Anmin Liu

List of Publications by Year
in descending order

109 papers	3,666 citations	172386 29 h-index	149623 56 g-index
110 all docs	110 docs citations	110 times ranked	3930 citing authors

#	Article	IF	Citations
1	Recent Progress in MXene-Based Materials for Metal-Sulfur and Metal-Air Batteries: Potential High-Performance Electrodes. Electrochemical Energy Reviews, 2022, 5, 112-144.	13.1	99
2	Sulfur contributes to stable and efficient carbon-based perovskite solar cells. Journal of Colloid and Interface Science, 2022, 605, 54-59.	5.0	2
3	Double shelled hollow CoS2@MoS2@NiS2 polyhedron as advanced trifunctional electrocatalyst for zinc-air battery and self-powered overall water splitting. Journal of Colloid and Interface Science, 2022, 610, 653-662.	5.0	44
4	MXenes and their composites for lithium- and sodium-ion battery applications. , 2022, , 307-341.		0
5	DFT study of Xâ€site ion substitution doping of <scp> Cs ₂ PtX ₆ </scp> on itsÂstructural and electronic properties. International Journal of Energy Research, 2022, 46, 8471-8479.	2.2	11
6	Theoretical study of the solubility of Pt salts in ionic liquids and deep eutectic solvents. Ionics, 2022, 28, 1985-1997.	1.2	0
7	Ru and Fe Alloying on a Twoâ€Dimensional MXene Support for Enhanced Electrochemical Synthesis of Ammonia. ChemCatChem, 2022, 14, .	1.8	10
8	Template synthesis of molybdenum-doped NiFe-layered double hydroxide nanotube as high efficiency electrocatalyst for oxygen evolution reaction. Materials Today Sustainability, 2022, 17, 100101.	1.9	8
9	Twoâ€Dimensional MXene Supported Bismuth for Efficient Electrocatalytic Nitrogen Reduction. ChemCatChem, 2022, 14, .	1.8	10
10	Synthesis of one-dimensional vanadium-doped CoS/Co9S8 heterojunctions as bifunctional electrocatalysts for zinc-air battery. Materials Today Energy, 2022, 25, 100968.	2.5	8
11	Highly efficient and stable perovskite solar cells induced by novel bulk organosulfur ammonium. Materials Today Energy, 2022, 26, 101004.	2.5	7
12	Organic/inorganic hybrid quaternary ionogel electrolyte with low lithium-ion association and uniform lithium flux for lithium secondary batteries. Electrochimica Acta, 2022, 416, 140292.	2.6	7
13	Self-assembly synthesis of Ni-decorated Nb2C MXene as an efficient and stable catalyst towards electrochemical nitrogen reduction. Ceramics International, 2022, 48, 20599-20604.	2.3	10
14	Oneâ€Dimensional Coâ€Carbonate Hydroxide@Niâ€MOFs Composite with Super Uniform Coreâ€“Shell Heterostructure for Ultrahigh Rate Performance Supercapacitor Electrode. Small, 2022, 18, e2200656.	5.2	17
15	Oxygen vacancy enabled fabrication of dual-atom Mn/Co catalysts for high-performance lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2022, 10, 11702-11711.	5.2	24
16	Peanut shells-derived biochars as adsorbents for the pipette-tip solid-phase extraction of endocrine-disrupting phenols in water, milk and beverage. Journal of Chromatography A, 2022, 1673, 463101.	1.8	16
17	Cascaded band gap design for highly efficient electron transport layer-free perovskite solar cells. Chemical Communications, 2022, 58, 6749-6752.	2.2	4
18	Mechanism of oxygen reduction reaction on Ni/CNTs and Ni/X-CNTs (X=B, N, O) catalysts: a theoretical study. Theoretical Chemistry Accounts, 2022, 141, .	0.5	0

#	Article	IF	Citations
19	Feâ€based catalysts for nitrogen reduction toward ammonia electrosynthesis under ambient conditions. SusMat, 2022, 2, 214-242.	7.8	35
20	DFT practice in MXene-based materials for electrocatalysis and energy storage: From basics to applications. Ceramics International, 2022, 48, 27217-27239.	2.3	8
21	Investigation of the interaction between graphene and fullerene C70: a molecular dynamics simulation. Indian Journal of Physics, 2021, 95, 851-856.	0.9	1
22	Cobalt induced growth of hollow MOF spheres for high performance supercapacitors. Materials Chemistry Frontiers, 2021, 5, 482-491.	3.2	60
23	DFT study of the defective carbon materials with vacancy and heteroatom as catalyst for NRR. Applied Surface Science, 2021, 536, 147851.	3.1	22
24	DMH and NAâ€“based cyanide-free silver electroplating bath: a promising alternative to cyanide ones in microelectronics. Ionics, 2021, 27, 417-422.	1.2	9
25	Investigation on the interfacial behavior of polyorganic inhibitors on a metal surface by DFT study and MD simulation. Applied Surface Science, 2021, 541, 148570.	3.1	25
26	Density functional theory study of nitrogen-doped graphene as a high-performance electrocatalyst for CO2RR. Applied Surface Science, 2021, 540, 148319.	3.1	32
27	Electrocatalytic Synthesis of Ammonia Using a 2D Ti₃C₂ MXene Loaded with Copper Nanoparticles. ChemPlusChem, 2021, 86, 166-170.	1.3	23
28	Theoretical study of the influence of doped oxygen group elements on the properties of organic semiconductors. Nanoscale Advances, 2021, 3, 3100-3106.	2.2	0
29	A peanut shell-derived economical and eco-friendly biochar catalyst for electrochemical ammonia synthesis under ambient conditions: combined experimental and theoretical study. Catalysis Science and Technology, 2021, 11, 1526-1536.	2.1	8
30	Theoretical and experimental study of the influence of PEG and PEI on copper electrodeposition. New Journal of Chemistry, 2021, 45, 19655-19659.	1.4	3
31	Investigation of the interfacial behavior of organics on sulfide semiconductor surfaces by quantum chemical calculations and molecular dynamics simulations. New Journal of Chemistry, 2021, 45, 19321-19328.	1.4	0
32	Theoretical study of the influence of doped niobium on the electronic properties of CsPbBr3. Nanoscale Advances, 2021, 3, 1910-1916.	2.2	1
33	FeS encapsulated hierarchical porous S, N-dual-doped carbon for oxygen reduction reaction facilitation in Znâ€“air batteries. Sustainable Energy and Fuels, 2021, 5, 2695-2703.	2.5	17
34	Recent progress in biomass-derived carbon materials used for secondary batteries. Sustainable Energy and Fuels, 2021, 5, 3017-3038.	2.5	36
35	Reviewâ€”Current Progress of Non-Precious Metal for ORR Based Electrocatalysts Used for Fuel Cells. Journal of the Electrochemical Society, 2021, 168, 044521.	1.3	15
36	Formation of Multipleâ€Helical Coreâ€Shell Structure from Polyphenyl and Boron Nitride Nanotube. Advanced Theory and Simulations, 2021, 4, 2100078.	1.3	1

#	Article	IF	Citations
37	<scp> CO ₂ </scp> electroreduction by <scp>AuCu</scp> bimetallic clusters: A first principles study. International Journal of Energy Research, 2021, 45, 18684-18694.	2.2	9
38	Design of Oxygenâ€doped Co₃S₄ Hollow Nanosheets by Suppressed Sulfurization for Supercapacitors. ChemElectroChem, 2021, 8, 3629-3636.	1.7	17
39	From 1D to 2D: dopamine constructed 2D NiCo-hydroxide nanosheets/graphene composites for high-performance supercapacitors. Sustainable Energy and Fuels, 2021, 5, 2373-2381.	2.5	5
40	Theoretical study of the oxygen reduction reaction on Niâ€Nâ€C and Coâ€Nâ€C catalysts derived from ZIF â€8. International Journal of Energy Research, 2021, 45, 8857-8870.	2.2	2
41	Recent progress in metal sulfide-based electron transport layers in perovskite solar cells. Nanoscale, 2021, 13, 17272-17289.	2.8	10
42	N-Doped Hierarchically Porous CNT@C Membranes for Accelerating Polysulfide Redox Conversion for High-Energy Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2021, 13, 2521-2529.	4.0	20
43	A two-dimensional MXene-supported metalâ€“organic framework for highly selective ambient electrocatalytic nitrogen reduction. Nanoscale, 2021, 13, 2843-2848.	2.8	81
44	2D heterostructure comprised of Ni3S2/d-Ti3C2 supported on Ni foam as binder-free electrode for hybrid supercapacitor. Journal of Alloys and Compounds, 2020, 814, 152271.	2.8	59
45	Theoretical investigation of methanol oxidation on Pt and PtNi catalysts. Ionics, 2020, 26, 1325-1336.	1.2	9
46	Energy- and cost-efficient NaCl-assisted synthesis of MAX-phase Ti3AlC2 at lower temperature. Ceramics International, 2020, 46, 6934-6939.	2.3	41
47	Current progress of Pt and Pt-based electrocatalysts used for fuel cells. Sustainable Energy and Fuels, 2020, 4, 15-30.	2.5	375
48	Polymer electrolyte with dual functional groups designed via theoretical calculation for all-solid-state lithium batteries. Journal of Power Sources, 2020, 450, 227614.	4.0	22
49	Atomically dispersed Mâ€“Nâ€“C catalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2020, 8, 23187-23201.	5.2	109
50	Current progress and performance improvement of Pt/C catalysts for fuel cells. Journal of Materials Chemistry A, 2020, 8, 24284-24306.	5.2	137
51	A theoretical study of atomically dispersed MN₄/C (M = Fe or Mn) as a high-activity catalyst for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2020, 22, 28297-28303.	1.3	34
52	DFT study of Ru/graphene as high-performance electrocatalyst for NRR. Inorganic Chemistry Communication, 2020, 120, 108169.	1.8	11
53	Two-dimensional CuAg/Ti₃C₂ catalyst for electrochemical synthesis of ammonia under ambient conditions: a combined experimental and theoretical study. Sustainable Energy and Fuels, 2020, 4, 5061-5071.	2.5	26
54	Novel Lead-Free Material Cs₂PtI₆ with Narrow Bandgap and Ultra-Stability for Its Photovoltaic Application. ACS Applied Materials & Interfaces, 2020, 12, 44700-44709.	4.0	35

#	Article	IF	Citations
55	Research on the Interfacial Interaction between Polyacetylene and Silver Nanowire. Macromolecular Theory and Simulations, 2020, 29, 2000034.	0.6	1
56	Formation of coreâ€“shell structure from carbon nanotube and gold nanowire: a molecular dynamic simulation. Journal of Dispersion Science and Technology, 2020, , 1-7.	1.3	0
57	Metalâ€Organicâ€Frameworkâ€Derived Cobaltâ€Doped Carbon Material for Electrochemical Ammonia Synthesis under Ambient Conditions. ChemElectroChem, 2020, 7, 4900-4905.	1.7	12
58	Shape-controlled synthesis of Ni-based metal-organic frameworks with albizia flower-like spheres@nanosheets structure for high performance supercapacitors. Journal of Colloid and Interface Science, 2020, 575, 347-355.	5.0	51
59	The reaction pathway of the CO₂RR to low-carbon alcohols: a theoretical study. New Journal of Chemistry, 2020, 44, 8971-8976.	1.4	14
60	Formation of polynylon12/carbon nanotubes composites through self-coiling process: a molecular dynamic simulation. Journal of Nanoparticle Research, 2020, 22, 1.	0.8	3
61	Significantly Enhanced V-oc and Efficiency in Perovskite Solar Cells through Composition Adjustment of SnS₂ Electron Transport Layers. ACS Sustainable Chemistry and Engineering, 2020, 8, 9250-9256.	3.2	18
62	Intermediate-Controlled Interfacial Engineering for Stable and Highly Efficient Carbon-Based PSCs. ACS Applied Materials & Interfaces, 2020, 12, 34479-34486.	4.0	9
63	Recent Progress in MXeneâ€Based Materials: Potential Highâ€Performance Electrocatalysts. Advanced Functional Materials, 2020, 30, 2003437.	7.8	181
64	A two-dimensional Ru@MXene catalyst for highly selective ambient electrocatalytic nitrogen reduction. Nanoscale, 2020, 12, 10933-10938.	2.8	100
65	Co loaded on graphene with interfacial structure as high performance catalyst for 4eâ¯ ORR: a DFT study. Ionics, 2020, 26, 3483-3490.	1.2	9
66	Influence of Composite Additive on Gold Electrodeposition in DMH-Based Electrolyte: Combined Experimental and Theoretical Study. Journal of the Electrochemical Society, 2020, 167, 022506.	1.3	6
67	Facile synthesis of ZnS decorated N, S co-doped carbon polyhedron as high efficiency oxygen reduction reaction catalyst for Zn-air battery. Applied Surface Science, 2020, 509, 145367.	3.1	22
68	Current progress in electrocatalytic carbon dioxide reduction to fuels on heterogeneous catalysts. Journal of Materials Chemistry A, 2020, 8, 3541-3562.	5.2	204
69	Current Progress of Electrocatalysts for Ammonia Synthesis Through Electrochemical Nitrogen Reduction Under Ambient Conditions. ChemSusChem, 2020, 13, 3766-3788.	3.6	67
70	Semi closed coordination structure polymer electrolyte combined in situ interface engineering for lithium batteries. Chemical Engineering Journal, 2020, 394, 124847.	6.6	15
71	Preparation of AgCl photocatalyst by recovering silver from discarded cyanide-free silver electrodeposition bath: insightful investigation of quantum chemical calculations and experiment. Ionics, 2019, 25, 2419-2426.	1.2	4
72	A black phosphorus/Ti₃C₂ MXene nanocomposite for sodium-ion batteries: a combined experimental and theoretical study. Nanoscale, 2019, 11, 19862-19869.	2.8	57

#	Article	IF	Citations
73	Molecular dynamics simulations of single-walled carbon nanotubes and polymers. Surface Innovations, 2019, 7, 284-289.	1.4	4
74	Niobium Incorporation into CsPbI₂Br for Stable and Efficient All-Inorganic Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 19994-20003.	4.0	106
75	Palladium nanoparticles hosted in graphene-based 2-dimension polyelectrolyte brushes for enhanced hydrogenation selectivity of o-chloronitrobenzene. Applied Surface Science, 2019, 485, 230-237.	3.1	15
76	Electrostatic self-assembly of 2D delaminated MXene (Ti3C2) onto Ni foam with superior electrochemical performance for supercapacitor. Electrochimica Acta, 2019, 305, 164-174.	2.6	123
77	Current progress in interfacial engineering of carbon-based perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 8690-8699.	5.2	84
78	Ultrathin 2D nitrogen-doped carbon nanosheets for high performance supercapacitors: insight into the effects of graphene oxides. Nanoscale, 2019, 11, 8588-8596.	2.8	49
79	Killing Two Birds with One Stone: A Highly Active Tubular Carbon Catalyst with Effective N Doping for Oxygen Reduction and Hydrogen Evolution Reactions. Catalysis Letters, 2019, 149, 486-495.	1.4	12
80	A facile approach for the fabrication of loading-controlled Ag/C foam catalyst. Ionics, 2019, 25, 361-365.	1.2	0
81	Preparation of gold catalyst by electrodeposition in [BMIm][TfO] ionic liquid electrolyte: an insightful study of theoretical calculations and experiments. Ionics, 2019, 25, 1407-1412.	1.2	2
82	Theoretical and experimental studies of the influence of microstructure on anti-tarnish ability of cyanide-free silver deposit. Ionics, 2019, 25, 849-857.	1.2	7
83	Molecular dynamics study of coreâ€“shell structure from carbon nanotube and platinum nanowire. Molecular Simulation, 2018, 44, 648-652.	0.9	4
84	3D self-supported hierarchical core/shell structured MnCo₂O₄@CoS arrays for high-energy supercapacitors. Journal of Materials Chemistry A, 2018, 6, 1822-1831.	5.2	141
85	In-Situ Grown Ni(OH)₂Nanosheets on Ni Foam for Hybrid Supercapacitors with High Electrochemical Performance. Journal of the Electrochemical Society, 2018, 165, A882-A890.	1.3	17
86	Formation of binocular-like structure using graphene nanosheet and carbon nanotubes. Molecular Simulation, 2018, 44, 200-205.	0.9	10
87	Theoretical and Experimental Studies of the Prevention Mechanism of Organic Inhibitors on Silver Anti-Tarnish. Journal of the Electrochemical Society, 2018, 165, H725-H732.	1.3	5
88	Graphene oxide template-directed synthesis of porous carbon nanosheets from expired wheat flour for high-performance supercapacitors. New Journal of Chemistry, 2018, 42, 11689-11696.	1.4	10
89	Formation of core-shell structure from carbon nanotube and silver nanowire. Journal of Alloys and Compounds, 2018, 765, 140-145.	2.8	16
90	Inâ€…Situ Growth of a Featherâ€like MnO₂ Nanostructure on Carbon Paper for Highâ€Performance Rechargeable Sodiumâ€Ion Batteries. ChemElectroChem, 2018, 5, 3266-3272.	1.7	16

#	Article	IF	Citations
91	Study on the synergistic lithium storage performance of Sn/graphene nanocomposites via quantum chemical calculations and experiments. Applied Surface Science, 2017, 416, 751-756.	3.1	21
92	Interfacial interaction between polypropylene and nanotube: A molecular dynamics simulation. Journal of Molecular Structure, 2017, 1144, 260-264.	1.8	20
93	Preparation of SnS/graphene nanocomposites from Sn/graphene for superior reversible lithium storage. Materials Letters, 2017, 209, 338-341.	1.3	24
94	A composite additive used for a new cyanide-free silver plating bath (II): an insight by electrochemical measurements and quantum chemical calculation. New Journal of Chemistry, 2017, 41, 11104-11112.	1.4	15
95	A Mixture of Ionic Liquid and Ethanol Used for Galvanostatic Electrodeposition of CuInxGa1-xSe2Thin Films. Journal of the Electrochemical Society, 2017, 164, D969-D977.	1.3	4
96	A Hierarchical Porous C@LiFePO₄/Carbon Nanotubes Microsphere Composite for Highâ€Rate Lithiumâ€Ion Batteries: Combined Experimental and Theoretical Study. Advanced Energy Materials, 2016, 6, 1600426.	10.2	194
97	Communicationâ€”Octahedral Indium Particles Synthesized by Electrodeposition from 1-Butyl-3-methylimidazolium Trifluoromethanesulfonate Ionic Liquid. Journal of the Electrochemical Society, 2016, 163, D707-D709.	1.3	2
98	Computational Chemistry and Electrochemical Mechanism Studies of Auxiliary Complexing Agents Used for Zn-Ni Electroplating in the 5-5'-Diethylhydantoin Electrolyte. Journal of the Electrochemical Society, 2016, 163, D764-D773.	1.3	5
99	Complexing agent study for environmentally friendly silver electrodeposition(<scp>ii</scp>): electrochemical behavior of silver complex. RSC Advances, 2016, 6, 7348-7355.	1.7	23
100	Electrochemical Study of the Diffusion and Nucleation of Gallium(III) in [Bmim][TfO] Ionic Liquid. Electrochimica Acta, 2016, 190, 1066-1077.	2.6	19
101	Experimental and theoretical studies of DMH as a complexing agent for a cyanide-free gold electroplating electrolyte. RSC Advances, 2015, 5, 64997-65004.	1.7	48
102	Computational Chemistry and Electrochemical Studies of Adsorption Behavior of Organic Additives during Gold Deposition in Cyanide-free Electrolytes. Electrochimica Acta, 2015, 176, 10-17.	2.6	27
103	Desired crystal oriented LiFePO₄nanoplatelets in situ anchored on a graphene cross-linked conductive network for fast lithium storage. Nanoscale, 2015, 7, 8819-8828.	2.8	107
104	A composite additive used for an excellent new cyanide-free silver plating bath. New Journal of Chemistry, 2015, 39, 2409-2412.	1.4	20
105	Role of polyethyleneimine as an additive in cyanide-free electrolytes for gold electrodeposition. RSC Advances, 2015, 5, 64806-64813.	1.7	28
106	Electrodeposit copper from alkaline cyanide-free baths containing 5,5â€²-dimethylhydantoin and citrate as complexing agents. RSC Advances, 2014, 4, 38012-38026.	1.7	26
107	Theoretical and experimental studies of the corrosion inhibition effect of nitrotetrazolium blue chloride on copper in 0.1 M H₂SO₄. RSC Advances, 2014, 4, 40606-40616.	1.7	36
108	Complexing agent study via computational chemistry for environmentally friendly silver electrodeposition and the application of a silver deposit. RSC Advances, 2014, 4, 40930-40940.	1.7	43

#	Article	IF	Citations
109	A Combined Theoretical and Experimental Study for Silver Electroplating. Scientific Reports, 2014, 4, 3837.	1.6	35