Jianping Lai

List of Publications by Citations

100 papers	3,364 citations	32 h-index	56 g-index
111 ext. papers	4,563 ext. citations	12.1 avg, IF	5.83 L-index

#	Paper	IF	Citations
100	Unprecedented metal-free 3D porous carbonaceous electrodes for full water splitting. *Energy and Environmental Science*, **2016**, 9, 1210-1214	35.4	237
99	Rational Design of MXene/1T-2H MoS2-C Nanohybrids for High-Performance Lithium□Sulfur Batteries. *Advanced Functional Materials*, **2018**, 28, 1707578	15.6	220
98	Strongly Coupled Nickel-Cobalt Nitrides/Carbon Hybrid Nanocages with Pt-Like Activity for Hydrogen Evolution Catalysis. *Advanced Materials*, **2019**, 31, e1805541	24	184
97	Tannic Acid Induced Self-Assembly of Three-Dimensional Graphene with Good Adsorption and Antibacterial Properties. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 1404-1413	8.3	168
96	Strengthening reactive metal-support interaction to stabilize high-density Pt single atoms on electron-deficient g-C3N4 for boosting photocatalytic H2 production. *Nano Energy*, **2019**, 56, 127-137	17.1	155
95	Solvothermal synthesis of metal nanocrystals and their applications. *Nano Today*, **2015**, 10, 240-267	17.9	149
94	MXene/Si@SiO @C Layer-by-Layer Superstructure with Autoadjustable Function for Superior Stable Lithium Storage. *ACS Nano*, **2019**, 13, 2167-2175	16.7	127
93	Ultrasensitive Glutathione Detection Based on Lucigenin Cathodic Electrochemiluminescence in the Presence of MnO2 Nanosheets. *Analytical Chemistry*, **2016**, 88, 7654-9	7.8	116
92	Ultrathin Visible-Light-Driven Mo Incorporating In O -ZnIn Se Z-Scheme Nanosheet Photocatalysts. *Advanced Materials*, **2019**, 31, e1807226	24	115
91	Designed multimetallic Pd nanosponges with enhanced electrocatalytic activity for ethylene glycol and glycerol oxidation. *Energy and Environmental Science*, **2016**, 9, 3097-3102	35.4	88
90	Fast site-to-site electron transfer of high-entropy alloy nanocatalyst driving redox electrocatalysis. *Nature Communications*, **2020**, 11, 5437	17.4	86
89	Tannic acid functionalized graphene hydrogel for entrapping gold nanoparticles with high catalytic performance toward dye reduction. *Journal of Hazardous Materials*, **2015**, 300, 615-623	12.8	80
88	3D Porous Carbonaceous Electrodes for Electrocatalytic Applications. *Joule*, **2018**, 2, 76-93	27.8	72
87	Synergetic interaction between neighboring platinum and ruthenium monomers boosts CO oxidation. *Chemical Science*, **2019**, 10, 5898-5905	9.4	71
86	Synthesis of convex hexoctahedral palladium@gold core-shell nanocrystals with {431} high-index facets with remarkable electrochemiluminescence activities. *ACS Nano*, **2014**, 8, 5953-8	16.7	65
85	Efficient Bifunctional Polyalcohol Oxidation and Oxygen Reduction Electrocatalysts Enabled by Ultrathin PtPdM (M = Ni, Fe, Co) Nanosheets. *Advanced Energy Materials*, **2019**, 9, 1800684	21.8	64
84	Recent Advances in the Synthesis and Electrocatalytic Applications of Platinum-Based Bimetallic Alloy Nanostructures. *ChemCatChem*, **2015**, 7, 3206-3228	5.2	58

83	Design of Ultrathin Pt-Based Multimetallic Nanostructures for Efficient Oxygen Reduction Electrocatalysis. *Small*, **2017**, 13, 1702156	11	57
82	Barrier-free Interface Electron Transfer on PtFe-Fe2C Janus-like Nanoparticles Boosts Oxygen Catalysis. *CheM*, **2018**, 4, 1153-1166	16.2	56
81	Facile surfactant-free synthesis and characterization of Fe3O4@3-aminophenol□formaldehyde core□shell magnetic microspheres. *Journal of Materials Chemistry A*, **2015**, 3, 519-524	13	55
80	High-performance nitrogen electroreduction at low overpotential by introducing Pb to Pd nanosponges. *Applied Catalysis B: Environmental*, **2020**, 265, 118481	21.8	44
79	Advanced Ultrathin RuPdM (M = Ni, Co, Fe) Nanosheets Electrocatalyst Boosts Hydrogen Evolution. *ACS Central Science*, **2019**, 5, 1991-1997	16.8	44
78	Gold nanoclusters: synthetic strategies and recent advances in fluorescent sensing. *Materials Today Nano*, **2018**, 3, 9-27	9.7	43
77	Amorphous FeCoPOx nanowires coupled to g-C3N4 nanosheets with enhanced interfacial electronic transfer for boosting photocatalytic hydrogen production. *Applied Catalysis B: Environmental*, **2018**, 238, 161-167	21.8	41
76	Solvent-free microwave synthesis of ultra-small Ru-MoC@CNT with strong metal-support interaction for industrial hydrogen evolution. *Nature Communications*, **2021**, 12, 4018	17.4	40
75	Facile Synthesis of Porous PtM (M=Cu, Ni) Nanowires and Their Application as Efficient Electrocatalysts for Methanol Electrooxidation. *ChemCatChem*, **2014**, 6, 2253-2257	5.2	36
74	Chemically coupled NiCoS/C nanocages as efficient electrocatalysts for nitrogen reduction reactions. *Journal of Materials Chemistry A*, **2020**, 8, 543-547	13	36
73	Designing noble metal single-atom-loaded two-dimension photocatalyst for N2 and CO2 reduction via anion vacancy engineering. *Science Bulletin*, **2020**, 65, 720-725	10.6	36
72	Face-to-face engineering of ultrathin Pd nanosheets on amorphous carbon nitride for efficient photocatalytic hydrogen production. *Science China Materials*, **2019**, 62, 351-358	7.1	35
71	Multi-Site Electrocatalysts Boost pH-Universal Nitrogen Reduction by High-Entropy Alloys. *Advanced Functional Materials*, **2021**, 31, 2006939	15.6	35
70	Surface oxygen-mediated ultrathin PtRuM (Ni, Fe, and Co) nanowires boosting methanol oxidation reaction. *Journal of Materials Chemistry A*, **2020**, 8, 2323-2330	13	32
69	Ni1□CoxSe2?C/ZnIn2S4 Hybrid Nanocages with Strong 2D/2D Hetero-Interface Interaction Enable Efficient H2-Releasing Photocatalysis. *Advanced Functional Materials*, **2021**, 31, 2100923	15.6	32
68	Stainless steel electrode for simultaneous stripping analysis of Cd(II), Pb(II), Cu(II) and Hg(II). *Talanta*, **2019**, 191, 485-490	6.2	32
67	Enhanced bifunctional fuel cell catalysis via Pd/PtCu core/shell nanoplates. *Chemical Communications*, **2018**, 54, 1315-1318	5.8	32
66	Surfactant-free synthesis of three-dimensional nitrogen-doped hierarchically porous carbon and its application as an electrode modification material for simultaneous sensing of ascorbic acid, dopamine and uric acid. *Analyst, The*, **2017**, 142, 478-484	5	27

65	Wireless electrochemiluminescence with disposable minidevice. *Analytical Chemistry*, **2014**, 86, 8927-31	7.8	26
64	The facile oil-phase synthesis of a multi-site synergistic high-entropy alloy to promote the alkaline hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2021**, 9, 889-893	13	26
63	Thiourea dioxide as a unique eco-friendly coreactant for luminol chemiluminescence in the sensitive detection of luminol, thiourea dioxide and cobalt ions. *Chemical Communications*, **2015**, 51, 1620-3	5.8	25
62	Exposure of Definite Palladium Facets Boosts Electrocatalytic Nitrogen Fixation at Low Overpotential. *Advanced Energy Materials*, **2020**, 10, 2002131	21.8	25
61	3D PtFe Clusters with Cube-in-Cube Structure Enhance Oxygen Reduction Catalysis and Electrochemical Sensing. *Small Methods*, **2018**, 2, 1800073	12.8	25
60	Visible light-driven methanol dehydrogenation and conversion into 1,1-dimethoxymethane over a non-noble metal photocatalyst under acidic conditions. *Catalysis Science and Technology*, **2018**, 8, 3372-3378	5.5	24
59	Hierarchical concave layered triangular PtCu alloy nanostructures: rational integration of dendritic nanostructures for efficient formic acid electrooxidation. *Nanoscale*, **2018**, 10, 9369-9375	7.7	22
58	A Platinum Highly Concave Cube with one Leg on each Vertex as an Advanced Nanocatalyst for Electrocatalytic Applications. *ChemCatChem*, **2015**, 7, 1064-1069	5.2	22
57	Autocatalysis Synthesis of Poly(benzoxazine-co-resol)-Based Polymer and Carbon Spheres. *Macromolecules*, **2018**, 51, 5494-5500	5.5	21
56	Concave and duck web-like platinum nanopentagons with enhanced electrocatalytic properties for formic acid oxidation. *Journal of Materials Chemistry A*, **2016**, 4, 807-812	13	20
55	PtCu□ highly excavated octahedral nanostructures built with nanodendrites for superior alcohol electrooxidation. *Journal of Materials Chemistry A*, **2019**, 7, 8568-8572	13	19
54	One-pot synthesis of gold nanorods using binary surfactant systems with improved monodispersity, dimensional tunability and plasmon resonance scattering properties. *Nanotechnology*, **2014**, 25, 125601	3.4	19
53	Bipolar Electrochemical Approach with a Thin Layer of Supporting Electrolyte towards the Growth of Self-Organizing TiO2 Nanotubes. *ChemElectroChem*, **2016**, 3, 360-365	4.3	19
52	Hydroxylamine-O-sulfonic acid as an efficient coreactant for luminol chemiluminescence for selective and sensitive detection. *Chemical Communications*, **2015**, 51, 6536-9	5.8	17
51	Multi-Sites Electrocatalysis in High-Entropy Alloys. *Advanced Functional Materials*, **2021**, 31, 2106715	15.6	17
50	Nanoparticle tracking analysis of gold nanomaterials stabilized by various capping agents. *RSC Advances*, **2014**, 4, 17114	3.7	16
49	Highly Excavated Octahedral Nanostructures Integrated from Ultrathin Mesoporous PtCu Nanosheets: Construction of Three-Dimensional Open Surfaces for Enhanced Electrocatalysis. *Small*, **2019**, 15, e1804407	11	15
48	Sensitive and selective colorimetric detection of Hg(2+) by a Hg(2+) induced dual signal amplification strategy based on cascade-type catalytic reactions. *Analyst, The*, **2016**, 141, 2362-6	5	14

47	The rational adjusting of proton-feeding by Pt-doped FeP/C hollow nanorod for promoting nitrogen reduction kinetics. *Applied Catalysis B: Environmental*, **2021**, 291, 120047	21.8	14
46	Modulating the oxophilic properties of inorganic nanomaterials for electrocatalysis of small carbonaceous molecules. *Nano Today*, **2019**, 29, 100802	17.9	13
45	Simple synthesis of nitrogen-doped porous carbon from Chinese steamed bread flour and its catalytic application for hydrogen evolution reaction. *Electrochimica Acta*, **2018**, 290, 30-37	6.7	11
44	Detection of ozone based on its striking inhibition of tris(1,10-phenanthroline)ruthenium(II)/glyoxal electrochemiluminescence. *Chemical Communications*, **2014**, 50, 8164-6	5.8	10
43	The twinned Pd nanocatalyst exhibits sustainable NRR electrocatalytic performance by promoting the desorption of NH3. *Journal of Materials Chemistry A*, **2021**, 9, 13483-13489	13	10
42	A facile and general preparation of high-performance noble-metal-based free-standing nanomembranes by a reagentless interfacial self-assembly strategy. *Nanoscale*, **2012**, 4, 6974-80	7.7	9
41	Significantly enhanced electrocatalytic N2 reduction to NH3 by surface selenization with multiple functions. *Journal of Materials Chemistry A*, **2020**, 8, 20331-20336	13	9
40	Efficient nitrogen reduction to ammonia by fluorine vacancies with a multi-step promoting effect. *Journal of Materials Chemistry A*, **2021**, 9, 894-899	13	9
39	New synthesis of gold nanocorals using a diazonium compound, and their application to an electrochemiluminescent assay of hydrogen peroxide. *Mikrochimica Acta*, **2014**, 181, 737-742	5.8	8
38	Hierarchical microsphere MOF arrays with ultralow Ir doping for efficient hydrogen evolution coupled with hydrazine oxidation in seawater. *Journal of Materials Chemistry A*, **2021**, 9, 27424-27433	13	8
37	Facile synthesis of monodisperse bulk boron- and nitrogen-doped carbon nano/microspheres. *Journal of Materials Chemistry A*, **2018**, 6, 23780-23786	13	8
36	Facet-controlled palladium nanocrystalline for enhanced nitrate reduction towards ammonia. *Journal of Colloid and Interface Science*, **2021**, 600, 620-628	9.3	8
35	Porous PdWM (M = Nb, Mo and Ta) Trimetallene for High C1 Selectivity in Alkaline Ethanol Oxidation Reaction.. *Advanced Science*, **2021**, e2103722	13.6	8
34	Aqueous Synthesis of Tunable Highly Photoluminescent CdTe Quantum Dots Using Rongalite and Bioimaging Application. *Chinese Journal of Analytical Chemistry*, **2015**, 43, e101-e107	1.6	7
33	One-Pot Seedless Aqueous Design of Metal Nanostructures for Energy Electrocatalytic Applications. *Electrochemical Energy Reviews*, **2018**, 1, 531-547	29.3	7
32	High-efficiency methanol oxidation electrocatalysts realized by ultrathin PtRuM-O (M = Ni, Fe, Co) nanosheets. *Chemical Communications*, **2020**, 56, 9028-9031	5.8	6
31	BiOCl/ultrathin polyaniline core/shell nanosheets with a sensitization mechanism for efficient visible-light-driven photocatalysis. *Science China Materials*, **2019**, 62, 95-102	7.1	6
30	Electrocatalytic Nitrogen Fixation on Metal Tellurides Boosted by Multiple Promoted-Synergetic Effects of Telluride. *Cell Reports Physical Science*, **2020**, 1, 100232	6.1	6

29	Superfast Synthesis of Densely Packed and Ultrafine Pt-Lanthanide@KB via Solvent-Free Microwave as Efficient Hydrogen Evolution Electrocatalysts. *Small*, **2021**, 17, e2102879	11	6
28	Coordination engineering of cobalt phthalocyanine by functionalized carbon nanotube for efficient and highly stable carbon dioxide reduction at high current density. *Nano Research*,1	10	5
27	High Valence M-Incorporated PdCu Nanoparticles (M = Ir, Rh, Ru) for Water Electrolysis in Alkaline Solution. *Nano Letters*, **2021**, 21, 5774-5781	11.5	5
26	Protecting the state of Cu clusters and nanoconfinement engineering over hollow mesoporous carbon spheres for electrocatalytical C-C coupling. *Applied Catalysis B: Environmental*, **2022**, 306, 121111	21.8	4
25	Rapid and large-scale synthesis of ultra-small immiscible alloy supported catalysts. *Applied Catalysis B: Environmental*, **2021**, 120916	21.8	4
24	Self-assembly of functionalized Echinops-like Rh porous nanostructure electrocatalysts for highly efficient seawater splitting. *Journal of Materials Chemistry C*, **2021**, 9, 8314-8322	7.1	4
23	The Synergistic Effect of Pyrrolic-N and Pyridinic-N with Pt Under Strong Metal-Support Interaction to Achieve High-Performance Alkaline Hydrogen Evolution. *Advanced Energy Materials*,2200110	21.8	4
22	Noble Metal (Pt, Rh, Pd, Ir) Doped Ru/CNT Ultra-Small Alloy for Acidic Hydrogen Evolution at High Current Density. *Small*, **2021**, e2104559	11	3
21	Scalable synthesis of ultra-small Ru2P@Ru/CNT for efficient seawater splitting. *Chinese Journal of Catalysis*, **2022**, 43, 1148-1155	11.3	3
20	Boric Acid-Based Dual Modulation Photoluminescent Glucose Sensor Using Thioglycolic Acid-Capped CdTe Quantum Dots. *Journal of Analysis and Testing*, **2017**, 1, 291-297	3.2	2
19	Systematic Engineering on Ni-Based Nanocatalysts Effectively Promote Hydrogen Evolution Reaction.. *Small*, **2022**, e2108072	11	2
18	Ordered Vacancies on the Body-Centered Cubic PdCu Nanocatalysts. *Nano Letters*, **2021**, 21, 9580-9586	11.5	2
17	Mixture Phases Engineering of PtFe Nanofoams for Efficient Hydrogen Evolution.. *Small*, **2022**, e2106947	11	2
16	One-pot synthesis of luminol–gallium nanoassemblies and their peroxidase-mimetic activity for colorimetric detection of pyrophosphate. *New Journal of Chemistry*, **2020**, 44, 21176-21182	3.6	2
15	Recent Advances on Electrocatalysis Using Pristinely Conductive Metal-Organic Frameworks and Covalent Organic Frameworks. *ChemElectroChem*, **2021**, 8, 2764-2777	4.3	2
14	High C1 selectivity in alkaline ethanol oxidation reaction over stable Lewis pairs of Pd-MxC@CNT (M = W, Mo and Cr). *Chemical Engineering Journal*, **2022**, 137178	14.7	2
13	Platinum Clusters Anchored Amorphous NiMo Hydroxide with Collaborative Electronic Transfer for Overall Water Splitting under High Current Density. *Advanced Materials Interfaces*,2102154	4.6	1
12	A simple, rapid and scalable synthesis approach for ultra-small size transition metal selenides with efficient water oxidation performance. *Journal of Materials Chemistry A*,	13	1

11	Rapid microwave synthesis of Ru-supported partially carbonized conductive metal-organic framework for efficient hydrogen evolution. *Chemical Engineering Journal*, **2021**, 431, 133247	14.7	1
10	High-entropy phosphate/C hybrid nanosheets for efficient acidic hydrogen evolution reaction. *Chemical Engineering Journal*, **2022**, 437, 135375	14.7	1
9	The self-complementary effect through strong orbital coupling in ultrathin high-entropy alloy nanowires boosting pH-universal multifunctional electrocatalysis. *Applied Catalysis B: Environmental*, **2022**, 121431	21.8	1
8	Engineering ordered vacancies and atomic arrangement over the intermetallic PdM/CNT (M = Pb, Sn, In) nanocatalysts for synergistically promoting electrocatalysis N2 fixation. *Applied Catalysis B: Environmental*, **2022**, 314, 121465	21.8	1
7	Interface engineering of metal nanomaterials enhance the electrocatalytic water splitting and fuel cell performance. *Electrochemical Science Advances*,e202100066		0
6	Constructing stable charge redistribution through strong metal-support interaction for overall water splitting in acidic solution. *Journal of Materials Chemistry A*,	13	0
5	A Platinum Highly Concave Cube with one Leg on each Vertex as an Advanced Nanocatalyst for Electrocatalytic Applications. *ChemCatChem*, **2015**, 7, 1033-1033	5.2	
4	Bipolar Electrochemical Approach with a Thin Layer of Supporting Electrolyte towards the Growth of Self-Organizing TiO2 Nanotubes. *ChemElectroChem*, **2016**, 3, 350-350	4.3	
3	Design of NiFe-based nanostructures for efficient oxygen evolution electrocatalysis. *Electrochemical Science Advances*,e2100052		
2	PdRu/CNTs synthesized by microwave-assisted method for high stable acidic oxygen evolution reaction. *Electrochemical Science Advances*,e202100111		
1	Superfast tellurizing synthesis of unconventional phase-controlled small Pd-Te nanoparticles. *Science China Materials*,1	7.1	