Ibrahim Saana Amiinu

List of Publications by Year
in descending order

64 papers	7,593 citations	71061 41 h-index	110317 64 g-index
64 all docs	64 docs citations	64 times ranked	8318 citing authors

#	Article	IF	Citations
1	From 3D ZIF Nanocrystals to Coâ€“N_x/C Nanorod Array Electrocatalysts for ORR, OER, and Znâ€“Air Batteries. Advanced Functional Materials, 2018, 28, 1704638.	7.8	708
2	Multifunctional Moâ€“N/C@MoS₂ Electrocatalysts for HER, OER, ORR, and Znâ€“Air Batteries. Advanced Functional Materials, 2017, 27, 1702300.	7.8	658
3	RuP₂â€Based Catalysts with Platinumâ€like Activity and Higher Durability for the Hydrogen Evolution Reaction at All pHâ€…Values. Angewandte Chemie - International Edition, 2017, 56, 11559-11564.	7.2	564
4	Carbon Nanosheets Containing Discrete Co-N_x-B_y-C Active Sites for Efficient Oxygen Electrocatalysis and Rechargeable Znâ€“Air Batteries. ACS Nano, 2018, 12, 1894-1901.	7.3	419
5	A universal synthesis strategy for P-rich noble metal diphosphide-based electrocatalysts for the hydrogen evolution reaction. Energy and Environmental Science, 2019, 12, 952-957.	15.6	397
6	2D Dualâ€Metal Zeoliticâ€Imidazolateâ€Frameworkâ€(ZIF)â€Derived Bifunctional Air Electrodes with Ultrahigh Electrochemical Properties for Rechargeable Zincâ€“Air Batteries. Advanced Functional Materials, 2018, 28, 1705048.	7.8	361
7	Transitionâ€Metal Phosphides: Activity Origin, Energyâ€Related Electrocatalysis Applications, and Synthetic Strategies. Advanced Functional Materials, 2020, 30, 2004009.	7.8	309
8	Effects of Intrinsic Pentagon Defects on Electrochemical Reactivity of Carbon Nanomaterials. Angewandte Chemie - International Edition, 2019, 58, 3859-3864.	7.2	253
9	A universal synthesis strategy for single atom dispersed cobalt/metal clusters heterostructure boosting hydrogen evolution catalysis at all pH values. Nano Energy, 2019, 59, 472-480.	8.2	202
10	Phytic acid-derivative transition metal phosphides encapsulated in N,P-codoped carbon: an efficient and durable hydrogen evolution electrocatalyst in a wide pH range. Nanoscale, 2017, 9, 3555-3560.	2.8	201
11	Iron-Doped Nickel Phosphide Nanosheet Arrays: An Efficient Bifunctional Electrocatalyst for Water Splitting. ACS Applied Materials & Interfaces, 2017, 9, 26001-26007.	4.0	200
12	General Strategy for the Synthesis of Transition-Metal Phosphide/N-Doped Carbon Frameworks for Hydrogen and Oxygen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 16187-16193.	4.0	175
13	Single-Atom Catalysts for Electrochemical Hydrogen Evolution Reaction: Recent Advances and Future Perspectives. Nano-Micro Letters, 2020, 12, 21.	14.4	159
14	Semimetallic MoP₂: an active and stable hydrogen evolution electrocatalyst over the whole pH range. Nanoscale, 2016, 8, 8500-8504.	2.8	155
15	Hexapod PtRuCu Nanocrystalline Alloy for Highly Efficient and Stable Methanol Oxidation. ACS Catalysis, 2018, 8, 7578-7584.	5.5	152
16	Self-Organized 3D Porous Graphene Dual-Doped with Biomass-Sponsored Nitrogen and Sulfur for Oxygen Reduction and Evolution. ACS Applied Materials & Interfaces, 2016, 8, 29408-29418.	4.0	143
17	Mo₂C quantum dot embedded chitosan-derived nitrogen-doped carbon for efficient hydrogen evolution in a broad pH range. Chemical Communications, 2016, 52, 12753-12756.	2.2	138
18	Co₂P quantum dot embedded N, P dual-doped carbon self-supported electrodes with flexible and binder-free properties for efficient hydrogen evolution reactions. Nanoscale, 2018, 10, 2902-2907.	2.8	136

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19	Surface Evolution of PtCu Alloy Shell over Pd Nanocrystals Leads to Superior Hydrogen Evolution and Oxygen Reduction Reactions. ACS Energy Letters, 2018, 3, 940-945.	8.8	126
20	Ultrasmall tungsten phosphide nanoparticles embedded in nitrogen-doped carbon as a highly active and stable hydrogen-evolution electrocatalyst. Journal of Materials Chemistry A, 2016, 4, 15327-15332.	5.2	116
21	Smart reconstruction of dual-carbon decorated MnO for anode with high-capacity and ultralong-life lithium storage properties. Carbon, 2017, 115, 95-104.	5.4	115
22	Transforming waste biomass with an intrinsically porous network structure into porous nitrogen-doped graphene for highly efficient oxygen reduction. Physical Chemistry Chemical Physics, 2016, 18, 10392-10399.	1.3	109
23	Three dimensional few-layer porous carbon nanosheets towards oxygen reduction. Applied Catalysis B: Environmental, 2017, 211, 148-156.	10.8	99
24	Transition metal/nitrogen dual-doped mesoporous graphene-like carbon nanosheets for the oxygen reduction and evolution reactions. Nanoscale, 2016, 8, 13311-13320.	2.8	94
25	Carbon nanotubes intercalated Co/N-doped porous carbon nanosheets as efficient electrocatalyst for oxygen reduction reaction and zincâ€“air batteries. Chemical Engineering Journal, 2018, 342, 163-170.	6.6	91
26	Activating rhodium phosphide-based catalysts for the pH-universal hydrogen evolution reaction. Nanoscale, 2018, 10, 12407-12412.	2.8	89
27	RuP₂â€Based Catalysts with Platinumâ€like Activity and Higher Durability for the Hydrogen Evolution Reaction at All pHâ€…Values. Angewandte Chemie, 2017, 129, 11717-11722.	1.6	86
28	Surface Modification of a NiS₂ Nanoarray with Ni(OH)₂ toward Superior Water Reduction Electrocatalysis in Alkaline Media. Inorganic Chemistry, 2017, 56, 13651-13654.	1.9	84
29	Ultrastable nitrogen-doped carbon encapsulating molybdenum phosphide nanoparticles as highly efficient electrocatalyst for hydrogen generation. Nanoscale, 2016, 8, 17256-17261.	2.8	83
30	Efficient water splitting catalyzed by flexible NiP₂ nanosheet array electrodes under both neutral and alkaline solutions. New Journal of Chemistry, 2017, 41, 2154-2159.	1.4	77
31	Molybdenum Carbide-Derived Chlorine-Doped Ordered Mesoporous Carbon with Few-Layered Graphene Walls for Energy Storage Applications. ACS Applied Materials & Interfaces, 2017, 9, 3702-3712.	4.0	75
32	Integrated design and construction of WP/W nanorod array electrodes toward efficient hydrogen evolution reaction. Chemical Engineering Journal, 2017, 327, 705-712.	6.6	72
33	A Generic Conversion Strategy: From 2D Metal Carbides (M_xC_y) to Mâ€Selfâ€Doped Graphene toward Highâ€Efficiency Energy Applications. Advanced Functional Materials, 2017, 27, 1604904.	7.8	67
34	A Copper Silicide Nanofoam Current Collector for Directly Grown Si Nanowire Networks and their Application as Lithiumâ€Ion Anodes. Advanced Functional Materials, 2020, 30, 2003278.	7.8	57
35	Electronic Structure Control of Tungsten Oxide Activated by Ni for Ultrahighâ€Performance Supercapacitors. Small, 2018, 14, e1800381.	5.2	55
36	Toward Anhydrous Proton Conductivity Based on Imidazole Functionalized Mesoporous Silica/Nafion Composite Membranes. Electrochimica Acta, 2015, 160, 185-194.	2.6	54

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37	Progress and perspectives on alloying-type anode materials for advanced potassium-ion batteries. Materials Today, 2021, 48, 241-269.	8.3	51
38	Scalable cellulose-sponsored functionalized carbon nanorods induced by cobalt for efficient overall water splitting. Carbon, 2018, 137, 274-281.	5.4	50
39	Naâ€Mnâ€O Nanocrystals as a High Capacity and Long Life Anode Material for Liâ€Ion Batteries. Advanced Energy Materials, 2017, 7, 1602092.	10.2	49
40	Dense Silicon Nanowire Networks Grown on a Stainlessâ€Steel Fiber Cloth: A Flexible and Robust Anode for Lithiumâ€Ion Batteries. Advanced Materials, 2021, 33, e2105917.	11.1	46
41	Anion-Modulated Platinum for High-Performance Multifunctional Electrocatalysis toward HER, HOR, and ORR. IScience, 2020, 23, 101793.	1.9	45
42	Robust MOF-253-derived N-doped carbon confinement of Pt single nanocrystal electrocatalysts for oxygen evolution reaction. Chinese Journal of Catalysis, 2020, 41, 839-846.	6.9	41
43	Effects of Intrinsic Pentagon Defects on Electrochemical Reactivity of Carbon Nanomaterials. Angewandte Chemie, 2019, 131, 3899-3904.	1.6	40
44	Shrunken hollow Mo-N/Mo-C nanosphere structure for efficient hydrogen evolution in a broad pH range. Electrochimica Acta, 2019, 298, 799-805.	2.6	38
45	H₂O₂â€Assisted Synthesis of Porous Nâ€Doped Graphene/Molybdenum Nitride Composites with Boosted Oxygen Reduction Reaction. Advanced Materials Interfaces, 2017, 4, 1601227.	1.9	35
46	Direct Growth of Si, Ge, and Siâ€“Ge Heterostructure Nanowires Using Electroplated Zn: An Inexpensive Seeding Technique for Liâ€Ion Alloying Anodes. Small, 2021, 17, e2005443.	5.2	26
47	Yolk-shell m-SiO2@ Nitrogen doped carbon derived zeolitic imidazolate framework high efficient counter electrode for dye-sensitized solar cells. Electrochimica Acta, 2018, 292, 276-284.	2.6	25
48	Zeolitic-imidazolate-framework (ZIF-8)/PEDOT:PSS composite counter electrode for low cost and efficient dye-sensitized solar cells. New Journal of Chemistry, 2018, 42, 17303-17310.	1.4	25
49	Enhancing the performance of germanium nanowire anodes for Li-ion batteries by direct growth on textured copper. Chemical Communications, 2019, 55, 7780-7783.	2.2	23
50	Anhydrous Proton Conducting Materials Based on Sulfonated Dimethylphenethylchlorosilane Grafted Mesoporous Silica/Ionic Liquid Composite. ACS Applied Materials & Interfaces, 2013, 5, 11535-11543.	4.0	22
51	Naâ€“Mnâ€“O@C yolkâ€“shell nanorods as an ultrahigh electrochemical performance anode for lithium ion batteries. Journal of Materials Chemistry A, 2017, 5, 18509-18517.	5.2	22
52	TePtFe Nanotubes as Highâ€Performing Bifunctional Electrocatalysts for the Oxygen Reduction Reaction and Hydrogen Evolution Reaction. ChemSusChem, 2018, 11, 1328-1333.	3.6	22
53	Si3N4/MoS2-PEDOT: PSS composite counter electrode for bifacial dye-sensitized solar cells. Solar Energy, 2018, 173, 1135-1143.	2.9	21
54	Distorted niobium-self-doped graphene in-situ grown from 2D niobium carbide for catalyzing oxygen reduction. Carbon, 2018, 139, 1144-1151.	5.4	19

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55	Carbon black/silicon nitride nanocomposites as high-efficiency counter electrodes for dye-sensitized solar cells. New Journal of Chemistry, 2018, 42, 11715-11723.	1.4	19
56	Three-Dimensionally Costabilized Metal Catalysts toward an Oxygen Reduction Reaction. Langmuir, 2016, 32, 2236-2244.	1.6	16
57	ZnO-nitrogen doped carbon derived from a zeolitic imidazolate framework as an efficient counter electrode in dye-sensitized solar cells. Sustainable Energy and Fuels, 2019, 3, 1976-1987.	2.5	16
58	Lithium storage properties of in situ synthesized Li₂FeSiO₄ and LiFeBO₃ nanocomposites as advanced cathode materials for lithium ion batteries. Journal of Materials Chemistry A, 2015, 3, 23368-23375.	5.2	15
59	MoS2/ZIF-8 derived nitrogen doped carbon (NC)-PEDOT: PSS as optically transparent counter electrode for dye-sensitized solar cells. Solar Energy, 2021, 218, 117-128.	2.9	13
60	Improved oxygen reduction activity of porous carbon materials by self-doping nitrogen derived from PVP with urea as a promoter. Electrochimica Acta, 2015, 177, 73-78.	2.6	11
61	Inâ€…Situ Fabrication of Tungsten Diphosphide Nanoparticles on Tungsten foil: A Hydrogenâ€Evolution Cathode for a Wide pH Range. Energy Technology, 2016, 4, 1030-1034.	1.8	11
62	Subsuming the Metal Seed to Transform Binary Metal Chalcogenide Nanocrystals into Multinary Compositions. ACS Nano, 2022, 16, 8917-8927.	7.3	8
63	Evolution of Hierarchically Layered Cu-Rich Silicide Nanoarchitectures. Crystal Growth and Design, 2020, 20, 6677-6682.	1.4	4
64	Waste-Recovered Nanomaterials for Emerging Electrocatalytic Applications. Topics in Mining, Metallurgy and Materials Engineering, 2021, , 247-292.	1.4	1