Jian-Bo Wu

List of Publications by Citations

121	7,904	41	88
papers	citations	h-index	g-index
123	9,706	11.8	6.39
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
121	Platinum-based oxygen reduction electrocatalysts. *Accounts of Chemical Research*, **2013**, 46, 1848-57	24.3	774
120	Solar-driven interfacial evaporation. *Nature Energy*, **2018**, 3, 1031-1041	62.3	715
119	Truncated octahedral Pt(3)Ni oxygen reduction reaction electrocatalysts. *Journal of the American Chemical Society*, **2010**, 132, 4984-5	16.4	459
118	Icosahedral platinum alloy nanocrystals with enhanced electrocatalytic activities. *Journal of the American Chemical Society*, **2012**, 134, 11880-3	16.4	445
117	Shape and composition-controlled platinum alloy nanocrystals using carbon monoxide as reducing agent. *Nano Letters*, **2011**, 11, 798-802	11.5	407
116	Surface strategies for catalytic CO reduction: from two-dimensional materials to nanoclusters to single atoms. *Chemical Society Reviews*, **2019**, 48, 5310-5349	58.5	365
115	Temperature effect and thermal impact in lithium-ion batteries: A review. *Progress in Natural Science: Materials International*, **2018**, 28, 653-666	3.6	282
114	Surface lattice-engineered bimetallic nanoparticles and their catalytic properties. *Chemical Society Reviews*, **2012**, 41, 8066-74	58.5	215
113	Bioinspired Multifunctional Paper-Based rGO Composites for Solar-Driven Clean Water Generation. *ACS Applied Materials & Interfaces*, **2016**, 8, 14628-36	9.5	187
112	Epitaxial Growth of Twinned Au-Pt Core-Shell Star-Shaped Decahedra as Highly Durable Electrocatalysts. *Nano Letters*, **2015**, 15, 7808-15	11.5	168
111	Coupling Interface Constructions of MoS /Fe Ni S Heterostructures for Efficient Electrochemical Water Splitting. *Advanced Materials*, **2018**, 30, e1803151	24	163
110	Bioinspired Bifunctional Membrane for Efficient Clean Water Generation. *ACS Applied Materials & Interfaces*, **2016**, 8, 772-9	9.5	152
109	Highly uniform platinum icosahedra made by hot injection-assisted GRAILS method. *Nano Letters*, **2013**, 13, 2870-4	11.5	150
108	Synthesis and Oxygen Reduction Electrocatalytic Property of Platinum Hollow and Platinum-on-Silver Nanoparticles *Chemistry of Materials*, **2010**, 22, 1098-1106	9.6	138
107	Paper-based membranes on silicone floaters for efficient and fast solar-driven interfacial evaporation under one sun. *Journal of Materials Chemistry A*, **2017**, 5, 16359-16368	13	127
106	Electrochemical synthesis and catalytic property of sub-10 nm platinum cubic nanoboxes. *Nano Letters*, **2010**, 10, 1492-6	11.5	123
105	Metal-Level Thermally Conductive yet Soft Graphene Thermal Interface Materials. *ACS Nano*, **2019**, 13, 11561-11571	16.7	117

104	The impact of surface chemistry on the performance of localized solar-driven evaporation system. *Scientific Reports*, **2015**, 5, 13600	4.9	117
103	Efficient Solar-Thermal Energy Harvest Driven by Interfacial Plasmonic Heating-Assisted Evaporation. *ACS Applied Materials & Interfaces*, **2016**, 8, 23412-8	9.5	109
102	Dynamic tuning of optical absorbers for accelerated solar-thermal energy storage. *Nature Communications*, **2017**, 8, 1478	17.4	101
101	A Paper-Like Inorganic Thermal Interface Material Composed of Hierarchically Structured Graphene/Silicon Carbide Nanorods. *ACS Nano*, **2019**, 13, 1547-1554	16.7	93
100	Growth of Au on Pt icosahedral nanoparticles revealed by low-dose in situ TEM. *Nano Letters*, **2015**, 15, 2711-5	11.5	90
99	In Situ Vertical Growth of FeNi Layered Double-Hydroxide Arrays on FeNi Alloy Foil: Interfacial Layer Enhanced Electrocatalyst with Small Overpotential for Oxygen Evolution Reaction. *ACS Energy Letters*, **2018**, 3, 2357-2365	20.1	90
98	In Situ Environmental TEM in Imaging Gas and Liquid Phase Chemical Reactions for Materials Research. *Advanced Materials*, **2016**, 28, 9686-9712	24	88
97	Epitaxial Growth of Multimetallic Pd@PtM (M = Ni, Rh, Ru) Core-Shell Nanoplates Realized by in Situ-Produced CO from Interfacial Catalytic Reactions. *Nano Letters*, **2016**, 16, 7999-8004	11.5	80
96	Tuning Surface Structure and Strain in Pd-Pt Core-Shell Nanocrystals for Enhanced Electrocatalytic Oxygen Reduction. *Small*, **2017**, 13, 1603423	11	76
95	Platinum-Based Nanowires as Active Catalysts toward Oxygen Reduction Reaction: In Situ Observation of Surface-Diffusion-Assisted, Solid-State Oriented Attachment. *Advanced Materials*, **2017**, 29, 1703460	24	74
94	Magnetically-accelerated large-capacity solar-thermal energy storage within high-temperature phase-change materials. *Energy and Environmental Science*, **2019**, 12, 1613-1621	35.4	74
93	Synthesis and electrocatalytic oxygen reduction properties of truncated octahedral Pt3Ni nanoparticles. *Nano Research*, **2011**, 4, 72-82	10	72
92	High-efficiency direct methane conversion to oxygenates on a cerium dioxide nanowires supported rhodium single-atom catalyst. *Nature Communications*, **2020**, 11, 954	17.4	70
91	Floating rGO-based black membranes for solar driven sterilization. *Nanoscale*, **2017**, 9, 19384-19389	7.7	68
90	Dissolution Kinetics of Oxidative Etching of Cubic and Icosahedral Platinum Nanoparticles Revealed by in Situ Liquid Transmission Electron Microscopy. *ACS Nano*, **2017**, 11, 1696-1703	16.7	65
89	Nanoscale kinetics of asymmetrical corrosion in core-shell nanoparticles. *Nature Communications*, **2018**, 9, 1011	17.4	64
88	Neighboring Pt Atom Sites in an Ultrathin FePt Nanosheet for the Efficient and Highly CO-Tolerant Oxygen Reduction Reaction. *Nano Letters*, **2018**, 18, 5905-5912	11.5	58
87	Enhancing Localized Evaporation through Separated Light Absorbing Centers and Scattering Centers. *Scientific Reports*, **2015**, 5, 17276	4.9	50

86	Form-Stable Solar Thermal Heat Packs Prepared by Impregnating Phase-Changing Materials within Carbon-Coated Copper Foams. *ACS Applied Materials & Interfaces*, **2019**, 11, 3417-3427	9.5	49
85	Plasmonic-Enhanced Oxygen Reduction Reaction of Silver/Graphene Electrocatalysts. *Nano Letters*, **2019**, 19, 1371-1378	11.5	49
84	High-Efficiency Superheated Steam Generation for Portable Sterilization under Ambient Pressure and Low Solar Flux. *ACS Applied Materials & Interfaces*, **2019**, 11, 18466-18474	9.5	48
83	Facile synthesis of Rh-Pd alloy nanodendrites as highly active and durable electrocatalysts for oxygen reduction reaction. *Nanoscale*, **2014**, 6, 7012-8	7.7	47
82	Thermal conductivity of suspended few-layer MoS. *Nanoscale*, **2018**, 10, 2727-2734	7.7	46
81	Quantitative Analysis of Different Formation Modes of Platinum Nanocrystals Controlled by Ligand Chemistry. *Nano Letters*, **2017**, 17, 6146-6150	11.5	43
80	Intraoperative Raman-Guided Chemo-Photothermal Synergistic Therapy of Advanced Disseminated Ovarian Cancers. *Small*, **2018**, 14, e1801022	11	41
79	Three-Dimensional Porous Solar-Driven Interfacial Evaporator for High-Efficiency Steam Generation under Low Solar Flux. *ACS Omega*, **2019**, 4, 3546-3555	3.9	39
78	Atomically Dispersed Indium Sites for Selective CO Electroreduction to Formic Acid. *ACS Nano*, **2021**, 15, 5671-5678	16.7	38
77	Mastering the surface strain of platinum catalysts for efficient electrocatalysis. *Nature*, **2021**, 598, 76-81	50.4	37
76	Patterned Surfaces for Solar-Driven Interfacial Evaporation. *ACS Applied Materials & Interfaces*, **2019**, 11, 7584-7590	9.5	36
75	Stably dispersed high-temperature Fe3O4/silicone-oil nanofluids for direct solar thermal energy harvesting. *Journal of Materials Chemistry A*, **2016**, 4, 17503-17511	13	35
74	Strain-induced Stranski-Krastanov growth of Pd@Pt core-shell hexapods and octapods as electrocatalysts for methanol oxidation. *Nanoscale*, **2017**, 9, 11077-11084	7.7	35
73	Enhancing the Photocatalytic Hydrogen Evolution Performance of a Metal/Semiconductor Catalyst through Modulation of the Schottky Barrier Height by Controlling the Orientation of the Interface. *ACS Applied Materials & Interfaces*, **2017**, 9, 12494-12500	9.5	33
72	Fabrication and performance evaluation of flexible heat pipes for potential thermal control of foldable electronics. *Applied Thermal Engineering*, **2016**, 95, 445-453	5.8	33
71	General solution route for nanoplates of hexagonal oxide or hydroxide. *Journal of Physical Chemistry B*, **2006**, 110, 11196-8	3.4	33
70	Substrateless Welding of Self-Assembled Silver Nanowires at Air/Water Interface. *ACS Applied Materials & Interfaces*, **2016**, 8, 20483-90	9.5	32
69	Strong Electronic Interaction of Amorphous Fe2O3 Nanosheets with Single-Atom Pt toward Enhanced Carbon Monoxide Oxidation. *Advanced Functional Materials*, **2019**, 29, 1904278	15.6	32

68	Visualization of fast hydrogen pumpin core-shell nanostructured Mg@Pt through hydrogen-stabilized Mg3Pt. *Journal of Materials Chemistry A*, **2019**, 7, 14629-14637	13	30
67	Probing the dynamics of nanoparticle formation from a precursor at atomic resolution. *Science Advances*, **2019**, 5, eaau9590	14.3	29
66	Vapor-Enabled Propulsion for Plasmonic Photothermal Motor at the Liquid/Air Interface. *Journal of the American Chemical Society*, **2017**, 139, 12362-12365	16.4	29
65	Photothermally Enabled Pyro-Catalysis of a BaTiO Nanoparticle Composite Membrane at the Liquid/Air Interface. *ACS Applied Materials & Interfaces*, **2018**, 10, 21246-21253	9.5	27
64	An open thermo-electrochemical cell enabled by interfacial evaporation. *Journal of Materials Chemistry A*, **2019**, 7, 6514-6521	13	27
63	Multimetallic AuPd@Pd@Pt core-interlayer-shell icosahedral electrocatalysts for highly efficient oxygen reduction reaction. *Science Bulletin*, **2018**, 63, 494-501	10.6	26
62	Integrating plasmonic nanostructures with natural photonic architectures in Pd-modified butterfly wings for sensitive hydrogen gas sensing.. *RSC Advances*, **2018**, 8, 32395-32400	3.7	25
61	Strain-Induced Corrosion Kinetics at Nanoscale Are Revealed in Liquid: Enabling Control of Corrosion Dynamics of Electrocatalysis. *CheM*, **2020**, 6, 2257-2271	16.2	24
60	Single-crystalline Pd square nanoplates enclosed by {100} facets on reduced graphene oxide for formic acid electro-oxidation. *Chemical Communications*, **2016**, 52, 14204-14207	5.8	23
59	Bioinspired Infrared Sensing Materials and Systems. *Advanced Materials*, **2018**, 30, e1707632	24	23
58	In situ ETEM study of composition redistribution in Pt-Ni octahedral catalysts for electrochemical reduction of oxygen. *AICHE Journal*, **2016**, 62, 399-407	3.6	19
57	High-performance diluted nickel nanoclusters decorating ruthenium nanowires for pH-universal overall water splitting. *Energy and Environmental Science*, **2021**, 14, 3194-3202	35.4	19
56	Clean water generation with switchable dispersion of multifunctional Fe3O4-reduced graphene oxide particles. *Progress in Natural Science: Materials International*, **2018**, 28, 422-429	3.6	18
55	Ternary PtPdAg alloy nanoflowers for oxygen reduction reaction electrocatalysis. *CrystEngComm*, **2017**, 19, 6964-6971	3.3	18
54	Enhanced stability of (111)-surface-dominant core-shell nanoparticle catalysts towards the oxygen reduction reaction. *ChemSusChem*, **2013**, 6, 1888-92	8.3	18
53	Reconsidering the Benchmarking Evaluation of Catalytic Activity in Oxygen Reduction Reaction. *IScience*, **2020**, 23, 101532	6.1	18
52	Butterfly Wing Hears Sound: Acoustic Detection Using Biophotonic Nanostructure. *Nano Letters*, **2019**, 19, 2627-2633	11.5	17
51	Confinement Effect of Mesopores: In Situ Synthesis of Cationic Tungsten-Vacancies for a Highly Ordered Mesoporous Tungsten Phosphide Electrocatalyst. *ACS Applied Materials & Interfaces*, **2020**, 12, 22741-22750	9.5	17

50	Proton selective adsorption on PtNi nano-thorn array electrodes for superior hydrogen evolution activity. *Energy and Environmental Science*, **2021**, 14, 1594-1601	35.4	17
49	PdCu alloy nanodendrites with tunable composition as highly active electrocatalysts for methanol oxidation. *RSC Advances*, **2017**, 7, 5800-5806	3.7	16
48	Pyroelectric Synthesis of Metal–BaTiO3 Hybrid Nanoparticles with Enhanced Pyrocatalytic Performance. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 2602-2609	8.3	16
47	Amorphous CrWO-Modified WO Nanowires with a Large Specific Surface Area and Rich Lewis Acid Sites: A Highly Efficient Catalyst for Oxidative Desulfurization. *ACS Applied Materials & Interfaces*, **2020**, 12, 38140-38152	9.5	15
46	In situ chemical vapor reaction in molten salts for preparation of platinum nanosheets via bubble breakage. *Journal of Materials Chemistry*, **2012**, 22, 12046		14
45	Single-site Pt-doped RuO hollow nanospheres with interstitial C for high-performance acidic overall water splitting.. *Science Advances*, **2022**, 8, eabl9271	14.3	14
44	Deposition of Atomically Thin Pt Shells on Amorphous Palladium Phosphide Cores for Enhancing the Electrocatalytic Durability. *ACS Nano*, **2021**, 15, 7348-7356	16.7	13
43	Facile synthesis of PtCu3 alloy hexapods and hollow nanoframes as highly active electrocatalysts for methanol oxidation. *CrystEngComm*, **2016**, 18, 7823-7830	3.3	13
42	Origin of Photocatalytic Activity in Ti4+/Ti3+ Core–Shell Titanium Oxide Nanocrystals. *Journal of Physical Chemistry C*, **2019**, 123, 20949-20959	3.8	12
41	Lattice-mismatch-induced growth of ultrathin Pt shells with high-index facets for boosting oxygen reduction catalysis. *Journal of Materials Chemistry A*, **2020**, 8, 16477-16486	13	12
40	Electrically Driven Interfacial Evaporation for High-Efficiency Steam Generation and Sterilization. *ACS Omega*, **2019**, 4, 16603-16611	3.9	11
39	Solar-driven high-temperature steam generation at ambient pressure. *Progress in Natural Science: Materials International*, **2019**, 29, 10-15	3.6	11
38	Ultrathin and stable AgAu alloy nanowires. *Science China Materials*, **2015**, 58, 595-602	7.1	11
37	Bubble-Enabled Underwater Motion of a Light-Driven Motor. *Small*, **2019**, 15, e1804959	11	11
36	Supportless oxygen reduction electrocatalysts of CoCuPt hollow nanoparticles. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2010**, 368, 4261-74	3	10
35	Controllable assembly of Pd nanosheets: a solution for 2D materials storage. *CrystEngComm*, **2017**, 19, 3439-3444	3.3	10
34	A Large-Scalable, Surfactant-Free, and Ultrastable Ru-Doped PtCo Oxygen Reduction Catalyst. *Nano Letters*, **2021**, 21, 6625-6632	11.5	10
33	Ethylene glycol-based solar-thermal fluids dispersed with reduced graphene oxide.. *RSC Advances*, **2019**, 9, 10282-10288	3.7	9

32	Facets Matching of Platinum and Ferric Oxide in Highly Efficient Catalyst Design for Low-Temperature CO Oxidation. *ACS Applied Materials & Interfaces*, **2018**, 10, 15322-15327	9.5	8
31	Study of the Durability of Faceted Pt3Ni Oxygen Reduction Electrocatalysts. *ChemCatChem*, **2012**, 4, 1572-1577	5.2	8
30	Heterostructure of ZnO Nanosheets/Zn with a Highly Enhanced Edge Surface for Efficient CO Electrochemical Reduction to CO. *ACS Applied Materials & Interfaces*, **2021**, 13, 10837-10844	9.5	8
29	Real-Time Visualization of Solid-Phase Ion Migration Kinetics on Nanowire Monolayer. *Journal of the American Chemical Society*, **2020**, 142, 7968-7975	16.4	7
28	Coalescence, Spreading, and Rebound of Two Water Droplets with Different Temperatures on a Superhydrophobic Surface. *ACS Omega*, **2019**, 4, 17615-17622	3.9	7
27	In Situ Transmission Electron Microscopy Study of Nanocrystal Formation for Electrocatalysis. *ChemNanoMat*, **2019**, 5, 1439-1455	3.5	7
26	Stability of single-atom catalysts for electrocatalysis. *Journal of Materials Chemistry A*,	13	7
25	Shape Transformation Mechanism of Gallium Indium Alloyed Liquid Metal Nanoparticles. *Advanced Materials Interfaces*, **2021**, 8, 2001874	4.6	7
24	Coupling effects in 3D plasmonic structures templated by Morpho butterfly wings. *Nanoscale*, **2018**, 10, 533-537	7.7	7
23	Self-propelled rotation of paper-based Leidenfrost rotor. *Applied Physics Letters*, **2019**, 114, 113703	3.4	6
22	Manipulation of Electron Transfer between Pd and TiO for Improved Electrocatalytic Hydrogen Evolution Reaction Performance. *ACS Applied Materials & Interfaces*, **2020**, 12, 27037-27044	9.5	6
21	Fe containing MoO3 nanowires grown along the [110] direction and their fast selective adsorption of quasi-phenothiazine dyes. *CrystEngComm*, **2019**, 21, 5106-5114	3.3	6
20	Dynamics of Transformation from Platinum Icosahedral Nanoparticles to Larger FCC Crystal at Millisecond Time Resolution. *Scientific Reports*, **2017**, 7, 17243	4.9	6
19	Highly Surface-Distorted Pt Superstructures for Multifunctional Electrocatalysis. *Nano Letters*, **2021**, 21, 5075-5082	11.5	6
18	Understanding of Strain-Induced Electronic Structure Changes in Metal-Based Electrocatalysts: Using Pd@Pt Core-Shell Nanocrystals as an Ideal Platform. *Small*, **2021**, 17, e2100559	11	6
17	Self-Heating Approach to the Fast Production of Uniform Metal Nanostructures. *ChemNanoMat*, **2016**, 2, 37-41	3.5	5
16	Waste heat recovery in an oscillating heat pipe using interfacial electrical double layers. *Applied Physics Letters*, **2018**, 112, 243903	3.4	5
15	Boosting Oxygen and Peroxide Reduction Reactions on PdCu Intermetallic Cubes. *ChemElectroChem*, **2020**, 7, 2614-2620	4.3	4

14	Atomistic Imaging of Competition between Surface Diffusion and Phase Transition during the Intermetallic Formation of Faceted Particles. *ACS Nano*, **2021**, 15, 5284-5293	16.7	4
13	AgPO electrocatalyst for oxygen reduction reaction: enhancement from positive charge.. *RSC Advances*, **2018**, 8, 5382-5387	3.7	3
12	Construction of 3D Conductive Network in Liquid Gallium with Enhanced Thermal and Electrical Performance. *Advanced Materials Technologies*,2100970	6.8	3
11	Butterfly Wing Inspired High Performance Infrared Detection with Spectral Selectivity. *Advanced Optical Materials*, **2020**, 8, 1901647	8.1	3
10	Design of Highly Durable Core-Shell Catalysts by Controlling Shell Distribution Guided by In-Situ Corrosion Study. *Advanced Materials*, **2021**, 33, e2101511	24	3
9	Oxygen Reduction Reaction: Tuning Surface Structure and Strain in Pd□Pt Core□Shell Nanocrystals for Enhanced Electrocatalytic Oxygen Reduction (Small 7/2017). *Small*, **2017**, 13,	11	2
8	A Non-Pt Electronically Coupled Semiconductor Heterojunction for Enhanced Oxygen Reduction Electrocatalytic Property. *ChemistrySelect*, **2019**, 4, 5264-5268	1.8	2
7	Structural evolution of Pt-based oxygen reduction reaction electrocatalysts. *Chinese Journal of Catalysis*, **2022**, 43, 47-58	11.3	2
6	Vapor detection through dynamic process of molecule desorption from butterfly wings. *Pure and Applied Chemistry*, **2020**, 92, 223-232	2.1	1
5	Hydrogen evolution from silicon nanowire surfaces.. *RSC Advances*, **2018**, 8, 41657-41662	3.7	1
4	Bioinspired Color Change through Guided Reflection. *Advanced Optical Materials*, **2018**, 6, 1800464	8.1	0
3	Chemical Synthesis of Nanoscale Heterogeneous Catalysts9-29		
2	In Situ Observation of Pt Icosahedral Nanoparticles Transformation into FCC Single Crystal. *Microscopy and Microanalysis*, **2016**, 22, 766-767	0.5	
1	Combined In Situ and Ex Situ Study on Synthesis of Nanostructured Catalyst in Solid State. *Microscopy and Microanalysis*, **2018**, 24, 288-289	0.5	