Fan Liao

List of Publications by Year
in descending order

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64	2,293	236612	223531
papers	citations	25 h-index	46 g-index

64	64	64	3208
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rh/RhO_x nanosheets as pH-universal bifunctional catalysts for hydrazine oxidation and hydrogen evolution reactions. Journal of Materials Chemistry A, 2022, 10, 1891-1898.	5.2	25
2	Interfacial engineered PdRu/C with robust poison tolerance for oxygen reduction reaction and zinc-air battery. Journal of Alloys and Compounds, 2022, 896, 163112.	2.8	3
3	Boosting electrocatalytic selectivity in carbon dioxide reduction: The fundamental role of dispersing gold nanoparticles on silicon nanowires. Chinese Chemical Letters, 2022, 33, 4380-4384.	4.8	5
4	Carbon dots bridge NiO and Mn2O3 as highly efficient bifunctional oxygen electrocatalysts for rechargeable zinc-air batteries. Applied Surface Science, 2022, 596, 153642.	3.1	8
5	Diluted silicon promoting Pd/Pt catalysts for oxygen reduction reaction with strong anti-poisoning effect. Applied Catalysis B: Environmental, 2022, 315, 121549.	10.8	15
6	ZIF/Co-C₃N₄ with enhanced electrocatalytic reduction of carbon dioxide activity by the photoactivation process. Nanoscale, 2021, 13, 14089-14095.	2.8	7
7	A metal-free photocatalyst for highly efficient hydrogen peroxide photoproduction in real seawater. Nature Communications, 2021, 12, 483.	5.8	193
8	Palladiumâ€“Copper Bimetallic Nanoparticles Loaded on Carbon Black for Oxygen Reduction and Zincâ€“Air Batteries. ACS Applied Nano Materials, 2021, 4, 1478-1484.	2.4	12
9	Rod-shaped Î±-MnO2 electrocatalysts with high Mn3+ content for oxygen reduction reaction and Zn-air battery. Journal of Alloys and Compounds, 2021, 860, 158427.	2.8	17
10	In-situ photovoltage transients assisted catalytic study on H2O2 photoproduction over organic molecules modified carbon nitride photocatalyst. Applied Catalysis B: Environmental, 2021, 285, 119817.	10.8	42
11	Surface fluorinated nickel-graphene nanocomposites for high-efficiency methanol electrooxidation. International Journal of Hydrogen Energy, 2021, 46, 27138-27148.	3.8	5
12	Electric field polarized sulfonated carbon dots/NiFe layerd double hydroxide as highly efficient electrocatalyst for oxygen evolution reaction. Chemical Engineering Journal, 2021, 420, 129690.	6.6	16
13	Carbon dots modified WO2-NaxWO3 composite as UV-Vis-NIR broad spectrum-driven photocatalyst for overall water splitting. Catalysis Today, 2020, 340, 152-160.	2.2	14
14	Sulfhydryl-functionalized carbon dots modified ball cactus-like Au composites facilitating the electrocatalytic ethanol oxidation through adsorption effect. Journal of Applied Electrochemistry, 2020, 50, 925-933.	1.5	6
15	Engineering CoN/Ni(OH)2 heterostructures with improved intrinsic interfacial charge transfer toward simultaneous hydrogen generation and urea-rich wastewater purification. Journal of Power Sources, 2020, 480, 229151.	4.0	29
16	Highly efficient water splitting over a RuO₂/F-doped graphene electrocatalyst with ultra-low ruthenium content. Inorganic Chemistry Frontiers, 2020, 7, 2188-2194.	3.0	29
17	Functionalization of metal oxides with thiocyanate groups: A general strategy for boosting oxygen evolution reaction in neutral media. Nano Energy, 2020, 76, 105079.	8.2	16
18	Rhodium/graphitic-carbon-nitride composite electrocatalyst facilitates efficient hydrogen evolution in acidic and alkaline electrolytes. Journal of Colloid and Interface Science, 2020, 571, 30-37.	5.0	14

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19	Strain engineering for Janus palladium-gold bimetallic nanoparticles: Enhanced electrocatalytic performance for oxygen reduction reaction and zinc-air battery. Chemical Engineering Journal, 2020, 389, 124240.	6.6	40
20	CoWO4/CoP2 nanoflakes grown on carbon nanotube film as an efficient electrocatalyst for water splitting in alkaline media. Applied Surface Science, 2020, 514, 145919.	3.1	21
21	One-Step Direct Fixation of Atmospheric CO2 by Si-H Surface in Solution. IScience, 2020, 23, 100806.	1.9	3
22	Effective PtAu nanowire network catalysts with ultralow Pt content for formic acid oxidation and methanol oxidation. International Journal of Hydrogen Energy, 2020, 45, 16071-16079.	3.8	27
23	A function-switchable metal-free photocatalyst for the efficient and selective production of hydrogen and hydrogen peroxide. Journal of Materials Chemistry A, 2020, 8, 11773-11780.	5.2	42
24	Carbon dots-Pt modified polyaniline nanosheet grown on carbon cloth as stable and high-efficient electrocatalyst for hydrogen evolution in pH-universal electrolyte. Applied Catalysis B: Environmental, 2019, 257, 117905.	10.8	74
25	Fluorescent-stable and water-soluble two-component-modified silicon quantum dots and their application for bioimaging. Journal of Luminescence, 2019, 215, 116644.	1.5	13
26	Mesocrystal PtRu supported on reduced graphene oxide as catalysts for methanol oxidation reaction. Journal of Colloid and Interface Science, 2019, 557, 729-736.	5.0	22
27	Approaching the Volcano Top: Iridium/Silicon Nanocomposites as Efficient Electrocatalysts for the Hydrogen Evolution Reaction. ACS Nano, 2019, 13, 2786-2794.	7.3	106
28	Silicon nanowires decorated with gold nanoparticles via in situ reduction for photoacoustic imaging-guided photothermal cancer therapy. Journal of Materials Chemistry B, 2019, 7, 4393-4401.	2.9	15
29	Silicon monoxide assisted synthesis of Ru modified carbon nanocomposites as high mass activity electrocatalysts for hydrogen evolution. International Journal of Hydrogen Energy, 2019, 44, 11817-11823.	3.8	16
30	Quasi-layer Co₂P-polarized Cu₃P nanocomposites with enhanced intrinsic interfacial charge transfer for efficient overall water splitting. Nanoscale, 2019, 11, 6394-6400.	2.8	23
31	Rhodium/silicon quantum dot/carbon quantum dot composites as highly efficient electrocatalysts for hydrogen evolution reaction with Pt-like performance. Electrochimica Acta, 2019, 299, 828-834.	2.6	24
32	Ternary Os-Ag-Si electrocatalysts for hydrogen evolution are more efficient than Os-Au-Si. Journal of Colloid and Interface Science, 2019, 539, 257-262.	5.0	2
33	Platinumâ€Decorated Si Nanowires as Methanolâ€Tolerant Oxygen Reduction Electrocatalysts. ChemistrySelect, 2018, 3, 4619-4623.	0.7	2
34	Palladium â€“ silicon nanocomposites as a stable electrocatalyst for hydrogen evolution reaction. Journal of Colloid and Interface Science, 2018, 522, 242-248.	5.0	25
35	Nanosponge Pt Modified Graphene Nanocomposites Using Silicon Monoxides as a Reducing Agent: High Efficient Electrocatalysts for Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2018, 6, 15238-15244.	3.2	11
36	Ir/g-C₃N₄/Nitrogen-Doped Graphene Nanocomposites as Bifunctional Electrocatalysts for Overall Water Splitting in Acidic Electrolytes. ACS Applied Materials & Interfaces, 2018, 10, 39161-39167.	4.0	80

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37	Rhodium Nanoparticles/F-Doped Graphene Composites as Multifunctional Electrocatalyst Superior to Pt/C for Hydrogen Evolution and Formic Acid Oxidation Reaction. ACS Applied Materials & Interfaces, 2018, 10, 33153-33161.	4.0	63
38	Network-like porous Co-Ni-B grown on carbon cloth as efficient and stable catalytic electrodes for hydrogen evolution. Electrochemistry Communications, 2018, 93, 104-108.	2.3	47
39	Parameter optimization for Ag-coated TiO2 nanotube arrays as recyclable SERS substrates. Applied Surface Science, 2018, 443, 613-618.	3.1	17
40	Rhâ€“Agâ€“Si ternary composites: highly active hydrogen evolution electrocatalysts over Ptâ€“Agâ€“Si. Journal of Materials Chemistry A, 2017, 5, 1623-1628.	5.2	28
41	The self-activation and synergy of amorphous Re nanoparticle â€“ Si nanowire composites for the electrocatalytic hydrogen evolution. Electrochimica Acta, 2017, 228, 268-273.	2.6	18
42	A stepwise-designed Rh-Au-Si nanocomposite that surpasses Pt/C hydrogen evolution activity at high overpotentials. Nano Research, 2017, 10, 1749-1755.	5.8	37
43	Photoluminescence of pure silicon quantum dots embedded in an amorphous silica wire array. Journal of Materials Chemistry C, 2017, 5, 6713-6717.	2.7	10
44	Pt nanocrystals on nitrogen-doped graphene for the hydrogen evolution reaction using Si nanowires as a sacrificial template. Nanoscale, 2017, 9, 10138-10144.	2.8	73
45	Optimizing the hydrogen evolution reaction by shrinking Pt amount in Pt-Ag/SiNW nanocomposites. International Journal of Hydrogen Energy, 2017, 42, 15024-15030.	3.8	31
46	Powerful synergy: efficient Ptâ€“Auâ€“Si nanocomposites as state-of-the-art catalysts for electrochemical hydrogen evolution. Journal of Materials Chemistry A, 2017, 5, 21903-21908.	5.2	19
47	Carbon cloth supported cobalt phosphide as multifunctional catalysts for efficient overall water splitting and zincâ€“air batteries. Nanoscale, 2017, 9, 18977-18982.	2.8	92
48	Os/Si nanocomposites as excellent hydrogen evolution electrocatalysts with thermodynamically more favorable hydrogen adsorption free energy than platinum. Nano Energy, 2017, 39, 284-290.	8.2	40
49	Prominent electrocatalytic methanol oxidation from cauli-flower shape gold with high-index facets. Materials Chemistry and Physics, 2017, 186, 301-304.	2.0	9
50	Single-source precursor to Ag/NiO composite for rechargeable charge storage. Journal of Alloys and Compounds, 2017, 692, 34-39.	2.8	16
51	Tuning surface properties of graphene oxide quantum dots by gamma-ray irradiation. Journal of Luminescence, 2016, 175, 88-93.	1.5	6
52	Gamma ray shifted and enhanced photoluminescence of graphene quantum dots. Journal of Materials Chemistry C, 2016, 4, 10538-10544.	2.7	10
53	A rhodium/silicon co-electrocatalyst design concept to surpass platinum hydrogen evolution activity at high overpotentials. Nature Communications, 2016, 7, 12272.	5.8	272
54	Bi-functional Au/FeS (Au/Co3O4) composite for in situ SERS monitoring and degradation of organic pollutants. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	19

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55	Ru-modified silicon nanowires as electrocatalysts for hydrogen evolution reaction. Electrochemistry Communications, 2015, 52, 29-33.	2.3	56
56	Network-like mesoporous NiCo₂O₄grown on carbon cloth for high-performance pseudocapacitors. Journal of Materials Chemistry A, 2015, 3, 16520-16527.	5.2	107
57	Silicon nanowires: applications in catalysis with distinctive surface property. Journal of Materials Science: Materials in Electronics, 2015, 26, 4722-4729.	1.1	15
58	Catalytic degradation of dye molecules and in situ SERS monitoring by peroxidase-like Au/CuS composite. Nanoscale, 2014, 6, 8117.	2.8	81
59	Smart Liquid SERS Substrates based on Fe3O4/Au Nanoparticles with Reversibly Tunable Enhancement Factor for Practical Quantitative Detection. Scientific Reports, 2014, 4, 7204.	1.6	41
60	The Effect of Dielectric Constants on Noble Metal/Semiconductor SERS Enhancement: FDTD Simulation and Experiment Validation of Ag/Ge and Ag/Si Substrates. Scientific Reports, 2014, 4, 4052.	1.6	68
61	Bi-functional ZnOâ€“RGOâ€“Au substrate: photocatalysts for degrading pollutants and SERS substrates for real-time monitoring. Chemical Communications, 2013, 49, 3049.	2.2	79
62	An effective oxide shell-protected surface-enhanced Raman scattering (SERS) substrate: the easy route to Ag@AgxO-silicon nanowire films via surface doping. Journal of Materials Chemistry C, 2013, 1, 1628.	2.7	26
63	Surface-dependent chemical properties of silicon nanowires: The acceleration of copper oxidation. Applied Physics Letters, 2012, 100, 093114.	1.5	5
64	Pd Nanoparticles/F, N Codoping Graphene Composites for Oxygen Reduction and Zinc-Air Batteries. ACS Sustainable Chemistry and Engineering, 0, , .	3.2	6