Enza Passalacqua

List of Publications by Year
in descending order

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93 papers	4,941 citations	126708 33 h-index	91712 69 g-index
95 all docs	95 docs citations	95 times ranked	3795 citing authors

#	Article	IF	Citations
1	Influence of Nafion loading in the catalyst layer of gas-diffusion electrodes for PEFC. Journal of Power Sources, 1999, 77, 136-142.	4.0	406
2	Nafion content in the catalyst layer of polymer electrolyte fuel cells: effects on structure and performance. Electrochimica Acta, 2001, 46, 799-805.	2.6	389
3	Hybrid Nafionâ€“silica membranes doped with heteropolyacids for application in direct methanol fuel cells. Solid State Ionics, 2001, 145, 101-107.	1.3	276
4	Sulfonated polysulfone as promising membranes for polymer electrolyte fuel cells. Journal of Applied Polymer Science, 2000, 77, 1250-1256.	1.3	255
5	Influence of the PTFE content in the diffusion layer of low-Pt loading electrodes for polymer electrolyte fuel cells. Electrochimica Acta, 1998, 43, 3675-3680.	2.6	252
6	Sulfonated polysulfone ionomer membranes for fuel cells. Solid State Ionics, 2001, 145, 47-51.	1.3	209
7	Sulfonated polybenzimidazole membranes â€" preparation and physico-chemical characterization. Journal of Membrane Science, 2001, 188, 71-78.	4.1	202
8	Nafionâ€“TiO2 hybrid membranes for medium temperature polymer electrolyte fuel cells (PEFCs). Journal of Power Sources, 2005, 152, 16-21.	4.0	183
9	An empirical equation for polymer electrolyte fuel cell (PEFC) behaviour. Journal of Applied Electrochemistry, 1999, 29, 1449-1455.	1.5	156
10	Title is missing!. Journal of Applied Electrochemistry, 2001, 31, 449-454.	1.5	144
11	Influence of the structure in low-Pt loading electrodes for polymer electrolyte fuel cells. Electrochimica Acta, 1998, 43, 3665-3673.	2.6	128
12	Analysis of platinum particle size and oxygen reduction in phosphoric acid. Electrochimica Acta, 1991, 36, 1979-1984.	2.6	126
13	ZrO2â€“Nafion composite membranes for polymer electrolyte fuel cells (PEFCs) at intermediate temperature. Journal of Power Sources, 2006, 163, 47-51.	4.0	125
14	Performance comparison of long and short-side chain perfluorosulfonic membranes for high temperature polymer electrolyte membrane fuel cell operation. Journal of Power Sources, 2011, 196, 8925-8930.	4.0	124
15	Sulphonated poly(ether ether ketone) membranes for fuel cell application: Thermal and structural characterisation. Journal of Power Sources, 2006, 163, 18-26.	4.0	122
16	Performance and degradation of high temperature polymer electrolyte fuel cell catalysts. Journal of Power Sources, 2008, 178, 525-536.	4.0	113
17	The influence of Pt on the electrooxidation behaviour of carbon in phosphoric acid. Electrochimica Acta, 1992, 37, 2725-2730.	2.6	103
18	Improvement in the diffusion characteristics of low Pt-loaded electrodes for PEFCs. Journal of Applied Electrochemistry, 1999, 29, 445-448.	1.5	94

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19	Relationship between physicochemical properties and electrooxidation behaviour of carbon materials. Electrochimica Acta, 1991, 36, 1931-1935.	2.6	74
20	Electroxidation of H2 on Pt/C Ptâ€“Ru/C and Ptâ€“Mo/C anodes for polymer electrolyte fuel cell. Electrochimica Acta, 2000, 46, 555-561.	2.6	69
21	Structural and electrochemical investigation on re-cast Nafion membranes for polymer electrolyte fuel cells (PEFCs) application. Journal of Membrane Science, 2006, 278, 105-113.	4.1	59
22	Surface Properties of Pt and PtCo Electrocatalysts and Their Influence on the Performance and Degradation of High-Temperature Polymer Electrolyte Fuel Cells. Journal of Physical Chemistry C, 2010, 114, 15823-15836.	1.5	57
23	Influence of the bolt torque on PEFC performance with different gasket materials. International Journal of Hydrogen Energy, 2011, 36, 13043-13050.	3.8	57
24	The effect of thermal treatment on structure and surface composition of PtCo electro-catalysts for application in PEMFCs operating under automotive conditions. Journal of Power Sources, 2012, 208, 35-45.	4.0	52
25	Composites Nafion-titania membranes for Polymer Electrolyte Fuel Cell (PEFC) applications at low relative humidity levels: Chemical physical properties and electrochemical performance. Polymer Testing, 2016, 56, 10-18.	2.3	52
26	Composite S-PEEK membranes for medium temperature polymer electrolyte fuel cells. Journal of Power Sources, 2008, 178, 661-666.	4.0	50
27	Sulfonated PEEK-WC membranes for proton-exchange membrane fuel cell: Effect of the increasing level of sulfonation on electrochemical performances. Journal of Membrane Science, 2006, 281, 377-385.	4.1	47
28	Phosphotungstic Acid Supported on a Nanopowdered ZrO₂ as a Filler in Nafionâ€Based Membranes for Polymer Electrolyte Fuel Cells. Fuel Cells, 2008, 8, 225-235.	1.5	46
29	Sulphonated polysulphone membranes for medium temperature in polymer electrolyte fuel cells (PEFC). Polymer Testing, 2008, 27, 248-259.	2.3	39
30	Effect of operative conditions on a PEFC stack performance. International Journal of Hydrogen Energy, 2008, 33, 3137-3141.	3.8	38
31	An investigation of the effects of electrode preparation parameters on the performance of phosphoric acid fuel cell cathodes. Electrochimica Acta, 1990, 35, 1411-1421.	2.6	36
32	High temperature proton exchange membrane fuel cell using a sulfonated membrane obtained via H2SO4 treatment of PEEK-WC. Catalysis Today, 2005, 104, 213-218.	2.2	36
33	CO-tolerant electrodes developed with PhosphoMolybdic Acid for Polymer Electrolyte Fuel Cell (PEFCs) application. Journal of Power Sources, 2007, 171, 540-545.	4.0	35
34	Polymer electrolyte fuel cell stack research and development. International Journal of Hydrogen Energy, 2008, 33, 1941-1946.	3.8	32
35	Investigation of layered double hydroxide (LDH) Nafion-based nanocomposite membranes for high temperature PEFCs. Energy Conversion and Management, 2015, 96, 39-46.	4.4	32
36	Block co-polymer templated mesoporous carbonâ€“Nafion hybrid membranes for polymer electrolyte fuel cells under reduced relative humidity. Journal of Membrane Science, 2016, 499, 503-514.	4.1	32

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37	Oxide-supported PtCo alloy catalyst for intermediate temperature polymer electrolyte fuel cells. Applied Catalysis B: Environmental, 2013, 142-143, 15-24.	10.8	30
38	Progress in polymeric material for hydrogen storage application in middle conditions. Energy, 2014, 64, 607-614.	4.5	30
39	Morphological characteristics of PTFE bonded gas diffusion electrodes. Electrochimica Acta, 1991, 36, 1049-1055.	2.6	29
40	Investigation on composite S-PEEK/H-BETA MEAs for medium temperature PEFC. International Journal of Hydrogen Energy, 2008, 33, 3153-3158.	3.8	27
41	Influence of silica morphology in composite Nafion membranes properties. International Journal of Hydrogen Energy, 2011, 36, 14725-14733.	3.8	27
42	Optimization of perfluorosulphonic ionomer amount in gas diffusion electrodes for PEMFC operation under automotive conditions. Electrochimica Acta, 2015, 165, 450-455.	2.6	26
43	Composite membranes based on micro and mesostructured silica: A comparison of physicochemical and transport properties. Journal of Power Sources, 2011, 196, 5394-5401.	4.0	25
44	1.5ÂkWe HT-PEFC stack with composite MEA for CHP application. International Journal of Hydrogen Energy, 2013, 38, 11619-11627.	3.8	23
45	Hydrogen storage based on polymeric material. International Journal of Hydrogen Energy, 2011, 36, 9062-9068.	3.8	22
46	Investigation of Pd-based electrocatalysts for oxygen reduction in PEMFCs operating under automotive conditions. Journal of Power Sources, 2013, 222, 390-399.	4.0	22
47	Design and development of a 7kW polymer electrolyte membrane fuel cell stack for UPS application. International Journal of Hydrogen Energy, 2010, 35, 9983-9989.	3.8	21
48	Increasing the stability of membrane-electrode assemblies based on AquivionÂ® membranes under automotive fuel cell conditions by using proper catalysts and ionomers. Journal of Electroanalytical Chemistry, 2019, 842, 59-65.	1.9	21
49	MEAs for Polymer Electrolyte Fuel Cell (PEFC) Working at Medium Temperature. Journal of Fuel Cell Science and Technology, 2006, 3, 361-365.	0.8	18
50	Polymer electrolyte fuel cell mini power unit for portable application. Journal of Power Sources, 2007, 169, 334-337.	4.0	18
51	An electro-kinetic study of oxygen reduction in polymer electrolyte fuel cells at intermediate temperatures. International Journal of Hydrogen Energy, 2013, 38, 675-681.	3.8	17
52	Composites membranes based on Nafion and PAMAM dendrimers for PEMFC applications. International Journal of Hydrogen Energy, 2014, 39, 16686-16693.	3.8	17
53	Synthesized Yttria Stabilised Zirconia as filler in Proton Exchange Membranes (PEMs) with enhanced stability. Polymer Testing, 2018, 65, 322-330.	2.3	15
54	TiO2-based photoelectrodes in photoelectrochemical cells: Performance and mechanism of O2 evolution. International Journal of Hydrogen Energy, 1987, 12, 305-313.	3.8	14

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55	Influence of physicochemical properties on the performance of Pt/C porous electrodes for oxygen reduction in phosphoric acid. Electrochimica Acta, 1993, 38, 913-918.	2.6	13
56	Microstructure, state of water and proton conductivity of sulfonated poly(ether ether ketone). Solid State Ionics, 2013, 252, 62-67.	1.3	13
57	Electrochemical characterization of sulfonated PEEK-WC membranes for PEM fuel cells. International Journal of Hydrogen Energy, 2013, 38, 551-557.	3.8	13
58	Effects of the Chemical Treatment on the Physical-Chemical and Electrochemical Properties of the Commercial Nafionâ„¢ NR212 Membrane. Materials, 2020, 13, 5254.	1.3	13
59	CFD analysis of the flow-field scale-up influence on the electrodes performance in a PEFC. Journal of Power Sources, 2005, 152, 67-74.	4.0	12
60	Influence of doping level in Yttria-Stabilised-Zirconia (YSZ) based-fillers as degradation inhibitors for proton exchange membranes fuel cells (PEMFCs) in drastic conditions. International Journal of Hydrogen Energy, 2019, 44, 31445-31457.	3.8	12
61	Computer aided fuel cell design and scale-up, comparison between model and experimental results. Journal of Applied Electrochemistry, 2006, 37, 87-93.	1.5	11
62	Evaluation of High Temperature Degradation of Pt/C Catalysts in PEM Fuel Cells. ECS Transactions, 2006, 3, 765-774.	0.3	11
63	Study on sulphonated polysulphone/polyurethane blend membranes for fuel cell applications. Chemical Physics Letters, 2013, 579, 100-104.	1.2	11
64	Composite sPEEK-TPyP membranes development for portable applications. International Journal of Hydrogen Energy, 2015, 40, 17394-17401.	3.8	11
65	Fuel cell performance assessment for closed-loop renewable energy systems. Journal of Energy Chemistry, 2016, 25, 531-538.	7.1	11
66	Mechanism of O2 evolution on TiO2 photoanodes. International Journal of Hydrogen Energy, 1985, 10, 585-590.	3.8	10
67	Molten carbonate fuel cell with indirect internal reforming. Journal of Power Sources, 1994, 52, 41-47.	4.0	10
68	Evaluation of titanium oxide introduction in the electrode structure for portable PEMFC applications. International Journal of Hydrogen Energy, 2021, , .	3.8	10
69	Partial oxidation of propane on Nafion supported catalytic membranes. Catalysis Today, 2000, 61, 37-41.	2.2	9
70	Comparative Investigation on Nano-Sized SiO2 as a Filler for Proton Exchange Membranes (PEM) Fuel Cells. ECS Transactions, 2007, 11, 357-366.	0.3	9
71	Influence of the operating conditions and of the ageing upon the electrochemical performance of a phosphoric acid fuel cell. Journal of Power Sources, 1993, 42, 365-376.	4.0	8
72	Influence of post-casting treatments on sulphonated polyetheretherketone composite membranes. Journal of Power Sources, 2010, 195, 6037-6042.	4.0	8

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73	Proton conducting membranes based on sulfonated PEEK-WC polymer for PEMFCs. International Journal of Hydrogen Energy, 2013, 38, 16642-16648.	3.8	8
74	A preliminary investigation on reinforced double layer Nafion membranes for high temperature PEFCs application. Chemical Physics Letters, 2014, 591, 149-155.	1.2	8
75	Morphological changes in the electrodes of phosphoric acid fuel cells operating under open circuit voltage conditions. Journal of Applied Electrochemistry, 1990, 20, 235-239.	1.5	7
76	Influence of the morphological-absorptive properties upon the performance of phosphoric acid fuel cell gas diffusion electrodes. International Journal of Hydrogen Energy, 1992, 17, 771-776.	3.8	7
77	Electrodics at the gas diffusion platinum electrodesâ€"H3PW12O40 proton conducting liquid electrolyte interface. Electrochimica Acta, 1996, 41, 2817-2827.	2.6	7
78	Nafion^{Â®} Electro-Spun Reinforced Membranes for Polymer Electrolyte Fuel Cell. Journal of Nanoscience and Nanotechnology, 2011, 11, 8768-8774.	0.9	7
79	Stack Operation Using Composite Membrane-Electrodes Assemblies at 120ÃƒÂ‚Ã‚Â°C. Journal of Fuel Cell Science and Technology, 2012, 9, .	0.8	7
80	Effect of platinum particle size on the performance of PAFC O2 reduction electrocatalysts. International Journal of Hydrogen Energy, 1994, 19, 165-168.	3.8	6
81	Iron oxide electrodes for photoelectrolysis of water. International Journal of Hydrogen Energy, 1983, 8, 763-766.	3.8	5
82	Polymer Electrolyte Fuel Cell Stacks at CNR-ITAE: State of the Art. Journal of Fuel Cell Science and Technology, 2007, 4, 350-356.	0.8	5
83	Stochastic Reconstruction at Two Scales and Experimental Validation to Determine the Effective Electrical Resistivity of a PEMFC Catalyst Layer. ECS Transactions, 2011, 41, 2061-2071.	0.3	5
84	Composite Sulfonated Polyether-Ether Ketone Membranes with SBA-15 for Electrochemical Energy Systems. Materials, 2020, 13, 1570.	1.3	4
85	Cyclic Current Profile Performance of Proton Exchange Membrane Fuel Cells in Stationary Applications. ECS Transactions, 2007, 11, 1527-1533.	0.3	3
86	Investigation of Carbon Supported Pt and PtCo Electrocatalysts by Low-Energy Ion Scattering and X-ray Photoelectron Spectroscopy: Influence of the Surface Characteristics on Performance and Degradation. ECS Transactions, 2011, 35, 83-91.	0.3	3
87	Composite sPEEK Membranes for Vanadium Redox Batteries Application. Procedia Engineering, 2012, 44, 1041-1043.	1.2	3
88	Performance assessment of an integrated PEFC and an hydrogen storage device based on innovative material. International Journal of Hydrogen Energy, 2015, 40, 17388-17393.	3.8	3
89	Solid-State Materials for Hydrogen Storage. , 2018, , 443-467.		3
90	Photoelectrochemical behaviour of mixed TiNb oxide electrodes. Solar Energy Materials and Solar Cells, 1986, 14, 483-498.	0.4	2

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91	Electrooxidation Behaviour of Pt/Carbon Electrocatalyst for Phosphoric Acid Fuel Cells (PAFC). , 0, , .		0
92	A Novel Polymeric Approach by Utilizing Functionalized Poly(ether ether ketone) for Hydrogen Storage Applications. Materials Research Society Symposia Proceedings, 2009, 1216, 1.	0.1	0
93	Transport phenomena in polymer electrolyte membrane fuel cells. , 2022, , 341-368.		0