

Siti Kartom Kamarudin

List of Publications by Year in descending order

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126
papers

8,393
citations

50276

46
h-index

46799

89
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128
all docs

128
docs citations

128
times ranked

6958
citing authors

#	ARTICLE	IF	CITATIONS
1	Microporous and mesoporous structure catalysts for the production of 5-hydroxymethylfurfural (5-HMF). International Journal of Energy Research, 2022, 46, 577-633.	4.5	10
2	Enhancement on the Quaternized sodium alginate/polyvinyl alcohol membrane performance in the application of passive DEFCs. Materials Letters, 2022, 309, 131388.	2.6	4
3	Chitosan/carrageenan/polyvinyl alcohol-graphene oxide biopolymer composite membrane for application of air-breathing passive direct ethanol fuel cells. Journal of Applied Polymer Science, 2022, 139, .	2.6	7
4	Design and simulation for improved performance via pump-less direct ethanol fuel cell for mobile application. International Journal of Energy Research, 2022, 46, 15683-15695.	4.5	9
5	Recent biopolymers used for membrane fuel cells: Characterization analysis perspectives. International Journal of Energy Research, 2022, 46, 16178-16207.	4.5	16
6	Biogenic platinum from agricultural wastes extract for improved methanol oxidation reaction in direct methanol fuel cell. Journal of Advanced Research, 2021, 28, 63-75.	9.5	28
7	Introduction to direct alcohol fuel cells (DAFCs)., 2021, , 49-70.		4
8	Carbon nanotube, graphene oxide and montmorillonite as conductive fillers in polymer electrolyte membrane for fuel cell: an overview. International Journal of Energy Research, 2021, 45, 1309-1346.	4.5	41
9	Potential of Nafion/eggshell composite membrane for application in direct methanol fuel cell. International Journal of Energy Research, 2021, 45, 2245-2264.	4.5	23
10	Advanced modification of scandia-stabilized zirconia electrolytes for solid oxide fuel cells application—A review. International Journal of Energy Research, 2021, 45, 4871-4887.	4.5	34
11	Fuel cells as an advanced alternative energy source for the residential sector applications in Malaysia. International Journal of Energy Research, 2021, 45, 5032-5057.	4.5	14
12	Carbon and graphene quantum dots in fuel cell application: An overview. International Journal of Energy Research, 2021, 45, 1396-1424.	4.5	59
13	Progress and challenges: Review for direct liquid fuel cell. International Journal of Energy Research, 2021, 45, 6644-6688.	4.5	96
14	Direct dimethyl ether fuel cells (DDMEFCs)., 2021, , 177-189.		0
15	Structural mechanism investigation on methanol crossover and stability of a passive direct methanol fuel cell performance via modified microporous layer. International Journal of Energy Research, 2021, 45, 12928-12943.	4.5	13
16	Superior stability and methanol tolerance of a metal-free nitrogen-doped hierarchical porous carbon electrocatalyst derived from textile waste. Journal of Materials Research and Technology, 2021, 11, 1834-1846.	5.8	12
17	Research and innovation in the electrocatalyst development toward glycerol oxidation reaction. International Journal of Energy Research, 2021, 45, 12693-12727.	4.5	11
18	Critical review on development of magnesium alloy as anode in Mg-Air fuel cell and additives in electrolyte. International Journal of Energy Research, 2021, 45, 15739-15759.	4.5	6

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19	Effect of alkali doping on alkaline stability and cell performance of quaternization polyvinyl alcohol/graphene oxide membranes for passive DEFCs. <i>Materials Letters</i> , 2021, 292, 129651.	2.6	10
20	A review of alkaline solid polymer membrane in the application of AEM electrolyzer: Materials and characterization. <i>International Journal of Energy Research</i> , 2021, 45, 18337-18354.	4.5	44
21	Application of graphene in low-temperature fuel cell technology: An overview. <i>International Journal of Energy Research</i> , 2021, 45, 18318-18336.	4.5	10
22	The progress of fuel cell for Malaysian residential consumption: Energy status and prospects to introduction as a renewable power generation system. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 144, 110984.	16.4	53
23	The mechanism of the water dissociation and dehydrogenation of glycerol on Au (111) and PdAu alloy catalyst surfaces. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 30937-30947.	7.1	4
24	Enhanced performance of methanol oxidation reaction via green synthesis of platinum electrocatalyst from sugar cane bagasse. <i>International Journal of Energy Research</i> , 2021, 45, 7380-7403.	4.5	11
25	Sodium alginate/alumina composite biomembrane preparation and performance in DMFC application. <i>Polymer Testing</i> , 2020, 81, 106183.	4.8	42
26	Anode structure with double-catalyst layers for improving the direct ethanol fuel cell performance. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 22302-22314.	7.1	5
27	Evaluation of Quaternized polyvinyl alcohol/graphene oxide-based membrane towards improving the performance of air-breathing passive direct methanol fuel cell. <i>International Journal of Energy Research</i> , 2020, 44, 8988-9000.	4.5	26
28	The potential of novel carbon nanocages as a carbon support for an enhanced methanol electrooxidation reaction in a direct methanol fuel cell. <i>International Journal of Energy Research</i> , 2020, 44, 10071-10086.	4.5	18
29	Influence of quaternization and polymer blending modification on the mechanical stability, ionic conductivity and fuel barrier of sodium alginate-based membranes for passive DEFCs. <i>Materials Letters</i> , 2020, 279, 128517.	2.6	10
30	NiPd Supported on Mesostructured Silica Nanoparticle as Efficient Anode Electrocatalyst for Methanol Electrooxidation in Alkaline Media. <i>Catalysts</i> , 2020, 10, 1235.	3.5	9
31	Active direct methanol fuel cell: An overview. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 19620-19641.	7.1	150
32	A review of quaternized polyvinyl alcohol as an alternative polymeric membrane in DMFCs and DEFCs. <i>International Journal of Energy Research</i> , 2020, 44, 6223-6239.	4.5	39
33	A review of progressive advanced polymer nanohybrid membrane in fuel cell application. <i>International Journal of Energy Research</i> , 2020, 44, 8255-8295.	4.5	39
34	Synthesis and optimization of PtRu/TiO ₂ -CNF anodic catalyst for direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 30543-30552.	7.1	35
35	Potential of sodium alginate/titanium oxide biomembrane nanocomposite in DMFC application. <i>International Journal of Energy Research</i> , 2019, 43, 8057.	4.5	24
36	Membraneless micro fuel cell system design and performance: An overview. <i>International Journal of Energy Research</i> , 2019, 43, 8956-8972.	4.5	23

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37	The optimization performance of cross-linked sodium alginate polymer electrolyte bio-membranes in passive direct methanol/ethanol fuel cells. <i>International Journal of Energy Research</i> , 2019, 43, 8275.	4.5	14
38	Green synthesis of metal and metal oxide nanoparticles via plant extracts: an overview. <i>Materials Research Express</i> , 2019, 6, 112004.	1.6	142
39	Influence of Graphene Oxide on the Ethanol Permeability and Ionic Conductivity of QPVA-Based Membrane in Passive Alkaline Direct Ethanol Fuel Cells. <i>Nanoscale Research Letters</i> , 2019, 14, 28.	5.7	40
40	Sustainable route of synthesis platinum nanoparticles using orange peel extract. <i>International Journal of Green Energy</i> , 2019, 16, 1518-1526.	3.8	27
41	Recent progress of anode catalysts and their support materials for methanol electrooxidation reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 14744-14769.	7.1	132
42	Nanostructured Pd-Based Electrocatalyst and Membrane Electrode Assembly Behavior in a Passive Direct Glycerol Fuel Cell. <i>Nanoscale Research Letters</i> , 2019, 14, 52.	5.7	26
43	Performance of quaternized poly(vinyl alcohol)-based electrolyte membrane in passive alkaline DEFCs application: RSM optimization approach. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47526.	2.6	16
44	Durability and performance of direct glycerol fuel cell with palladium-aurum/vapor grown carbon nanofiber support. <i>Energy Conversion and Management</i> , 2019, 188, 120-130.	9.2	38
45	Enhanced alkaline stability and performance of alkali-doped quaternized poly(vinyl alcohol) membranes for passive direct ethanol fuel cell. <i>International Journal of Energy Research</i> , 2019, 43, 5252-5265.	4.5	30
46	Current status, opportunities, and challenges in fuel cell catalytic application of aerogels. <i>International Journal of Energy Research</i> , 2019, 43, 2447-2467.	4.5	28
47	Improved performance of sulfonated polyimide composite membranes with rice husk ash as a bio-filler for application in direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 1857-1866.	7.1	45
48	Critical challenges in the system development of direct alcohol fuel cells as portable power supplies: An overview. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 3031-3054.	7.1	140
49	Recent advances in additive-enhanced polymer electrolyte membrane properties in fuel cell applications: An overview. <i>International Journal of Energy Research</i> , 2019, 43, 2756-2794.	4.5	116
50	Parametric study on direct ethanol fuel cell (DEFC) performance and fuel crossover. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 8566-8574.	7.1	48
51	New composite membrane poly(vinyl alcohol)/graphene oxide for direct ethanol proton exchange membrane fuel cell. <i>Journal of Applied Polymer Science</i> , 2019, 136, 46928.	2.6	48
52	Analisis Tenaga Bebas dan Sifat Mangkin PtRuFeNi untuk Sel Fuel Metanol Langsung (DMFC) Tunggal. <i>Sains Malaysiana</i> , 2019, 48, 1221-1231.	0.5	1
53	Novel Anodic Catalyst Support for Direct Methanol Fuel Cell: Characterizations and Single-Cell Performances. <i>Nanoscale Research Letters</i> , 2018, 13, 90.	5.7	56
54	Platinum-Based Catalysts on Various Carbon Supports and Conducting Polymers for Direct Methanol Fuel Cell Applications: a Review. <i>Nanoscale Research Letters</i> , 2018, 13, 410.	5.7	189

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55	Performance of crosslinked sodium alginate/sulfonated graphene oxide as polymer electrolyte membrane in DMFC application: RSM optimization approach. International Journal of Hydrogen Energy, 2018, 43, 22986-23003.	7.1	57
56	Molecular dynamics simulations of sodium alginate/sulfonated graphene oxide membranes properties. Heliyon, 2018, 4, e00808.	3.2	10
57	Silica-related membranes in fuel cell applications: An overview. International Journal of Hydrogen Energy, 2018, 43, 16068-16084.	7.1	69
58	Facile preparation of ultra-low Pt loading graphene-immobilized electrode for methanol oxidation reaction. International Journal of Hydrogen Energy, 2018, 43, 16005-16014.	7.1	12
59	Enhanced Proton Conductivity and Methanol Permeability Reduction via Sodium Alginate Electrolyte-Sulfonated Graphene Oxide Bio-membrane. Nanoscale Research Letters, 2018, 13, 82.	5.7	56
60	Enhanced mechanical flexibility and performance of sodium alginate polymer electrolyte bio-membrane for application in direct methanol fuel cell. Journal of Applied Polymer Science, 2018, 135, 46666.	2.6	46
61	Preliminary Study of Alkaline Direct Ethanol Fuel Cell by using Crosslinked Quaternized Poly (Vinyl) Tj ETQq1 1 0.784314 rgBT /Overlook	0.3	20
62	HRT EFFECT ON SIMULTANEOUS COD, AMMONIA AND MANGANESE REMOVAL FROM DRINKING WATERTREATMENT SYSTEM USING A BIOLOGICAL AERATED FILTER (BAF). Environmental Engineering and Management Journal, 2018, 17, 199-207.	0.6	6
63	Applications of graphene nano-sheets as anode diffusion layers in passive direct methanol fuel cells (DMFC). International Journal of Hydrogen Energy, 2017, 42, 9252-9261.	7.1	27
64	Direct liquid fuel cells: A review. International Journal of Hydrogen Energy, 2017, 42, 10142-10157.	7.1	427
65	Titanium dioxide nanotubes (TNT) in energy and environmental applications: An overview. Renewable and Sustainable Energy Reviews, 2017, 76, 212-225.	16.4	113
66	Graphene in electrocatalyst and proton conductiong membrane in fuel cell applications: An overview. Renewable and Sustainable Energy Reviews, 2017, 69, 862-870.	16.4	103
67	Review on microstructure modelling of a gas diffusion layer for proton exchange membrane fuel cells. Renewable and Sustainable Energy Reviews, 2017, 77, 1001-1009.	16.4	94
68	Novel heat-treated cobalt phthalocyanine/carbon-tungsten oxide nanowires (CoPc/C-W 18 O 49) cathode catalyst for direct methanol fuel cell. Journal of Electroanalytical Chemistry, 2017, 803, 19-29.	3.8	15
69	Recent progress of carbonaceous materials in fuel cell applications: An overview. Chemical Engineering Journal, 2017, 309, 489-502.	12.7	145
70	Performance and stability of single and 6-cell stack passive direct methanol fuel cell (DMFC) for long-term operation. International Journal of Hydrogen Energy, 2017, 42, 9230-9242.	7.1	44
71	Fabrication and Characterization of New Composite Tio2 Carbon Nanofiber Anodic Catalyst Support for Direct Methanol Fuel Cell via Electrospinning Method. Nanoscale Research Letters, 2017, 12, 613.	5.7	19
72	TiO2 Nanotube-Carbon (TNT-C) as Support for Pt-based Catalyst for High Methanol Oxidation Reaction in Direct Methanol Fuel Cell. Nanoscale Research Letters, 2016, 11, 553.	5.7	28

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73	Direct conversion technologies of methane to methanol: An overview. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 65, 250-261.	16.4	194
74	Modified Nafion membranes for direct alcohol fuel cells: An overview. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 65, 841-852.	16.4	160
75	Membranes for direct ethanol fuel cells: An overview. <i>Applied Energy</i> , 2016, 163, 334-342.	10.1	139
76	An overview of polymer electrolyte membrane electrolyzer for hydrogen production: Modeling and mass transport. <i>Journal of Power Sources</i> , 2016, 309, 56-65.	7.8	148
77	Catalysts in direct ethanol fuel cell (DEFC): An overview. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 4214-4228.	7.1	348
78	Chitosan and alginate types of bio-membrane in fuel cell application: An overview. <i>Journal of Power Sources</i> , 2015, 289, 71-80.	7.8	161
79	Development of a conceptual design model of a direct ethanol fuel cell (DEFC). <i>International Journal of Hydrogen Energy</i> , 2015, 40, 11943-11948.	7.1	30
80	Investigating design parameter effects on the methanol flux in the passive storage of a direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 11931-11942.	7.1	7
81	Optimization of a porous carbon nanofiber layer for the membrane electrode assembly in DMFC. <i>Energy Conversion and Management</i> , 2015, 101, 525-531.	9.2	29
82	Study on the electronic properties and molecule adsorption of W 18 O 49 Nanowires as a catalyst support in the cathodes of direct methanol fuel cells. <i>Journal of Power Sources</i> , 2015, 288, 461-472.	7.8	17
83	Effective curves of completing simultaneous ammonium and manganese removal in polluted water using a biological aerated filter. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 30, 153-159.	5.8	17
84	Titanium dioxide in fuel cell technology: An overview. <i>Journal of Power Sources</i> , 2015, 278, 109-118.	7.8	106
85	Study on kinetic energy of a novel metal composite for anode catalyst in direct methanol fuel cell. <i>International Journal of Energy Research</i> , 2015, 39, 181-190.	4.5	7
86	Optimization of Integrated Impeller Mixer via Radiotracer Experiments. <i>Scientific World Journal</i> , The, 2014, 2014, 1-8.	2.1	1
87	Radiotracer Technology in Mixing Processes for Industrial Applications. <i>Scientific World Journal</i> , The, 2014, 2014, 1-15.	2.1	10
88	Optimization of a Continuous Hybrid Impeller Mixer via Computational Fluid Dynamics. <i>Scientific World Journal</i> , The, 2014, 2014, 1-6.	2.1	2
89	Novel Anode Catalyst for Direct Methanol Fuel Cells. <i>Scientific World Journal</i> , The, 2014, 2014, 1-8.	2.1	15
90	An Overview of Power Electronics Applications in Fuel Cell Systems: DC and AC Converters. <i>Scientific World Journal</i> , The, 2014, 2014, 1-9.	2.1	17

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91	High power direct methanol fuel cell with a porous carbon nanofiber anode layer. Applied Energy, 2014, 113, 946-954.	10.1	88
92	Mass transfer and performance of membrane-less micro fuel cell: A review. International Journal of Hydrogen Energy, 2014, 39, 1039-1055.	7.1	64
93	Investigation of MEA degradation in a passive direct methanol fuel cell under different modes of operation. Applied Energy, 2014, 135, 364-372.	10.1	39
94	Modeling and simulation of a direct ethanol fuel cell: An overview. Journal of Power Sources, 2014, 262, 401-406.	7.8	57
95	Optimization of hot pressing parameters in membrane electrode assembly fabrication by response surface method. International Journal of Hydrogen Energy, 2013, 38, 9484-9493.	7.1	22
96	Nafion/Pd@SiO ₂ nanofiber composite membranes for direct methanol fuel cell applications. International Journal of Hydrogen Energy, 2013, 38, 9474-9483.	7.1	96
97	Review: Direct ethanol fuel cells. International Journal of Hydrogen Energy, 2013, 38, 9438-9453.	7.1	478
98	An overview on non-platinum cathode catalysts for direct methanol fuel cell. Applied Energy, 2013, 103, 212-220.	10.1	111
99	An overview of fuel management in direct methanol fuel cells. Renewable and Sustainable Energy Reviews, 2013, 24, 557-565.	16.4	69
100	Performance of direct methanol fuel cell with a palladium@silica nanofibre/Nafion composite membrane. Energy Conversion and Management, 2013, 75, 718-726.	9.2	53
101	Biodiesel Progress in Malaysia. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2012, 34, 2139-2146.	2.3	8
102	Removal of ion in drinking water treatment using locally isolated heterotrophic nitrifier. Desalination and Water Treatment, 2012, 50, 294-301.	1.0	5
103	Overview on Direct Formic Acid Fuel Cells (DFAFCs) as an Energy Sources. APCBEE Procedia, 2012, 3, 33-39.	0.5	91
104	Overview on Vapor Feed Direct Methanol Fuel Cell. APCBEE Procedia, 2012, 3, 40-45.	0.5	11
105	Materials, morphologies and structures of MEAs in DMFCs. Renewable and Sustainable Energy Reviews, 2012, 16, 2494-2515.	16.4	42
106	Mass and heat transport in direct methanol fuel cells. Journal of Power Sources, 2011, 196, 9847-9855.	7.8	15
107	A novel hybrid Nafion-PBI-ZP membrane for direct methanol fuel cells. International Journal of Hydrogen Energy, 2011, 36, 14668-14677.	7.1	76
108	Passive direct methanol fuel cells for portable electronic devices. Applied Energy, 2011, 88, 1681-1689.	10.1	142

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109	Overview on nanostructured membrane in fuel cell applications. International Journal of Hydrogen Energy, 2011, 36, 3187-3205.	7.1	129
110	Process system engineering in direct methanol fuel cell. International Journal of Hydrogen Energy, 2011, 36, 6219-6236.	7.1	47
111	EFFECT OF ORGANIC CARBON LOADING (OCL) ON SIMULTANEOUS NH ₄ ⁺ -N AND Mn ²⁺ REMOVAL IN DRINKING WATER USING A BAF SYSTEM. Environmental Engineering and Management Journal, 2011, 10, 1733-1742.	0.6	7
112	Adsorption isotherm mechanism of amino organic compounds as mild steel corrosion inhibitors by electrochemical measurement method. Central South University, 2010, 17, 34-39.	0.5	24
113	High power passive $\frac{1}{4}$ DMFC with low catalyst loading for small power generation. Energy Conversion and Management, 2010, 51, 821-825.	9.2	51
114	Hydrogen production by methanol steam reforming using Ni ₃ Si ₂ Mo ₂ Cu ₃ alumina trimetallic catalysts. Asia-Pacific Journal of Chemical Engineering, 2010, 5, 862-868.	1.5	15
115	Overview of hybrid membranes for direct-methanol fuel-cell applications. International Journal of Hydrogen Energy, 2010, 35, 2160-2175.	7.1	225
116	Non-linear optimization of passive direct methanol fuel cell (DMFC). International Journal of Hydrogen Energy, 2010, 35, 1759-1768.	7.1	37
117	Electrode in direct methanol fuel cells. International Journal of Hydrogen Energy, 2010, 35, 4606-4621.	7.1	130
118	Nanocatalyst for direct methanol fuel cell (DMFC). International Journal of Hydrogen Energy, 2010, 35, 7957-7970.	7.1	259
119	Inhibition of Mild Steel Corrosion under Hydrodynamic Conditions. , 2010, , .		3
120	Overview on the application of direct methanol fuel cell (DMFC) for portable electronic devices. International Journal of Hydrogen Energy, 2009, 34, 6902-6916.	7.1	678
121	Design, fabrication and testing of a PMMA-based passive single-cell and a multi-cell stack micro-DMFC. International Journal of Hydrogen Energy, 2009, 34, 8263-8269.	7.1	98
122	Preparation of Na doped SiO ₂ solid catalysts by the sol-gel method for the production of biodiesel from jatropha oil. Green Chemistry, 2009, 11, 1862.	9.0	48
123	Microwave-assisted transesterification of jatropha and waste frying palm oil. International Journal of Sustainable Energy, 2009, 28, 195-201.	2.4	30
124	Overview on the challenges and developments of micro-direct methanol fuel cells (DMFC). Journal of Power Sources, 2007, 163, 743-754.	7.8	347
125	The conceptual design of a PEMFC system via simulation. Chemical Engineering Journal, 2004, 103, 99-113.	12.7	21
126	Catalytic Activity of Silver Metal Supported on Doped Graphene in Alkaline Medium for Oxygen Reduction Reaction. Advanced Materials Research, 0, 1155, 55-69.	0.3	1