Yi Jia

List of Publications by Year
in descending order

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80	10,710	41258	64668
papers	citations	49	79
		h-index	g-index

82	82	82	11309
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ultrathin Ironâ€Cobalt Oxide Nanosheets with Abundant Oxygen Vacancies for the Oxygen Evolution Reaction. Advanced Materials, 2017, 29, 1606793.	11.1	1,144
2	Defect Graphene as a Trifunctional Catalyst for Electrochemical Reactions. Advanced Materials, 2016, 28, 9532-9538.	11.1	961
3	A Heterostructure Coupling of Exfoliated Niâ€“Fe Hydroxide Nanosheet and Defective Graphene as a Bifunctional Electrocatalyst for Overall Water Splitting. Advanced Materials, 2017, 29, 1700017.	11.1	845
4	Graphene Defects Trap Atomic Ni Species for Hydrogen and Oxygen Evolution Reactions. CheM, 2018, 4, 285-297.	5.8	624
5	Coordination of Atomic Coâ€“Pt Coupling Species at Carbon Defects as Active Sites for Oxygen Reduction Reaction. Journal of the American Chemical Society, 2018, 140, 10757-10763.	6.6	464
6	Defects on carbons for electrocatalytic oxygen reduction. Chemical Society Reviews, 2018, 47, 7628-7658.	18.7	432
7	Identification of active sites for acidic oxygen reduction on carbon catalysts with and without nitrogen doping. Nature Catalysis, 2019, 2, 688-695.	16.1	423
8	A Defect-Driven Metal-free Electrocatalyst for Oxygen Reduction in Acidic Electrolyte. CheM, 2018, 4, 2345-2356.	5.8	292
9	The Role of Defect Sites in Nanomaterials for Electrocatalytic Energy Conversion. CheM, 2019, 5, 1371-1397.	5.8	273
10	Three-dimensional NiCo₂O₄@NiWO₄ coreâ€“shell nanowire arrays for high performance supercapacitors. Journal of Materials Chemistry A, 2017, 5, 1028-1034.	5.2	264
11	Edgeâ€Rich Feâ€“N₄ Active Sites in Defective Carbon for Oxygen Reduction Catalysis. Advanced Materials, 2020, 32, e2000966.	11.1	215
12	A Surfactantâ€Free and Scalable General Strategy for Synthesizing Ultrathin Twoâ€Dimensional Metalâ€“Organic Framework Nanosheets for the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2019, 58, 13565-13572.	7.2	205
13	Sulfurâ€Modified Oxygen Vacancies in Ironâ€“Cobalt Oxide Nanosheets: Enabling Extremely High Activity of the Oxygen Evolution Reaction to Achieve the Industrial Water Splitting Benchmark. Angewandte Chemie - International Edition, 2020, 59, 14664-14670.	7.2	178
14	Defectiveâ€Activatedâ€Carbonâ€Supported Mnâ€“Co Nanoparticles as a Highly Efficient Electrocatalyst for Oxygen Reduction. Advanced Materials, 2016, 28, 8771-8778.	11.1	175
15	Defectâ€Induced Ptâ€“Coâ€“Se Coordinated Sites with Highly Asymmetrical Electronic Distribution for Boosting Oxygenâ€Involving Electrocatalysis. Advanced Materials, 2019, 31, e1805581.	11.1	168
16	Tuning oxygen vacancies in two-dimensional iron-cobalt oxide nanosheets through hydrogenation for enhanced oxygen evolution activity. Nano Research, 2018, 11, 3509-3518.	5.8	167
17	Combination of nanosizing and interfacial effect: Future perspective for designing Mg-based nanomaterials for hydrogen storage. Renewable and Sustainable Energy Reviews, 2015, 44, 289-303.	8.2	164
18	Seaweed biomass derived (Ni,Co)/CNT nanoaerogels: efficient bifunctional electrocatalysts for oxygen evolution and reduction reactions. Journal of Materials Chemistry A, 2016, 4, 6376-6384.	5.2	164

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19	Understanding the Activity of Coâ€N_{4â^’x}C_x in Atomic Metal Catalysts for Oxygen Reduction Catalysis. Angewandte Chemie - International Edition, 2020, 59, 6122-6127.	7.2	156
20	Activated carbon becomes active for oxygen reduction and hydrogen evolution reactions. Chemical Communications, 2016, 52, 8156-8159.	2.2	145
21	Recent advances in liquid-phase chemical hydrogen storage. Energy Storage Materials, 2020, 26, 290-312.	9.5	142
22	Single Carbon Vacancy Traps Atomic Platinum for Hydrogen Evolution Catalysis. Journal of the American Chemical Society, 2022, 144, 2171-2178.	6.6	140
23	Plasmaâ€Triggered Synergy of Exfoliation, Phase Transformation, and Surface Engineering in Cobalt Diselenide for Enhanced Water Oxidation. Angewandte Chemie - International Edition, 2018, 57, 16421-16425.	7.2	120
24	A Directional Synthesis for Topological Defect in Carbon. CheM, 2020, 6, 2009-2023.	5.8	120
25	Defect electrocatalytic mechanism: concept, topological structure and perspective. Materials Chemistry Frontiers, 2018, 2, 1250-1268.	3.2	119
26	Facile Synthesis of CoWO₄ Nanosheet Arrays Grown on Nickel Foam Substrates for Asymmetric Supercapacitors. ChemElectroChem, 2016, 3, 1490-1496.	1.7	98
27	Defective Structures in Metal Compounds for Energyâ€Related Electrocatalysis. Small Structures, 2021, 2, 2000067.	6.9	97
28	Hydrogen Incorporation and Storage in Well-Defined Nanocrystals of Anatase Titanium Dioxide. Journal of Physical Chemistry C, 2011, 115, 25590-25594.	1.5	93
29	Sulfurâ€Modified Oxygen Vacancies in Ironâ€“Cobalt Oxide Nanosheets: Enabling Extremely High Activity of the Oxygen Evolution Reaction to Achieve the Industrial Water Splitting Benchmark. Angewandte Chemie, 2020, 132, 14772-14778.	1.6	89
30	Enhanced hydrogen desorption from Mg(BH4)2 by combining nanoconfinement and a Ni catalyst. Journal of Materials Chemistry A, 2013, 1, 3471.	5.2	87
31	Charge Polarization from Atomic Metals on Adjacent Graphitic Layers for Enhancing the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2019, 58, 9404-9408.	7.2	87
32	Destabilization of Mgâ€“H bonding through nano-interfacial confinement by unsaturated carbon for hydrogen desorption from MgH2. Physical Chemistry Chemical Physics, 2013, 15, 5814.	1.3	80
33	Gradientâ€Concentration Design of Stable Coreâ€“Shell Nanostructure for Acidic Oxygen Reduction Electrocatalysis. Advanced Materials, 2020, 32, e2003493.	11.1	79
34	In-situ synthetize multi-walled carbon nanotubes@MnO2 nanoflake coreâ€“shell structured materials for supercapacitors. Journal of Power Sources, 2012, 216, 508-514.	4.0	75
35	Architecture-controlled synthesis of M_xO_y (M = Ni, Fe, Cu) microfibres from seaweed biomass for high-performance lithium ion battery anodes. Journal of Materials Chemistry A, 2015, 3, 22708-22715.	5.2	75
36	Layer-by-layer assembly and electrochemical properties of sandwiched film of manganese oxide nanosheet and carbon nanotube. Carbon, 2009, 47, 1534-1542.	5.4	73

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37	System analysis of pulping process coupled with supercritical water gasification of black liquor for combined hydrogen, heat and power production. Energy, 2017, 132, 238-247.	4.5	69
38	Activity Origins in Nanocarbons for the Electrocatalytic Hydrogen Evolution Reaction. Small, 2018, 14, e1800235.	5.2	68
39	Ultra-dense carbon defects as highly active sites for oxygen reduction catalysis. CheM, 2022, 8, 2715-2733.	5.8	66
40	Enhanced photodynamic therapy of mixed phase TiO2(B)/anatase nanofibers for killing of HeLa cells. Nano Research, 2014, 7, 1659-1669.	5.8	65
41	Biomimetic CNT@TiO2 composite with enhanced photocatalytic properties. Chemical Engineering Journal, 2015, 281, 60-68.	6.6	65
42	Metallic Ni nanocatalyst in situ formed from a metalâ€“organic-framework by mechanochemical reaction for hydrogen storage in magnesium. Journal of Materials Chemistry A, 2015, 3, 8294-8299.	5.2	65
43	Carbon scaffold modified by metal (Ni) or non-metal (N) to enhance hydrogen storage of MgH2 through nanoconfinement. International Journal of Hydrogen Energy, 2017, 42, 22933-22941.	3.8	64
44	Supercritical Water Gasification of Coal with Waste Black Liquor as Inexpensive Additives. Energy & Fuels, 2015, 29, 384-391.	2.5	62
45	Hydrogenation/dehydrogenation in MgH2-activated carbon composites prepared by ball milling. International Journal of Hydrogen Energy, 2012, 37, 7579-7585.	3.8	60
46	Catalytic De/Hydrogenation in Mg by Coâ€Ðoped Ni and VO_x on Active Carbon: Extremely Fast Kinetics at Low Temperatures and High Hydrogen Capacity. Advanced Energy Materials, 2011, 1, 387-393.	10.2	58
47	Fluorineâ€Ðoped Porous Singleâ€Crystal Rutile TiO₂ Nanorods for Enhancing Photoelectrochemical Water Splitting. Chemistry - A European Journal, 2014, 20, 11439-11444.	1.7	58
48	Scalable and controllable synthesis of atomic metal electrocatalysts assisted by an egg-box in alginate. Journal of Materials Chemistry A, 2018, 6, 18417-18425.	5.2	58
49	Manipulating solar absorption and electron transport properties of rutile TiO2 photocatalysts via highly n-type F-doping. Journal of Materials Chemistry A, 2014, 2, 3513.	5.2	52
50	Controllable synthesis of Feâ€“N₄ species for acidic oxygen reduction. , 2020, 2, 452-460.		50
51	Design of plasmonic nanomaterials for diagnostic spectrometry. Nanoscale Advances, 2019, 1, 459-469.	2.2	48
52	Defective Carbons Derived from Macadamia Nut Shell Biomass for Efficient Oxygen Reduction and Supercapacitors. ChemElectroChem, 2018, 5, 1874-1879.	1.7	47
53	Understanding the Activity of Coâ€N_{4â^’x}C_x in Atomic Metal Catalysts for Oxygen Reduction Catalysis. Angewandte Chemie, 2020, 132, 6178-6183.	1.6	47
54	Atomic Cobalt on Defective Bimodal Mesoporous Carbon toward Efficient Oxygen Reduction for Zincâ€“Air Batteries. Small Methods, 2019, 3, 1800450.	4.6	45

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55	Confined LiBH4: Enabling fast hydrogen release at â¼100ÂÂ°C. International Journal of Hydrogen Energy, 2012, 37, 18920-18926.	3.8	44
56	NaBH 4 regeneration from NaBO 2 by high-energy ball milling and its plausible mechanism. International Journal of Hydrogen Energy, 2017, 42, 13127-13135.	3.8	44
57	Hydrothermal Synthesis of 3D Porous Structure Bi₂WO₆/Reduced Graphene Oxide Hydrogels for Enhancing Supercapacitor Performance. ChemElectroChem, 2017, 4, 577-584.	1.7	40
58	Grafting Cobalt Diselenide on Defective Graphene for Enhanced Oxygen Evolution Reaction. IScience, 2018, 7, 145-153.	1.9	39
59	BrÃ¸nsted base site engineering of graphitic carbon nitride for enhanced photocatalytic activity. Journal of Materials Chemistry A, 2017, 5, 19227-19236.	5.2	36
60	Clarifying the Origin of Oxygen Reduction Activity in Heteroatom-Modified Defective Carbon. Cell Reports Physical Science, 2020, 1, 100083.	2.8	35
61	Atom-Coordinated Structure Triggers Selective H2O2 Production. CheM, 2020, 6, 548-550.	5.8	34
62	Defective carbon-based materials: controllable synthesis and electrochemical applications. EnergyChem, 2021, 3, 100059.	10.1	34
63	Probing the Active Sites of Carbonâ€Encapsulated Cobalt Nanoparticles for Oxygen Reduction. Small Methods, 2019, 3, 1800439.	4.6	33
64	Co3O4nanoparticle embedded carbonaceous fibres: a nanoconfinement effect on enhanced lithium-ion storage. Chemical Communications, 2015, 51, 16267-16270.	2.2	32
65	Dehydrogenation of Ammonia Borane Confined by Low-Density Porous Aromatic Framework. Journal of Physical Chemistry C, 2012, 116, 25694-25700.	1.5	30
66	Potassium Niobate Nanolamina: A Promising Adsorbent for Entrapment of Radioactive Cations from Water. Scientific Reports, 2014, 4, 7313.	1.6	24
67	Defective graphene anchored ironâ€“cobalt nanoparticles for efficient electrocatalytic oxygen reduction. Chemical Communications, 2017, 53, 12140-12143.	2.2	24
68	Hierarchically structured WO₃â€“CNT@TiO₂NS composites with enhanced photocatalytic activity. Journal of Materials Chemistry A, 2015, 3, 5467-5473.	5.2	23
69	Catalytically Enhanced Hydrogen Sorption in Mg-MgH2 by Coupling Vanadium-Based Catalyst and Carbon Nanotubes. Materials, 2015, 8, 3491-3507.	1.3	22
70	Catalytically enhanced dehydrogenation of MgH2 by activated carbon supported Pdâ€“VOx (x=2.38) nanocatalyst. International Journal of Hydrogen Energy, 2012, 37, 13393-13399.	3.8	20
71	One-step In-situ Synthesis of Vacancy-rich CoFe2O4@Defective Graphene Hybrids as Bifunctional Oxygen Electrocatalysts for Rechargeable Zn-Air Batteries. Chemical Research in Chinese Universities, 2020, 36, 479-487.	1.3	20
72	Hâ€“TiO2/C/MnO2 nanocomposite materials for high-performance supercapacitors. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	19

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73	A magnetic field strategy to porous Pt-Ni nanoparticles with predominant (111) facets for enhanced electrocatalytic oxygen reduction. Journal of Energy Chemistry, 2021, 53, 192-196.	7.1	19
74	Metallic Ni nanocatalyst in situ formed from LaNi5H5 toward efficient CO2 methanation. International Journal of Hydrogen Energy, 2019, 44, 29068-29074.	3.8	16
75	Platinum stabilized by defective activated carbon with excellent oxygen reduction performance in alkaline media. Chinese Journal of Catalysis, 2017, 38, 1011-1020.	6.9	13
76	Charge Polarization from Atomic Metals on Adjacent Graphitic Layers for Enhancing the Hydrogen Evolution Reaction. Angewandte Chemie, 2019, 131, 9504-9508.	1.6	10
77	Dehydrogenation and reaction pathway of Perovskite-Type NH4Ca(BH4)3. Progress in Natural Science: Materials International, 2018, 28, 194-199.	1.8	7
78	Heteroatom-Doped Graphdiyne Enables Ferromagnetism of Carbon. ACS Central Science, 2020, 6, 830-832.	5.3	6
79	Effect of titanium based complex catalyst and carbon nanotubes on hydrogen storage performance of magnesium. Science China Chemistry, 2013, 56, 451-458.	4.2	5
80	Defect Chemistry Special Collection. Chemistry - an Asian Journal, 2021, 16, 112-113.	1.7	0