Karthish Manthiram

List of Publications by Year
in descending order

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37 papers	3,553 citations	279798 23 h-index	330143 37 g-index
43 all docs	43 docs citations	43 times ranked	5723 citing authors

#	Article	IF	Citations
1	NGenE 2021: Electrochemistry Is Everywhere. ACS Energy Letters, 2022, 7, 368-374.	17.4	6
2	Proton Donors Induce a Differential Transport Effect for Selectivity toward Ammonia in Lithium-Mediated Nitrogen Reduction. ACS Catalysis, 2022, 12, 5197-5208.	11.2	46
3	Spatial Variation in Cost of Electricity-Driven Continuous Ammonia Production in the United States. ACS Sustainable Chemistry and Engineering, 2022, 10, 7862-7872.	6.7	9
4	Bayesian data analysis reveals no preference for cardinal Tafel slopes in CO2 reduction electrocatalysis. Nature Communications, 2021, 12, 703.	12.8	50
5	Redox Reservoirs: Enabling More Modular Electrochemical Synthesis. Trends in Chemistry, 2021, 3, 157-159.	8.5	4
6	Probing metal-organic frameworks during water oxidation electrocatalysis. Matter, 2021, 4, 2593-2595.	10.0	1
7	Electrochemical Modulation of Carbon Monoxideâ€Mediated Cell Signaling. Angewandte Chemie - International Edition, 2021, 60, 20325-20330.	13.8	9
8	Electrochemical Modulation of Carbon Monoxideâ€Mediated Cell Signaling. Angewandte Chemie, 2021, 133, 20488-20493.	2.0	0
9	Thermodynamic Discrimination between Energy Sources for Chemical Reactions. Joule, 2021, 5, 135-148.	24.0	15
10	Suppressing carboxylate nucleophilicity with inorganic salts enables selective electrocarboxylation without sacrificial anodes. Chemical Science, 2021, 12, 12365-12376.	7.4	33
11	Closed-Loop Electrolyte Design for Lithium-Mediated Ammonia Synthesis. ACS Central Science, 2021, 7, 2073-2082.	11.3	24
12	Mechanism of Chlorine-Mediated Electrochemical Ethylene Oxidation in Saline Water. ACS Catalysis, 2020, 10, 14015-14023.	11.2	44
13	Non-aqueous gas diffusion electrodes for rapid ammonia synthesis from nitrogen and water-splitting-derived hydrogen. Nature Catalysis, 2020, 3, 463-469.	34.4	261
14	Kinetic Analysis on the Role of Bicarbonate in Carbon Dioxide Electroreduction at Immobilized Cobalt Phthalocyanine. ACS Catalysis, 2020, 10, 4326-4336.	11.2	51
15	In situ electrochemical generation of nitric oxide for neuronal modulation. Nature Nanotechnology, 2020, 15, 690-697.	31.5	58
16	Kinetic Analysis of Electrochemical Lactonization of Ketones Using Water as the Oxygen Atom Source. ACS Catalysis, 2020, 10, 5750-5756.	11.2	13
17	Inductive and electrostatic effects on cobalt porphyrins for heterogeneous electrocatalytic carbon dioxide reduction. Catalysis Science and Technology, 2019, 9, 974-980.	4.1	56
18	Heterogeneous molecular catalysts for electrocatalytic CO2 reduction. Nano Research, 2019, 12, 2093-2125.	10.4	172

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19	Nature of the First Electron Transfer in Electrochemical Ammonia Activation in a Nonaqueous Medium. Journal of Physical Chemistry C, 2019, 123, 9713-9720.	3.1	13
20	Ambient Lithium-Mediated Ammonia Synthesis. Trends in Chemistry, 2019, 1, 141-142.	8.5	6
21	Protecting effect of mass transport during electrochemical reduction of oxygenated carbon dioxide feedstocks. Sustainable Energy and Fuels, 2019, 3, 1225-1232.	4.9	27
22	Understanding Continuous Lithium-Mediated Electrochemical Nitrogen Reduction. Joule, 2019, 3, 1127-1139.	24.0	191
23	Epoxidation of Cyclooctene Using Water as the Oxygen Atom Source at Manganese Oxide Electrocatalysts. Journal of the American Chemical Society, 2019, 141, 6413-6418.	13.7	108
24	Direct Electrochemical Carboxylation of Benzylic Câ€“N Bonds with Carbon Dioxide. ACS Catalysis, 2019, 9, 4699-4705.	11.2	98
25	Elucidating the Reactivity and Mechanism of CO₂ Electroreduction at Highly Dispersed Cobalt Phthalocyanine. ACS Energy Letters, 2018, 3, 1381-1386.	17.4	175
26	Electrification and Decarbonization of the Chemical Industry. Joule, 2017, 1, 10-14.	24.0	274
27	Study of Heat Transfer Dynamics from Gold Nanorods to the Environment via Time-Resolved Infrared Spectroscopy. ACS Nano, 2016, 10, 2144-2151.	14.6	109
28	Chemical Control of Plasmons in Metal Chalcogenide and Metal Oxide Nanostructures. Advanced Materials, 2015, 27, 5830-5837.	21.0	98
29	In Situ Transmission Electron Microscopy of Cadmium Selenide Nanorod Sublimation. Journal of Physical Chemistry Letters, 2015, 6, 605-611.	4.6	22
30	Interaction Potentials of Anisotropic Nanocrystals from the Trajectory Sampling of Particle Motion using in Situ Liquid Phase Transmission Electron Microscopy. ACS Central Science, 2015, 1, 33-39.	11.3	121
31	Enhanced Electrochemical Methanation of Carbon Dioxide with a Dispersible Nanoscale Copper Catalyst. Journal of the American Chemical Society, 2014, 136, 13319-13325.	13.7	465
32	Dendritic Assembly of Gold Nanoparticles during Fuel-Forming Electrocatalysis. Journal of the American Chemical Society, 2014, 136, 7237-7240.	13.7	96
33	Doped Nanocrystals as Plasmonic Probes of Redox Chemistry. Angewandte Chemie - International Edition, 2013, 52, 13671-13675.	13.8	120
34	Seeded Synthesis of CdSe/CdS Rod and Tetrapod Nanocrystals. Journal of Visualized Experiments, 2013, , e50731.	0.3	7
35	Tunable Localized Surface Plasmon Resonances in Tungsten Oxide Nanocrystals. Journal of the American Chemical Society, 2012, 134, 3995-3998.	13.7	646
36	Comparing the functional properties of the Hsp70 chaperones, DnaK and BiP. Biophysical Chemistry, 2010, 149, 58-66.	2.8	25

#	Article	IF	Citations
37	Multiply mutated Gaussia luciferases provide prolonged and intense bioluminescence. Biochemical and Biophysical Research Communications, 2009, 389, 563-568.	2.1	84