journal of Physical Chemistry C, 2011, 115, 19583-19587.	3.1	66
131	Onâ€Chip Microâ€Pseudocapacitors for Ultrahigh Energy and Power Delivery. Advanced Science, 2015, 2, 1500067.	11.2	66
132	Full Performance Nanoporous Graphene Based Liâ€O ₂ Batteries through Solution Phase Oxygen Reduction and Redoxâ€Additive Mediated Li ₂ O ₂ Oxidation. Advanced Energy Materials, 2017, 7, 1601933.	19.5	65
133	Heavily Doped and Highly Conductive Hierarchical Nanoporous Graphene for Electrochemical Hydrogen Production. Angewandte Chemie - International Edition, 2018, 57, 13302-13307.	13.8	64
134	Operando Observations of SEI Film Evolution by Massâ€Sensitive Scanning Transmission Electron Microscopy. Advanced Energy Materials, 2019, 9, 1902675.	19.5	64
135	Monolithic Nanoporous Zn Anode for Rechargeable Alkaline Batteries. ACS Nano, 2020, 14, 2404-2411.	14.6	64
136	Hierarchical nanoporous nickel alloy as three-dimensional electrodes for high-efficiency energy storage. Scripta Materialia, 2014, 89, 69-72.	5.2	62
137	Synthesizing 1T–1H Two-Phase Mo _{1–<i>x</i>} W _{<i>x</i>} S ₂ Monolayers by Chemical Vapor Deposition. ACS Nano, 2018, 12, 1571-1579.	14.6	62
138	Nobleâ€Metalâ€Free Metallic Glass as a Highly Active and Stable Bifunctional Electrocatalyst for Water Splitting. Advanced Materials Interfaces, 2017, 4, 1601086.	3.7	60
139	A nanoporous metal recuperated MnO ₂ anode for lithium ion batteries. Nanoscale, 2015, 7, 15111-15116.	5.6	58
140	Terahertz and mid-infrared plasmons in three-dimensional nanoporous graphene. Nature Communications, 2017, 8, 14885.	12.8	58
141	A Phthalocyanineâ€Based Layered Twoâ€Dimensional Conjugated Metal–Organic Framework as a Highly Efficient Electrocatalyst for the Oxygen Reduction Reaction. Angewandte Chemie, 2019, 131, 10787-10792.	2.0	58
142	Bioinspired Fe ₃ C@C as Highly Efficient Electrocatalyst for Nitrogen Reduction Reaction under Ambient Conditions. ACS Applied Materials & Samp; Interfaces, 2019, 11, 40062-40068.	8.0	57
143	Raman characterization of pseudocapacitive behavior of polypyrrole on nanoporous gold. Physical Chemistry Chemical Physics, 2014, 16, 3523.	2.8	56
144	Controllable defects implantation in MoS2 grown by chemical vapor deposition for photoluminescence enhancement. Nano Research, 2018, 11, 4123-4132.	10.4	55

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145	Ultra-thin layer structured anodes for highly durable low-Pt direct formic acid fuel cells. Nano Research, 2014, 7, 1569-1580.	10.4	54
146	Tuning Surface Structure of 3D Nanoporous Gold by Surfactantâ€Free Electrochemical Potential Cycling. Advanced Materials, 2017, 29, 1703601.	21.0	54
147	Bilayered nanoporous graphene/molybdenum oxide for high rate lithium ion batteries. Nano Energy, 2018, 45, 273-279.	16.0	54
148	Unprecedented Electromagnetic Interference Shielding from Three-Dimensional Bi-continuous Nanoporous Graphene. Matter, 2019, 1, 1077-1087.	10.0	53
149	3D Continuously Porous Graphene for Energy Applications. Advanced Materials, 2022, 34, e2108750.	21.0	53
150	Ultrahigh capacitance of nanoporous metal enhanced conductive polymer pseudocapacitors. Journal of Power Sources, 2013, 225, 304-310.	7.8	52
151	Hierarchical nanoporosity enhanced reversible capacity of bicontinuous nanoporous metal based Li-O2 battery. Scientific Reports, 2016, 6, 33466.	3.3	52
152	Extraordinary Supercapacitor Performance of a Multicomponent and Mixedâ€Valence Oxyhydroxide. Angewandte Chemie - International Edition, 2015, 54, 8100-8104.	13.8	50
153	Dislocation-mediated shear amorphization in boron carbide. Science Advances, 2021, 7, .	10.3	49
154	Hierarchical nanoporous metal/metal-oxide composite by dealloying metallic glass for high-performance energy storage. Corrosion Science, 2015, 96, 196-202.	6.6	48
155	3D Bicontinuous Nanoporous Reduced Graphene Oxide for Highly Sensitive Photodetectors. Advanced Functional Materials, 2016, 26, 1271-1277.	14.9	48
156	Free-standing nanoporous gold for direct plasmon enhanced electro-oxidation of alcohol molecules. Nano Energy, 2019, 56, 286-293.	16.0	48
157	Nanoindentation characterization of deformation and failure of aluminum oxynitride. Acta Materialia, 2011, 59, 1671-1679.	7.9	47
158	Shear amorphization of boron suboxide. Scripta Materialia, 2014, 76, 9-12.	5.2	47
159	Electric Properties of Dirac Fermions Captured into 3D Nanoporous Graphene Networks. Advanced Materials, 2016, 28, 10304-10310.	21.0	47
160	Operando observations of RuO2 catalyzed Li2O2 formation and decomposition in a Li-O2 micro-battery. Nano Energy, 2018, 47, 427-433.	16.0	47
161	Dealloying Kinetics of AgAu Nanoparticles by <i>In Situ</i> Liquid-Cell Scanning Transmission Electron Microscopy. Nano Letters, 2020, 20, 1944-1951.	9.1	47
162	Van der Waals interfacial reconstruction in monolayer transition-metal dichalcogenides and gold heterojunctions. Nature Communications, 2020, 11, 1011.	12.8	47

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163	A nanoporous nickel catalyst for selective hydrogenation of carbonates into formic acid in water. Green Chemistry, 2017, 19, 716-721.	9.0	46
164	Atomic origins of high electrochemical CO ₂ reduction efficiency on nanoporous gold. Nanoscale, 2018, 10, 8372-8376.	5.6	46
165	Structure Reâ€determination and Superconductivity Observation of Bulk 1T MoS ₂ . Angewandte Chemie, 2018, 130, 1246-1249.	2.0	46
166	Crystalline Liquid and Rubber-Like Behavior in Cu Nanowires. Nano Letters, 2013, 13, 3812-3816.	9.1	45
167	Nanoporous metal/oxide hybrid materials for rechargeable lithium–oxygen batteries. Journal of Materials Chemistry A, 2015, 3, 3620-3626.	10.3	45
168	Vapor phase dealloying: A versatile approach for fabricating 3D porous materials. Acta Materialia, 2019, 163, 161-172.	7.9	45
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