Kuang-Hsu Wu

List of Publications by Year
in descending order

87	4,802	101543 36	98798 67
papers	citations	h-index	g-index

90	90	90	6413
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structural transformation of highly active metalâ€“organic framework electrocatalysts during the oxygen evolution reaction. Nature Energy, 2020, 5, 881-890.	39.5	647
2	Trends in activity for the oxygen evolution reaction on transition metal (M = Fe, Co, Ni) phosphide pre-catalysts. Chemical Science, 2018, 9, 3470-3476.	7.4	443
3	A microporousâ€“mesoporous carbon with graphitic structure for a high-rate stable sulfur cathode in carbonate solvent-based Liâ€“S batteries. Physical Chemistry Chemical Physics, 2012, 14, 8703.	2.8	273
4	Recent Progress of Carbon-Supported Single-Atom Catalysts for Energy Conversion and Storage. Matter, 2020, 3, 1442-1476.	10.0	196
5	Confined Feâ€“Cu Clusters as Subâ€Nanometer Reactors for Efficiently Regulating the Electrochemical Nitrogen Reduction Reaction. Advanced Materials, 2020, 32, e2004382.	21.0	152
6	Revealing the Origin of Activity in Nitrogenâ€Doped Nanocarbons towards Electrocatalytic Reduction of Carbon Dioxide. ChemSusChem, 2016, 9, 1085-1089.	6.8	143
7	Highly Selective Hydrogen Peroxide Electrosynthesis on Carbon: In Situ Interface Engineering with Surfactants. CheM, 2020, 6, 1443-1458.	11.7	141
8	Reduced graphene oxide: a metal-free catalyst for aerobic oxidative desulfurization. Green Chemistry, 2017, 19, 1175-1181.	9.0	134
9	Intrinsic ORR Activity Enhancement of Pt Atomic Sites by Engineering the dâ€Band Center via Local Coordination Tuning. Angewandte Chemie - International Edition, 2021, 60, 21911-21917.	13.8	132
10	Direct Insight into Ethane Oxidative Dehydrogenation over Boron Nitrides. ChemCatChem, 2017, 9, 3293-3297.	3.7	112
11	A Discussion on the Activity Origin in Metalâ€Free Nitrogenâ€Doped Carbons For Oxygen Reduction Reaction and their Mechanisms. ChemSusChem, 2015, 8, 2772-2788.	6.8	111
12	Self-Assembly of Ir-Based Nanosheets with Ordered Interlayer Space for Enhanced Electrocatalytic Water Oxidation. Journal of the American Chemical Society, 2022, 144, 2208-2217.	13.7	103
13	Highly Efficient Electroâ€reforming of 5â€Hydroxymethylfurfural on Vertically Oriented Nickel Nanosheet/Carbon Hybrid Catalysts: Structureâ€“Function Relationships. Angewandte Chemie - International Edition, 2021, 60, 14528-14535.	13.8	98
14	Modulating Activity through Defect Engineering of Tin Oxides for Electrochemical CO₂ Reduction. Advanced Science, 2019, 6, 1900678.	11.2	92
15	Faceted Branched Nickel Nanoparticles with Tunable Branch Length for Highâ€Activity Electrocatalytic Oxidation of Biomass. Angewandte Chemie - International Edition, 2020, 59, 15487-15491.	13.8	83
16	N,P co-coordinated Fe species embedded in carbon hollow spheres for oxygen electrocatalysis. Journal of Materials Chemistry A, 2019, 7, 14732-14742.	10.3	80
17	Oxygen reduction to hydrogen peroxide on oxidized nanocarbon: Identification and quantification of active sites. Journal of Colloid and Interface Science, 2020, 573, 376-383.	9.4	78
18	Electroactive cellulose-supported graphene oxide interlayers for Liâ€“S batteries. Carbon, 2015, 93, 611-619.	10.3	71

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19	Tungsten Oxide/Carbide Surface Heterojunction Catalyst with High Hydrogen Evolution Activity. ACS Energy Letters, 2020, 5, 3560-3568.	17.4	70
20	Revisiting oxygen reduction reaction on oxidized and unzipped carbon nanotubes. Carbon, 2015, 81, 295-304.	10.3	64
21	Surface chemistry of nanocarbon: Characterization strategies from the viewpoint of catalysis and energy conversion. Carbon, 2019, 143, 915-936.	10.3	61
22	Electronically Modified Atomic Sites Within a Multicomponent Co/Cu Composite for Efficient Oxygen Electroreduction. Advanced Energy Materials, 2021, 11, 2100303.	19.5	61
23	Structural Origin of the Activity in Mn₃O₄â€“Graphene Oxide Hybrid Electrocatalysts for the Oxygen Reduction Reaction. ChemSusChem, 2015, 8, 3331-3339.	6.8	56
24	Molybdenum Carbide Modified Nanocarbon Catalysts for Alkane Dehydrogenation Reactions. ACS Catalysis, 2017, 7, 5820-5827.	11.2	55
25	A hierarchical porous Fe-N impregnated carbon-graphene hybrid for high-performance oxygen reduction reaction. Carbon, 2019, 144, 798-804.	10.3	51
26	Regulating electron transfer over asymmetric low-spin Co(II) for highly selective electrocatalysis. Chem Catalysis, 2022, 2, 372-385.	6.1	50
27	Spherical Murray-Type Assembly of Coâ€“Nâ€“C Nanoparticles as a High-Performance Trifunctional Electrocatalyst. ACS Applied Materials & Interfaces, 2019, 11, 9925-9933.	8.0	49
28	Electrocatalytic Water Oxidation at Quinone-on-Carbon: A Model System Study. Journal of the American Chemical Society, 2018, 140, 14717-14724.	13.7	48
29	Dependence of LiNO 3 decomposition on cathode binders in Liâ€“S batteries. Journal of Power Sources, 2015, 288, 13-19.	7.8	45
30	Anodic chlorine/nitrogen co-doping of reduced graphene oxide films at room temperature. Carbon, 2012, 50, 3333-3341.	10.3	44
31	Enhanced Stability of Immobilized Platinum Nanoparticles through Nitrogen Heteroatoms on Doped Carbon Supports. Chemistry of Materials, 2017, 29, 8670-8678.	6.7	44
32	N-Doped 3D Mesoporous Carbon/Carbon Nanotubes Monolithic Catalyst for H₂S Selective Oxidation. ACS Applied Nano Materials, 2019, 2, 3780-3792.	5.0	43
33	Overall Oxygen Electrocatalysis on Nitrogenâ€Modified Carbon Catalysts: Identification of Active Sites and Inâ€…Situ Observation of Reactive Intermediates. Angewandte Chemie - International Edition, 2021, 60, 3299-3306.	13.8	42
34	Reduction-induced surface amorphization enhances the oxygen evolution activity in Co3O4. RSC Advances, 2015, 5, 27823-27828.	3.6	40
35	Molybdenum carbide clusters for thermal conversion of CO2 to CO via reverse water-gas shift reaction. Journal of Energy Chemistry, 2020, 50, 37-43.	12.9	38
36	Functions in cooperation for enhanced oxygen reduction reaction: the independent roles of oxygen and nitrogen sites in metal-free nanocarbon and their functional synergy. Journal of Materials Chemistry A, 2017, 5, 3239-3248.	10.3	37

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37	Pd@C coreâ€“shell nanoparticles on carbon nanotubes as highly stable and selective catalysts for hydrogenation of acetylene to ethylene. Nanoscale, 2017, 9, 14317-14321.	5.6	37
38	Synergy of nanoconfinement and surface oxygen in recrystallization of sulfur melt in carbon nanocapsules and the related Liâ€“S cathode properties. Journal of Materials Chemistry A, 2014, 2, 6439.	10.3	36
39	A green and economical vapor-assisted ozone treatment process for surface functionalization of carbon nanotubes. Green Chemistry, 2017, 19, 1052-1062.	9.0	36
40	Tuning the Chemical Properties of Coâ€“Ti₃C₂T_x MXene Materials for Catalytic CO₂ Reduction. Small, 2021, 17, e2007509.	10.0	35
41	Ternary MnO/CoMn alloy@N-doped graphitic composites derived from a bi-metallic pigment as bi-functional electrocatalysts. Journal of Materials Chemistry A, 2019, 7, 20649-20657.	10.3	33
42	Structure-performance relationship of nanodiamonds @ nitrogen-doped mesoporous carbon in the direct dehydrogenation of ethylbenzene. Catalysis Today, 2018, 301, 38-47.	4.4	31
43	Long-chain solid organic polysulfide cathode for high-capacity secondary lithium batteries. Energy Storage Materials, 2018, 12, 30-36.	18.0	31
44	Creation of N-C=O active groups on N-doped CNT as an efficient CarboCatalyst for solvent-free aerobic coupling of benzylamine. Carbon, 2020, 170, 338-346.	10.3	27
45	Core/Shell NiFe Nanoalloy with a Discrete Nâ€doped Graphitic Carbon Cover for Enhanced Water Oxidation. ChemElectroChem, 2018, 5, 732-736.	3.4	26
46	Solution phase synthesis of halogenated graphene and the electrocatalytic activity for oxygen reduction reaction. Chinese Journal of Catalysis, 2014, 35, 884-890.	14.0	25
47	Ionic liquid derived Fe, N, B co-doped bamboo-like carbon nanotubes as an efficient oxygen reduction catalyst. Journal of Colloid and Interface Science, 2020, 579, 637-644.	9.4	25
48	Reconstructing Cu Nanoparticle Supported on Vertical Graphene Surfaces via Electrochemical Treatment to Tune the Selectivity of CO₂ Reduction toward Valuable Products. ACS Catalysis, 2022, 12, 4792-4805.	11.2	24
49	In Situ Electrostatic Modulation of Path Selectivity for the Oxygen Reduction Reaction on Feâ€“N Doped Carbon Catalyst. Chemistry of Materials, 2017, 29, 4649-4653.	6.7	23
50	In Situ Sulfurized Carbon-Confined Cobalt for Long-Life Mg/S Batteries. ACS Applied Energy Materials, 2020, 3, 2516-2525.	5.1	23
51	Pt₃Co@Pt Core@shell Nanoparticles as Efficient Oxygen Reduction Electrocatalysts in Direct Methanol Fuel Cell. ChemCatChem, 2021, 13, 1587-1594.	3.7	23
52	Bimetallic Metal-Organic Framework Derived Metal-Carbon Hybrid for Efficient Reversible Oxygen Electrocatalysis. Frontiers in Chemistry, 2019, 7, 747.	3.6	22
53	Electron-beam writing of deoxygenated micro-patterns on graphene oxide film. Carbon, 2015, 95, 738-745.	10.3	20
54	The Coulombic Nature of Active Nitrogen Sites in N-Doped Nanodiamond Revealed In Situ by Ionic Surfactants. ACS Catalysis, 2017, 7, 3295-3300.	11.2	20

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55	An Extension to the Analytical Evaluation of the Oxygen Reduction Reaction Based On the Electrokinetics On a Rotating Ringâ€“Disk Electrode. ChemElectroChem, 2016, 3, 622-628.	3.4	19
56	High yield electrooxidation of 5-hydroxymethyl furfural catalysed by unsaturated metal sites in CoFe Prussian Blue Analogue films. Green Chemistry, 2021, 23, 4333-4337.	9.0	19
57	Facettierte verzweigte Nickelâ€Nanopartikel mit variierbarer VerzweigungslÃnge fÃ¼r die hochaktive elektrokatalytische Oxidation von Biomasse. Angewandte Chemie, 2020, 132, 15615-15620.	2.0	18
58	Highly Efficient Electroâ€reforming of 5â€Hydroxymethylfurfural on Vertically Oriented Nickel Nanosheet/Carbon Hybrid Catalysts: Structureâ€“Function Relationships. Angewandte Chemie, 2021, 133, 14649-14656.	2.0	18
59	Nanodiamonds @ N, P co-modified mesoporous carbon supported on macroscopic SiC foam for oxidative dehydrogenation of ethylbenzene. Catalysis Today, 2020, 357, 231-239.	4.4	17
60	The influence of carbon surface chemistry on supported palladium nanoparticles in heterogeneous reactions. Journal of Colloid and Interface Science, 2016, 480, 175-183.	9.4	16
61	Nanodiamondâ€Coreâ€Reinforced, Grapheneâ€Shellâ€Immobilized Platinum Nanoparticles as a Highly Active Catalyst for the Lowâ€Temperature Dehydrogenation of nâ€Butane. ChemCatChem, 2018, 10, 520-524.	3.7	15
62	A generalized approach to adjust the catalytic activity of borocarbonitride for alkane oxidative dehydrogenation reactions. Journal of Catalysis, 2022, 405, 105-115.	6.2	15
63	The value of mixed conduction for oxygen electroreduction on grapheneâ€“chitosan composites. Carbon, 2014, 73, 234-243.	10.3	14
64	Efficient and Highly Selective Solventâ€Free Oxidation of Primary Alcohols to Aldehydes Using Bucky Nanodiamond. ChemSusChem, 2017, 10, 3497-3505.	6.8	14
65	Unlocking high-potential non-persistent radical chemistry for semi-aqueous redox batteries. Chemical Communications, 2019, 55, 2154-2157.	4.1	14
66	Metalâ€“Ligand Complexes as Molecular Metal-Ion Reservoirs for Highly Promoted Growth of Î²-Co(OH)2 Microplates. Crystal Growth and Design, 2016, 16, 8-11.	3.0	13
67	Enhanced Electroactivity of Facet-Controlled Co3O4 Nanocrystals for Enzymeless Biosensing. Journal of Materials Science and Technology, 2016, 32, 24-27.	10.7	12
68	Hydrotalcite-wrapped Coâ€“B alloy with enhanced oxygen evolution activity. Chinese Journal of Catalysis, 2017, 38, 1021-1027.	14.0	11
69	Phosphorus oxide clusters stabilized by carbon nanotubes for selective isomerization and dehydrogenation of Î²-isopentene. Catalysis Science and Technology, 2018, 8, 1522-1527.	4.1	11
70	Translated structural morphology of conductive polymer nanofilms synthesized by vapor phase polymerization. Synthetic Metals, 2018, 244, 113-119.	3.9	11
71	A comparative study on layered cobalt hydroxides in water oxidation. Asia-Pacific Journal of Chemical Engineering, 2016, 11, 415-423.	1.5	10
72	Benchmarking the Oxygen Reduction Electroactivity of Firstâ€Row Transitionâ€Metal Oxide Clusters on Carbon Nanotubes. ChemElectroChem, 2018, 5, 1862-1867.	3.4	10

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73	Decisive Intermediates Responsible for the Carbonaceous Products of CO₂ Electroâ€reduction on Nitrogenâ€Doped sp² Nanocarbon Catalysts in NaHCO₃ Aqueous Electrolyte. ChemElectroChem, 2017, 4, 1274-1278.	3.4	9
74	Carbocatalysing the preparation of N-Rich heterocycles with an unprecedented mechanism. Carbon, 2018, 130, 714-723.	10.3	7
75	Oxygen Electrocatalysis at Mn^{III}â€“O_xâ€“C Hybrid Heterojunction: An Electronic Synergy or Cooperative Catalysis?. ACS Applied Materials & Interfaces, 2019, 11, 706-713.	8.0	7
76	Ligandâ€Promoted Cooperative Electrochemical Oxidation of Bioâ€Alcohol on Distorted Cobalt Hydroxides for Bioâ€Hydrogen Extraction. ChemSusChem, 2021, 14, 2612-2620.	6.8	6
77	Probing the origin of the enhanced catalytic performance of sp3@sp2 nanocarbon supported Pd catalyst for CO oxidation. Carbon, 2020, 156, 463-469.	10.3	5
78	Gesamtâ€Sauerstoffâ€Elektrokatalyse auf stickstoffmodifizierten Kohlenstoffkatalysatoren: Identifizierung aktiver Zentren und Inâ€situâ€Beobachtung reaktiver Zwischenprodukte. Angewandte Chemie, 2021, 133, 3336-3343.	2.0	5
79	Insight into the Metalâ€Support Interactions between Ruthenium and Nanodiamondâ€derived Carbon material for CO Oxidation. ChemCatChem, 2021, 13, 1368-1374.	3.7	5
80	Realâ€Time Carbon Monoxide Detection using a Rotating Gold Ring Electrode: A Feasibility Study. ChemElectroChem, 2020, 7, 4417-4422.	3.4	4
81	Intrinsic ORR Activity Enhancement of Pt Atomic Sites by Engineering the d â€Band Center via Local Coordination Tuning. Angewandte Chemie, 2021, 133, 22082-22088.	2.0	4
82	Hydrophilic tannic acid-modified WS₂ nanosheets for enhanced polysulfide conversion in aqueous media. JPhys Energy, 2019, 1, 015005.	5.3	2
83	Oxygen Reduction Reaction: Electronically Modified Atomic Sites Within a Multicomponent Co/Cu Composite for Efficient Oxygen Electroreduction (Adv. Energy Mater. 17/2021). Advanced Energy Materials, 2021, 11, 2170067.	19.5	2
84	Dynamic single-site polysulfide immobilization in long-range disorder Cu-MOFs. Chemical Communications, 2020, 56, 10074-10077.	4.1	1
85	Editorial: Carbon Catalysis: Focus on Sustainable Chemical Technology. Frontiers in Chemistry, 2020, 8, 308.	3.6	1
86	Rotating Ringâ€Disc Electrode Method: Dissecting Oxygen Reduction Reaction Through a Different Lens. ChemElectroChem, 2021, 8, 644-647.	3.4	1
87	A Special Section on Hierarchical Nanostructured Materials for Sustainable Catalysis. Journal of Nanoscience and Nanotechnology, 2020, 20, 1083-1084.	0.9	0