Francisco Alcaide

List of Publications by Year
in descending order

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53 papers	1,876 citations	236925 25 h-index	254184 43 g-index
54 all docs	54 docs citations	54 times ranked	2585 citing authors

#	Article	IF	Citations
1	Tailor-made polymer electrolytes based upon ionic liquids and their application in all-plastic electrochromic devices. Electrochemistry Communications, 2006, 8, 482-488.	4.7	193
2	Ptâ€“Ru electrocatalysts supported on ordered mesoporous carbon for direct methanol fuel cell. Journal of Power Sources, 2010, 195, 4022-4029.	7.8	132
3	Fuel cells for chemicals and energy cogeneration. Journal of Power Sources, 2006, 153, 47-60.	7.8	124
4	A Highly Stable Metalâ€“Organic Framework-Engineered FeS₂/C Nanocatalyst for Heterogeneous Electro-Fenton Treatment: Validation in Wastewater at Mild pH. Environmental Science & Technology, 2020, 54, 4664-4674.	10.0	118
5	Manganese oxide catalysts for secondary zinc air batteries: from electrocatalytic activity to bifunctional air electrode performance. Electrochimica Acta, 2016, 217, 80-91.	5.2	88
6	A small-scale flow alkaline fuel cell for on-site production of hydrogen peroxide. Electrochimica Acta, 2002, 48, 331-340.	5.2	74
7	Enhanced electrocatalytic production of H2O2 at Co-based air-diffusion cathodes for the photoelectro-Fenton treatment of bronopol. Applied Catalysis B: Environmental, 2019, 247, 191-199.	20.2	73
8	Carbon monoxide and ethanol oxidation on PtSn supported catalysts: Effect of the nature of the carbon support and Pt:Sn composition. Applied Catalysis B: Environmental, 2015, 168-169, 33-41.	20.2	63
9	Testing of carbon supported Pdâ€“Pt electrocatalysts for methanol electrooxidation in direct methanol fuel cells. International Journal of Hydrogen Energy, 2011, 36, 4432-4439.	7.1	58
10	On-site H2O2 electrogeneration at a CoS2-based air-diffusion cathode for the electrochemical degradation of organic pollutants. Journal of Electroanalytical Chemistry, 2018, 808, 364-371.	3.8	53
11	Carbon-supported Pt-free catalysts with high specificity and activity toward the oxygen reduction reaction in acidic medium. Applied Catalysis B: Environmental, 2016, 184, 12-19.	20.2	52
12	Electrochemical performance of low temperature PEMFC with surface tailored carbon nanofibers as catalyst support. International Journal of Hydrogen Energy, 2012, 37, 393-404.	7.1	49
13	Electrogeneration of Hydroperoxide Ion Using an Alkaline Fuel Cell. Journal of the Electrochemical Society, 1998, 145, 3444-3449.	2.9	48
14	Supporting IrO2 and IrRuO nanoparticles on TiO2 and Nb-doped TiO2 nanotubes as electrocatalysts for the oxygen evolution reaction. Journal of Energy Chemistry, 2019, 34, 227-239.	12.9	48
15	Performance of carbon-supported PtPd as catalyst for hydrogen oxidation in the anodes of proton exchange membrane fuel cells. International Journal of Hydrogen Energy, 2010, 35, 11634-11641.	7.1	43
16	A stable CoSP/MWCNTs air-diffusion cathode for the photoelectro-Fenton degradation of organic pollutants at pre-pilot scale. Chemical Engineering Journal, 2020, 379, 122417.	12.7	43
17	Pt supported on carbon nanofibers as electrocatalyst for low temperature polymer electrolyte membrane fuel cells. Electrochemistry Communications, 2009, 11, 1081-1084.	4.7	37
18	Electrochemical Preparation and Characterization of Polypyrrole/Stainless Steel Electrodes Decorated with Gold Nanoparticles. ACS Applied Materials & Interfaces, 2015, 7, 2677-2687.	8.0	35

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19	EIS analysis of hydroperoxide ion generation in an uncatalyzed oxygen-diffusion cathode. Journal of Electroanalytical Chemistry, 2003, 547, 61-73.	3.8	34
20	Technical electrodes catalyzed with PtRu on mesoporous ordered carbons for liquid direct methanol fuel cells. Journal of Solid State Electrochemistry, 2010, 14, 1027-1034.	2.5	32
21	Electrochemical stability of carbon nanofibers in proton exchange membrane fuel cells. Electrochimica Acta, 2011, 56, 9370-9377.	5.2	31
22	Carbon monoxide and methanol oxidations on carbon nanofibers supported Ptâ€“Ru electrodes at different temperatures. Electrochimica Acta, 2015, 186, 359-368.	5.2	31
23	Oxygen Reduction on Uncatalyzed Carbon-PTFE Gas Diffusion Cathode in Alkaline Medium. Journal of the Electrochemical Society, 2002, 149, E64.	2.9	30
24	Enhanced activity and durability of novel activated carbon-supported PdSn heat-treated cathode catalyst for polymer electrolyte fuel cells. Electrochimica Acta, 2016, 192, 268-282.	5.2	28
25	Electrochemical performance of carbon-supported Pt(Cu) electrocatalysts for low-temperature fuel cells. International Journal of Hydrogen Energy, 2020, 45, 20582-20593.	7.1	28
26	Electrooxidation of H2/CO on carbon-supported PtRu-MoO nanoparticles for polymer electrolyte fuel cells. International Journal of Hydrogen Energy, 2011, 36, 14590-14598.	7.1	26
27	Proton-conducting membranes from phosphotungstic acid-doped sulfonated polyimide for direct methanol fuel cell applications. Polymer Bulletin, 2009, 62, 813-827.	3.3	23
28	Development of a carbon paper-supported Pd catalyst for PEMFC application. International Journal of Hydrogen Energy, 2012, 37, 7192-7199.	7.1	22
29	Effect of the solvent in the catalyst ink preparation on the properties and performance of unsupported PtRu catalyst layers in direct methanol fuel cells. Electrochimica Acta, 2017, 231, 529-538.	5.2	22
30	Single-walled carbon nanotube-supported platinum nanoparticles as fuel cell electrocatalysts. Journal of Materials Research, 2006, 21, 2841-2846.	2.6	20
31	Development of a novel portable-size PEMFC short stack with electrodeposited Pt hydrogen diffusion anodes. International Journal of Hydrogen Energy, 2010, 35, 5521-5527.	7.1	19
32	An electrochemical route to prepare Pd nanostructures on a gas diffusion substrate for a PEMFC. Electrochimica Acta, 2013, 106, 516-524.	5.2	17
33	Platinum-catalyzed Nbâ€“doped TiO2 and Nb-doped TiO2 nanotubes for hydrogen generation in proton exchange membrane water electrolyzers. International Journal of Hydrogen Energy, 2020, 45, 20605-20619.	7.1	17
34	In Situ Analysis of NMCâˆ£graphite Li-Ion Batteries by Means of Complementary Electrochemical Methods. Journal of the Electrochemical Society, 2020, 167, 090528.	2.9	17
35	Hydrogen Oxidation Reaction in a Pt-Catalyzed Gas Diffusion Electrode in Alkaline Medium. Journal of the Electrochemical Society, 2005, 152, E319.	2.9	14
36	A micro alkaline direct ethanol fuel cell with platinum-free catalysts. Journal of Micromechanics and Microengineering, 2013, 23, 115006.	2.6	14

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37	Supporting PtRh alloy nanoparticle catalysts by electrodeposition on carbon paper for the ethanol electrooxidation in acidic medium. Journal of Electroanalytical Chemistry, 2020, 861, 113960.	3.8	14
38	Impedance study of the evolution of a HO2â˜'-generating hydrophobic gas diffusion electrode. Electrochemistry Communications, 2002, 4, 838-843.	4.7	13
39	New approach to prepare Pt-based hydrogen diffusion anodes tolerant to CO for polymer electrolyte membrane fuel cells. Catalysis Today, 2006, 116, 408-414.	4.4	13
40	Synthesis and testing of new carbon-supported PdP catalysts for oxygen reduction reaction in polymer electrolyte fuel cells. Journal of Electroanalytical Chemistry, 2015, 754, 8-21.	3.8	13
41	Hydrogen reaction at open circuit in alkaline media on Pt in a gas-diffusion electrode. Journal of Electroanalytical Chemistry, 2009, 626, 183-191.	3.8	12
42	Nanoporous Fe-Based Alloy Prepared by Selective Dissolution: An Effective Fenton Catalyst for Water Remediation. ACS Omega, 2017, 2, 653-662.	3.5	12
43	Limiting behaviour during the hydroperoxide ion generation in a flow alkaline fuel cell. Journal of Electroanalytical Chemistry, 2004, 566, 235-240.	3.8	11
44	Testing PtCu Nanoparticles Supported on Highly Ordered Mesoporous Carbons CMK3 and CMK8 as Catalysts for Low-Temperature Fuel Cells. Catalysts, 2021, 11, 724.	3.5	10
45	An Impedance Study of the O[sub 2]âˆ£HO[sub 2][sup â˜'] System in Equilibrium on a Gas Diffusion Electrode. Journal of the Electrochemical Society, 2003, 150, E52.	2.9	8
46	Effect of Gas Diffusion Layer Composition on the Performance of Direct Methanol Fuel Cells. Electrochemical and Solid-State Letters, 2010, 13, B73.	2.2	5
47	New Insights on Tortuosity Determination by EIS for Battery Electrodes: Effect of Electrolyte Concentration and Temperature. Journal of the Electrochemical Society, 2021, 168, 110514.	2.9	4
48	Introduction. Journal of Hazardous Materials, 2016, 319, 1-2.	12.4	3
49	Effect of Gas Diffusion Layer Composition on the Performance of Liquid Direct Methanol Fuel Cells. ECS Transactions, 2009, 25, 891-897.	0.5	1
50	The use of tin oxide in fuel cells. , 2020, , 379-410.		1
51	APPLICATIONS - STATIONARY | Cogeneration of Energy and Chemicals: Fuel Cells. , 2013, , .		0
52	Progress on the development of uniform distributed Pd electroless based catalysts on MEA for PEMFC application. Journal of Solid State Electrochemistry, 2014, 18, 2721-2729.	2.5	0
53	Environmental Energy Technologies. , 2014, , 863-865.		0