

Karthish Manthiram

List of Publications by Year in descending order

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37
papers

3,553
citations

279798

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330143

37
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all docs

43
docs citations

43
times ranked

5723
citing authors

#	ARTICLE	IF	CITATIONS
1	Tunable Localized Surface Plasmon Resonances in Tungsten Oxide Nanocrystals. <i>Journal of the American Chemical Society</i> , 2012, 134, 3995-3998.	13.7	646
2	Enhanced Electrochemical Methanation of Carbon Dioxide with a Dispersible Nanoscale Copper Catalyst. <i>Journal of the American Chemical Society</i> , 2014, 136, 13319-13325.	13.7	465
3	Electrification and Decarbonization of the Chemical Industry. <i>Joule</i> , 2017, 1, 10-14.	24.0	274
4	Non-aqueous gas diffusion electrodes for rapid ammonia synthesis from nitrogen and water-splitting-derived hydrogen. <i>Nature Catalysis</i> , 2020, 3, 463-469.	34.4	261
5	Understanding Continuous Lithium-Mediated Electrochemical Nitrogen Reduction. <i>Joule</i> , 2019, 3, 1127-1139.	24.0	191
6	Elucidating the Reactivity and Mechanism of CO ₂ Electroreduction at Highly Dispersed Cobalt Phthalocyanine. <i>ACS Energy Letters</i> , 2018, 3, 1381-1386.	17.4	175
7	Heterogeneous molecular catalysts for electrocatalytic CO ₂ reduction. <i>Nano Research</i> , 2019, 12, 2093-2125.	10.4	172
8	Interaction Potentials of Anisotropic Nanocrystals from the Trajectory Sampling of Particle Motion using <i>in Situ</i> Liquid Phase Transmission Electron Microscopy. <i>ACS Central Science</i> , 2015, 1, 33-39.	11.3	121
9	Doped Nanocrystals as Plasmonic Probes of Redox Chemistry. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13671-13675.	13.8	120
10	Study of Heat Transfer Dynamics from Gold Nanorods to the Environment <i>via</i> Time-Resolved Infrared Spectroscopy. <i>ACS Nano</i> , 2016, 10, 2144-2151.	14.6	109
11	Epoxidation of Cyclooctene Using Water as the Oxygen Atom Source at Manganese Oxide Electrocatalysts. <i>Journal of the American Chemical Society</i> , 2019, 141, 6413-6418.	13.7	108
12	Chemical Control of Plasmons in Metal Chalcogenide and Metal Oxide Nanostructures. <i>Advanced Materials</i> , 2015, 27, 5830-5837.	21.0	98
13	Direct Electrochemical Carboxylation of Benzylic C-N Bonds with Carbon Dioxide. <i>ACS Catalysis</i> , 2019, 9, 4699-4705.	11.2	98
14	Dendritic Assembly of Gold Nanoparticles during Fuel-Forming Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2014, 136, 7237-7240.	13.7	96
15	Multiply mutated <i>Gussia</i> luciferases provide prolonged and intense bioluminescence. <i>Biochemical and Biophysical Research Communications</i> , 2009, 389, 563-568.	2.1	84
16	In situ electrochemical generation of nitric oxide for neuronal modulation. <i>Nature Nanotechnology</i> , 2020, 15, 690-697.	31.5	58
17	Inductive and electrostatic effects on cobalt porphyrins for heterogeneous electrocatalytic carbon dioxide reduction. <i>Catalysis Science and Technology</i> , 2019, 9, 974-980.	4.1	56
18	Kinetic Analysis on the Role of Bicarbonate in Carbon Dioxide Electroreduction at Immobilized Cobalt Phthalocyanine. <i>ACS Catalysis</i> , 2020, 10, 4326-4336.	11.2	51

#	ARTICLE	IF	CITATIONS
19	Bayesian data analysis reveals no preference for cardinal Tafel slopes in CO ₂ reduction electrocatalysis. <i>Nature Communications</i> , 2021, 12, 703.	12.8	50
20	Proton Donors Induce a Differential Transport Effect for Selectivity toward Ammonia in Lithium-Mediated Nitrogen Reduction. <i>ACS Catalysis</i> , 2022, 12, 5197-5208.	11.2	46
21	Mechanism of Chlorine-Mediated Electrochemical Ethylene Oxidation in Saline Water. <i>ACS Catalysis</i> , 2020, 10, 14015-14023.	11.2	44
22	Suppressing carboxylate nucleophilicity with inorganic salts enables selective electrocarboxylation without sacrificial anodes. <i>Chemical Science</i> , 2021, 12, 12365-12376.	7.4	33
23	Protecting effect of mass transport during electrochemical reduction of oxygenated carbon dioxide feedstocks. <i>Sustainable Energy and Fuels</i> , 2019, 3, 1225-1232.	4.9	27
24	Comparing the functional properties of the Hsp70 chaperones, DnaK and BiP. <i>Biophysical Chemistry</i> , 2010, 149, 58-66.	2.8	25
25	Closed-Loop Electrolyte Design for Lithium-Mediated Ammonia Synthesis. <i>ACS Central Science</i> , 2021, 7, 2073-2082.	11.3	24
26	In Situ Transmission Electron Microscopy of Cadmium Selenide Nanorod Sublimation. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 605-611.	4.6	22
27	Thermodynamic Discrimination between Energy Sources for Chemical Reactions. <i>Joule</i> , 2021, 5, 135-148.	24.0	15
28	Nature of the First Electron Transfer in Electrochemical Ammonia Activation in a Nonaqueous Medium. <i>Journal of Physical Chemistry C</i> , 2019, 123, 9713-9720.	3.1	13
29	Kinetic Analysis of Electrochemical Lactonization of Ketones Using Water as the Oxygen Atom Source. <i>ACS Catalysis</i> , 2020, 10, 5750-5756.	11.2	13
30	Electrochemical Modulation of Carbon Monoxide-Mediated Cell Signaling. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 20325-20330.	13.8	9
31	Spatial Variation in Cost of Electricity-Driven Continuous Ammonia Production in the United States. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7862-7872.	6.7	9
32	Seeded Synthesis of CdSe/CdS Rod and Tetrapod Nanocrystals. <i>Journal of Visualized Experiments</i> , 2013, e50731.	0.3	7
33	Ambient Lithium-Mediated Ammonia Synthesis. <i>Trends in Chemistry</i> , 2019, 1, 141-142.	8.5	6
34	NGenE 2021: Electrochemistry Is Everywhere. <i>ACS Energy Letters</i> , 2022, 7, 368-374.	17.4	6
35	Redox Reservoirs: Enabling More Modular Electrochemical Synthesis. <i>Trends in Chemistry</i> , 2021, 3, 157-159.	8.5	4
36	Probing metal-organic frameworks during water oxidation electrocatalysis. <i>Matter</i> , 2021, 4, 2593-2595.	10.0	1

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37	Electrochemical Modulation of Carbon Monoxideâ€Mediated Cell Signaling. <i>Angewandte Chemie</i> , 2021, 133, 20488-20493.	2.0	0