Hamish Andrew Miller

List of Publications by Year
in descending order

78 papers	3,805 citations	117571 34 h-index	128225 60 g-index
86 all docs	86 docs citations	86 times ranked	4009 citing authors

#	Article	IF	Citations
1	Recent developments in Pd-CeO2 nano-composite electrocatalysts for anodic reactions in anion exchange membrane fuel cells. Electrochemistry Communications, 2022, 135, 107219.	2.3	15
2	Remarkable stability of a molecular ruthenium complex in PEM water electrolysis. Chemical Science, 2022, 13, 3748-3760.	3.7	11
3	CeO₂ Modulates the Electronic States of a Palladium Onion-Like Carbon Interface into a Highly Active and Durable Electrocatalyst for Hydrogen Oxidation in Anion-Exchange-Membrane Fuel Cells. ACS Catalysis, 2022, 12, 7014-7029.	5.5	33
4	Performance of Pd@FeCo Catalyst in Anion Exchange Membrane Alcohol Fuel Cells. Electrocatalysis, 2021, 12, 295-309.	1.5	9
5	Synergy between Nickel Nanoparticles and N-Enriched Carbon Nanotubes Enhances Alkaline Hydrogen Oxidation and Evolution Activity. ACS Applied Nano Materials, 2021, 4, 3586-3596.	2.4	14
6	Hydrogen and chemicals from alcohols through electrochemical reforming by Pd-CeO2/C electrocatalyst. Inorganica Chimica Acta, 2021, 518, 120245.	1.2	14
7	Turning manganese into gold: Efficient electrochemical CO2 reduction by a fac-Mn(apbpy)(CO)3Br complex in a gasâ€“liquid interface flow cell. Chemical Engineering Journal, 2021, 416, 129050.	6.6	14
8	Titanium dioxide nanomaterials in electrocatalysis for energy. Current Opinion in Electrochemistry, 2021, 28, 100720.	2.5	19
9	Electrochemical reactor for sustainable transformation of bio-mass derived allyl alcohol into acrylate and pure hydrogen. Inorganica Chimica Acta, 2021, 525, 120488.	1.2	4
10	Exploiting the Combination of Displacement and Chemical Plating for a Tailored Electroless Deposition of Palladium Films on Copper. Applied Sciences (Switzerland), 2021, 11, 8403.	1.3	2
11	Phosphate stabilized PdCoP@Nifoam catalyst for self-pressurized H2 production from the electrochemical reforming of ethanol at 150ÂÂ°C. Journal of Catalysis, 2020, 382, 237-246.	3.1	5
12	Production of formate by CO₂ electrochemical reduction and its application in energy storage. Sustainable Energy and Fuels, 2020, 4, 277-284.	2.5	69
13	Integration of a Pd-CeO₂/C Anode with Pt and Pt-Free Cathode Catalysts in High Power Density Anion Exchange Membrane Fuel Cells. ACS Applied Energy Materials, 2020, 3, 10209-10214.	2.5	29
14	Synthesis of CeO_xâ€Decorated Pd/C Catalysts by Controlled Surface Reactions for Hydrogen Oxidation in Anion Exchange Membrane Fuel Cells. Advanced Functional Materials, 2020, 30, 2002087.	7.8	58
15	Unmasking the Latent Passivating Roles of Ni(OH)₂ on the Performance of Pdâ€“Ni Electrocatalysts for Alkaline Ethanol Fuel Cells. ACS Applied Energy Materials, 2020, 3, 8786-8802.	2.5	31
16	Green hydrogen from anion exchange membrane water electrolysis: a review of recent developments in critical materials and operating conditions. Sustainable Energy and Fuels, 2020, 4, 2114-2133.	2.5	367
17	Storage of renewable energy in fuels and chemicals through electrochemical reforming of bioalcohols. Current Opinion in Electrochemistry, 2020, 21, 140-145.	2.5	28
18	Platinum and Platinum Group Metal-Free Catalysts for Anion Exchange Membrane Fuel Cells. Energies, 2020, 13, 582.	1.6	50

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19	Facile preparation of novel cardo Poly(oxindolebiphenylylene) with pendent quaternary ammonium by superacid-catalysed polyhydroxyalkylation reaction for anion exchange membranes. Journal of Membrane Science, 2019, 591, 117320.	4.1	37
20	In-situ Quantification of Nanoparticles Oxidation: A Fixed Energy X-ray Absorption Approach. Catalysts, 2019, 9, 659.	1.6	8
21	Electrochemical CO₂ reduction in water at carbon cloth electrodes functionalized with a fac-Mn(apbpy)(CO)₃Br complex. Chemical Communications, 2019, 55, 775-777.	2.2	38
22	Facile Preparation of an Ether-Free Anion Exchange Membrane with Pendant Cyclic Quaternary Ammonium Groups. ACS Applied Energy Materials, 2019, 2, 4576-4581.	2.5	63
23	Palladiumâ€“Ceria Catalysts with Enhanced Alkaline Hydrogen Oxidation Activity for Anion Exchange Membrane Fuel Cells. ACS Applied Energy Materials, 2019, 2, 4999-5008.	2.5	56
24	Recycling of waste automobile tires: Transforming char in oxygen reduction reaction catalysts for alkaline fuel cells. Journal of Power Sources, 2019, 427, 85-90.	4.0	32
25	A Goldâ€“Palladium Nanoparticle Alloy Catalyst for CO Production from CO 2 Electroreduction. Energy Technology, 2019, 7, 1800859.	1.8	14
26	Palladium-ceria nanocatalyst for hydrogen oxidation in alkaline media: Optimization of the Pdâ€“CeO2 interface. Nano Energy, 2019, 57, 820-826.	8.2	70
27	An increase in hydrogen production from light and ethanol using a dual scale porosity photocatalyst. Green Chemistry, 2018, 20, 2299-2307.	4.6	18
28	Electrocatalysts and Mechanisms of Hydrogen Oxidation in Alkaline Media for Anion Exchange Membrane Fuel Cells. Lecture Notes in Energy, 2018, , 79-103.	0.2	5
29	Nanostructured carbon supported Pd-ceria as anode catalysts for anion exchange membrane fuel cells fed with polyalcohols. Inorganica Chimica Acta, 2018, 470, 213-220.	1.2	15
30	Hydrogen production from the electrooxidation of methanol and potassium formate in alkaline media on carbon supported Rh and Pd nanoparticles. Inorganica Chimica Acta, 2018, 470, 263-269.	1.2	19
31	Energy Production and Storage Promoted by Organometallic Complexes. European Journal of Inorganic Chemistry, 2018, 2018, 4393-4412.	1.0	24
32	Evidence of the Strong Metal Support Interaction in a Palladium-Ceria Hybrid Electrocatalyst for Enhancement of the Hydrogen Evolution Reaction. Journal of the Electrochemical Society, 2018, 165, F1147-F1153.	1.3	28
33	Beyond 1.0ÂW cm^{â^'2}Performance without Platinum: The Beginning of a New Era in Anion Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2018, 165, J3039-J3044.	1.3	91
34	Surface Adsorption Affects the Performance of Alkaline Anion-Exchange Membrane Fuel Cells. ACS Catalysis, 2018, 8, 9429-9439.	5.5	55
35	Improving the Energy Efficiency of Direct Formate Fuel Cells with a Pd/C-CeO2 Anode Catalyst and Anion Exchange Ionomer in the Catalyst Layer. Energies, 2018, 11, 369.	1.6	36
36	A high conductivity ultrathin anion-exchange membrane with 500+ h alkali stability for use in alkaline membrane fuel cells that can achieve 2 W cm^{â^'2} at 80 Â°C. Journal of Materials Chemistry A, 2018, 6, 15404-15412.	5.2	177

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37	Highly active nanostructured palladium-ceria electrocatalysts for the hydrogen oxidation reaction in alkaline medium. Nano Energy, 2017, 33, 293-305.	8.2	147
38	Electrochemical Coproduction of Acrylate and Hydrogen from 1,3-Propandiol. ACS Sustainable Chemistry and Engineering, 2017, 5, 6090-6098.	3.2	23
39	Carbon supported Rh nanoparticles for the production of hydrogen and chemicals by the electroreforming of biomass-derived alcohols. RSC Advances, 2017, 7, 13971-13978.	1.7	57
40	Hydrogen and Chemicals from Renewable Alcohols by Organometallic Electroreforming. ChemCatChem, 2017, 9, 746-750.	1.8	22
41	Direct Alcohol Fuel Cells: Nanostructured Materials for the Electrooxidation of Alcohols in Alkaline Media. Nanostructure Science and Technology, 2016, , 477-516.	0.1	5
42	Energy efficiency of platinum-free alkaline direct formate fuel cells. Applied Energy, 2016, 175, 479-487.	5.1	44
43	Performance Evaluation of a Platinumâ€Free Microscale Alkaline Direct Ethanol Fuel Cell Operating for Long Periods. Energy Technology, 2016, 4, 1119-1124.	1.8	5
44	Heat treated carbon supported iron(<scp>ii</scp>)phthalocyanine oxygen reduction catalysts: elucidation of the structureâ€“activity relationship using X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 33142-33151.	1.3	39
45	A Pd/Câ€CeO₂ Anode Catalyst for Highâ€Performance Platinumâ€Free Anion Exchange Membrane Fuel Cells. Angewandte Chemie - International Edition, 2016, 55, 6004-6007.	7.2	199
46	Carbon supported Auâ€“Pd coreâ€“shell nanoparticles for hydrogen production by alcohol electroreforming. Catalysis Science and Technology, 2016, 6, 6870-6878.	2.1	42
47	Enhancement of the Efficiency and Selectivity for Carbon Dioxide Electroreduction to Fuels on Tailored Copper Catalyst Architectures. Energy Technology, 2016, 4, 1020-1028.	1.8	12
48	A Pd/Câ€CeO₂ Anode Catalyst for Highâ€Performance Platinumâ€Free Anion Exchange Membrane Fuel Cells. Angewandte Chemie, 2016, 128, 6108-6111.	1.6	47
49	High volume hydrogen production from the hydrolysis of sodium borohydride using a cobalt catalyst supported on a honeycomb matrix. Journal of Power Sources, 2015, 299, 391-397.	4.0	32
50	Energy Efficiency of Alkaline Direct Ethanol Fuel Cells Employing Nanostructured Palladium Electrocatalysts. ChemCatChem, 2015, 7, 2214-2221.	1.8	58
51	Deactivation of Palladium Electrocatalysts for Alcohols Oxidation in Basic Electrolytes. Electrochimica Acta, 2015, 177, 100-106.	2.6	34
52	Recent Technological Progress in CO₂ Electroreduction to Fuels and Energy Carriers in Aqueous Environments. Energy Technology, 2015, 3, 197-210.	1.8	98
53	Electro-oxidation of ethylene glycol and glycerol at palladium-decorated FeCo@Fe coreâ€“shell nanocatalysts for alkaline direct alcohol fuel cells: functionalized MWCNT supports and impact on product selectivity. Journal of Materials Chemistry A, 2015, 3, 7145-7156.	5.2	95
54	Direct Alcohol Fuel Cells: Toward the Power Densities of Hydrogenâ€Fed Proton Exchange Membrane Fuel Cells. ChemSusChem, 2015, 8, 524-533.	3.6	56

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55	Electrochemical growth of platinum nanostructures for enhanced ethanol oxidation. Applied Catalysis B: Environmental, 2015, 165, 185-191.	10.8	17
56	Energy and Chemicals from the Selective Electrooxidation of Renewable Diols by Organometallic Fuel Cells. ChemSusChem, 2014, 7, 2432-2435.	3.6	27
57	Energy Savings in the Conversion of CO₂ to Fuels using an Electrolytic Device. Energy Technology, 2014, 2, 522-525.	1.8	55
58	Electrodeposition of Semiconductors Thin Films with Different Composition and Band Gap. ECS Transactions, 2014, 58, 23-32.	0.3	2
59	Energy & Chemicals from Renewable Resources by Electrocatalysis. Journal of the Electrochemical Society, 2014, 161, D3032-D3043.	1.3	18
60	Nanotechnology makes biomass electrolysis more energy efficient than water electrolysis. Nature Communications, 2014, 5, 4036.	5.8	290
61	Revisiting strontium-doped lanthanum cuprate perovskite for the electrochemical reduction of CO2. Journal of CO2 Utilization, 2014, 5, 53-59.	3.3	30
62	Nanostructured Feâ€“Ag electrocatalysts for the oxygen reduction reaction in alkaline media. Journal of Materials Chemistry A, 2013, 1, 13337.	5.2	33
63	Enhanced electro-oxidation of alcohols at electrochemically treated polycrystalline palladium surface. Journal of Power Sources, 2013, 242, 872-876.	4.0	15
64	Electrooxidation of Ethylene Glycol and Glycerol on Pdâ€(Niâ€Zn)/C Anodes in Direct Alcohol Fuel Cells. ChemSusChem, 2013, 6, 518-528.	3.6	138
65	A Birdâ€™s Eye View of Energy-Related Electrochemistry. Nanostructure Science and Technology, 2013, , 25-61.	0.1	1
66	Electrochemical Devices for Energy Conversion and Storage. Nanostructure Science and Technology, 2013, , 63-89.	0.1	0
67	Electrooxidation in Alkaline Media of Ethylene Glycol and Glycerol on Pdâ€(Niâ€Zn)/C Anodes in Direct Alcohol Fuel Cells. ChemSusChem, 2013, 6, 390-390.	3.6	5
68	Molecular Complexes in Electrocatalysis for Energy Production and Storage. Nanostructure Science and Technology, 2013, , 273-315.	0.1	2
69	Shape and Structure-Controlled Metal Nanoparticles. Nanostructure Science and Technology, 2013, , 219-250.	0.1	0
70	New LDPE based anion-exchange membranes for alkaline solid polymeric electrolyte water electrolysis. International Journal of Hydrogen Energy, 2012, 37, 14992-15002.	3.8	100
71	Improvement in the efficiency of an OrganoMetallic Fuel Cell by tuning the molecular architecture of the anode electrocatalyst and the nature of the carbon support. Energy and Environmental Science, 2012, 5, 8608.	15.6	54
72	Electrochemical and spectroscopic study of novel Cu and Fe-based catalysts forÂoxygen reduction in alkaline media. Journal of Power Sources, 2012, 213, 169-179.	4.0	76

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73	H2/air alkaline membrane fuel cell performance and durability, using novel ionomer and non-platinum group metal cathode catalyst. Journal of Power Sources, 2010, 195, 5875-5881.	4.0	153
74	Reactive Blending of Polyamides with Different Carbonyl Containing Olefin Polymers. Macromolecular Materials and Engineering, 2003, 288, 475-483.	1.7	15
75	Solvent extraction of metal sulfates by zwitterionic forms of ditopic ligands. Dalton Transactions, 2003, , 55-64.	1.6	45
76	Exploiting supramolecular chemistry in metal recovery: novel zwitterionic extractants for nickel(ii) salts. Dalton Transactions, 2003, , 1932-1940.	1.6	24
77	Signal Amplification by a Fluorescent Indicator of a pH-Driven Intramolecular Translocation of a Copper(II) Ion. Angewandte Chemie - International Edition, 2002, 41, 2553-2556.	7.2	66
78	Supramolecular assemblies from ditopic ligands and transition metal saltsâ€Šâ€. Dalton Transactions RSC, 2000, , 3773-3782.	2.3	37