

# Siti Kartom Kamarudin

## List of Publications by Citations

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123  
papers

6,065  
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41  
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128  
ext. papers

7,217  
ext. citations

6.5  
avg, IF

6.81  
L-index

#	Paper	IF	Citations
123	Overview on the application of direct methanol fuel cell (DMFC) for portable electronic devices. <i>International Journal of Hydrogen Energy</i> , <b>2009</b> , 34, 6902-6916	6.7	577
122	Review: Direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 9438-9453	6.7	400
121	Overview on the challenges and developments of micro-direct methanol fuel cells (DMFC). <i>Journal of Power Sources</i> , <b>2007</b> , 163, 743-754	8.9	306
120	Direct liquid fuel cells: A review. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 10142-10157	6.7	296
119	Catalysts in direct ethanol fuel cell (DEFC): An overview. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 4214-4228	6.7	261
118	Nanocatalyst for direct methanol fuel cell (DMFC). <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 7957-7970	6.7	225
117	Overview of hybrid membranes for direct-methanol fuel-cell applications. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 2160-2175	6.7	205
116	Direct conversion technologies of methane to methanol: An overview. <i>Renewable and Sustainable Energy Reviews</i> , <b>2016</b> , 65, 250-261	16.2	141
115	Passive direct methanol fuel cells for portable electronic devices. <i>Applied Energy</i> , <b>2011</b> , 88, 1681-1689	10.7	130
114	Modified Nafion membranes for direct alcohol fuel cells: An overview. <i>Renewable and Sustainable Energy Reviews</i> , <b>2016</b> , 65, 841-852	16.2	129
113	Chitosan and alginate types of bio-membrane in fuel cell application: An overview. <i>Journal of Power Sources</i> , <b>2015</b> , 289, 71-80	8.9	110
112	Overview on nanostructured membrane in fuel cell applications. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 3187-3205	6.7	110
111	Membranes for direct ethanol fuel cells: An overview. <i>Applied Energy</i> , <b>2016</b> , 163, 334-342	10.7	109
110	Recent progress of carbonaceous materials in fuel cell applications: An overview. <i>Chemical Engineering Journal</i> , <b>2017</b> , 309, 489-502	14.7	109
109	Electrode in direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 4606-4621	6.7	108
108	Platinum-Based Catalysts on Various Carbon Supports and Conducting Polymers for Direct Methanol Fuel Cell Applications: a Review. <i>Nanoscale Research Letters</i> , <b>2018</b> , 13, 410	5	99
107	An overview on non-platinum cathode catalysts for direct methanol fuel cell. <i>Applied Energy</i> , <b>2013</b> , 103, 212-220	10.7	94

106	Design, fabrication and testing of a PMMA-based passive single-cell and a multi-cell stack micro-DMFC. <i>International Journal of Hydrogen Energy</i> , <b>2009</b> , 34, 8263-8269	6.7	85
105	Nafion/PdBiO <sub>2</sub> nanofiber composite membranes for direct methanol fuel cell applications. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 9474-9483	6.7	84
104	An overview of polymer electrolyte membrane electrolyzer for hydrogen production: Modeling and mass transport. <i>Journal of Power Sources</i> , <b>2016</b> , 309, 56-65	8.9	83
103	Titanium dioxide nanotubes (TNT) in energy and environmental applications: An overview. <i>Renewable and Sustainable Energy Reviews</i> , <b>2017</b> , 76, 212-225	16.2	82
102	Titanium dioxide in fuel cell technology: An overview. <i>Journal of Power Sources</i> , <b>2015</b> , 278, 109-118	8.9	82
101	Critical challenges in the system development of direct alcohol fuel cells as portable power supplies: An overview. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 3031-3054	6.7	82
100	Recent progress of anode catalysts and their support materials for methanol electrooxidation reaction. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 14744-14769	6.7	78
99	Graphene in electrocatalyst and proton conductiong membrane in fuel cell applications: An overview. <i>Renewable and Sustainable Energy Reviews</i> , <b>2017</b> , 69, 862-870	16.2	76
98	High power direct methanol fuel cell with a porous carbon nanofiber anode layer. <i>Applied Energy</i> , <b>2014</b> , 113, 946-954	10.7	75
97	Recent advances in additive-enhanced polymer electrolyte membrane properties in fuel cell applications: An overview. <i>International Journal of Energy Research</i> , <b>2019</b> , 43, 2756-2794	4.5	75
96	Overview on Direct Formic Acid Fuel Cells (DFAFCs) as an Energy Sources. <i>APCBEE Procedia</i> , <b>2012</b> , 3, 33-39		67
95	A novel hybrid Nafion-PBI-ZP membrane for direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 14668-14677	6.7	65
94	Green synthesis of metal and metal oxide nanoparticles via plant extracts: an overview. <i>Materials Research Express</i> , <b>2019</b> , 6, 112004	1.7	64
93	Review on microstructure modelling of a gas diffusion layer for proton exchange membrane fuel cells. <i>Renewable and Sustainable Energy Reviews</i> , <b>2017</b> , 77, 1001-1009	16.2	63
92	Active direct methanol fuel cell: An overview. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 19620-19641	6.7	58
91	An overview of fuel management in direct methanol fuel cells. <i>Renewable and Sustainable Energy Reviews</i> , <b>2013</b> , 24, 557-565	16.2	56
90	Mass transfer and performance of membrane-less micro fuel cell: A review. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 1039-1055	6.7	51
89	Modeling and simulation of a direct ethanol fuel cell: An overview. <i>Journal of Power Sources</i> , <b>2014</b> , 262, 401-406	8.9	47

88	Performance of direct methanol fuel cell with a palladium-silica nanofibre/Nafion composite membrane. <i>Energy Conversion and Management</i> , <b>2013</b> , 75, 718-726	10.6	46
87	High power passive DMFC with low catalyst loading for small power generation. <i>Energy Conversion and Management</i> , <b>2010</b> , 51, 821-825	10.6	45
86	Silica-related membranes in fuel cell applications: An overview. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 16068-16084	6.7	44
85	Performance and stability of single and 6-cell stack passive direct methanol fuel cell (DMFC) for long-term operation. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 9230-9242	6.7	42
84	Enhanced Proton Conductivity and Methanol Permeability Reduction via Sodium Alginate Electrolyte-Sulfonated Graphene Oxide Bio-membrane. <i>Nanoscale Research Letters</i> , <b>2018</b> , 13, 82	5	41
83	Preparation of Na doped SiO <sub>2</sub> solid catalysts by the sol-gel method for the production of biodiesel from jatropha oil. <i>Green Chemistry</i> , <b>2009</b> , 11, 1862	10	41
82	Novel Anodic Catalyst Support for Direct Methanol Fuel Cell: Characterizations and Single-Cell Performances. <i>Nanoscale Research Letters</i> , <b>2018</b> , 13, 90	5	40
81	Process system engineering in direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 6219-6236	6.7	39
80	Performance of crosslinked sodium alginate/sulfonated graphene oxide as polymer electrolyte membrane in DMFC application: RSM optimization approach. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 22986-23003	6.7	38
79	Investigation of MEA degradation in a passive direct methanol fuel cell under different modes of operation. <i>Applied Energy</i> , <b>2014</b> , 135, 364-372	10.7	34
78	Materials, morphologies and structures of MEAs in DMFCs. <i>Renewable and Sustainable Energy Reviews</i> , <b>2012</b> , 16, 2494-2515	16.2	33
77	Non-linear optimization of passive direct methanol fuel cell (DMFC). <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 1759-1768	6.7	32
76	New composite membrane poly(vinyl alcohol)/graphene oxide for direct ethanol-proton exchange membrane fuel cell. <i>Journal of Applied Polymer Science</i> , <b>2019</b> , 136, 46928	2.9	32
75	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> , <b>2019</b> , 14, 28	5	31
74	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> , <b>2019</b> , 44, 1857-1866	6.7	29
73	Durability and performance of direct glycerol fuel cell with palladium-aurum/vapor grown carbon nanofiber support. <i>Energy Conversion and Management</i> , <b>2019</b> , 188, 120-130	10.6	28
72	Enhanced mechanical flexibility and performance of sodium alginate polymer electrolyte bio-membrane for application in direct methanol fuel cell. <i>Journal of Applied Polymer Science</i> , <b>2018</b> , 135, 46666	2.9	28
71	Progress and challenges: Review for direct liquid fuel cell. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 6644-6688	4.5	28

70	Microwave-assisted transesterification of jatropha and waste frying palm oil. <i>International Journal of Sustainable Energy</i> , <b>2009</b> , 28, 195-201	2.7	27
69	Development of a conceptual design model of a direct ethanol fuel cell (DEFC). <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 11943-11948	6.7	26
68	Parametric study on direct ethanol fuel cell (DEFC) performance and fuel crossover. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 8566-8574	6.7	25
67	Applications of graphene nano-sheets as anode diffusion layers in passive direct methanol fuel cells (DMFC). <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 9252-9261	6.7	24
66	Synthesis and optimization of PtRu/TiO <sub>2</sub> -CNF anodic catalyst for direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 30543-30552	6.7	24
65	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> , <b>2019</b> , 43, 5252-5265	4.5	23
64	A review of quaternized polyvinyl alcohol as an alternative polymeric membrane in DMFCs and DEFCs. <i>International Journal of Energy Research</i> , <b>2020</b> , 44, 6223-6239	4.5	21
63	Carbon and graphene quantum dots in fuel cell application: An overview. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 1396-1424	4.5	21
62	Optimization of a porous carbon nanofiber layer for the membrane electrode assembly in DMFC. <i>Energy Conversion and Management</i> , <b>2015</b> , 101, 525-531	10.6	20
61	A review of progressive advanced polymer nanohybrid membrane in fuel cell application. <i>International Journal of Energy Research</i> , <b>2020</b> , 44, 8255-8295	4.5	20
60	The conceptual design of a PEMFC system via simulation. <i>Chemical Engineering Journal</i> , <b>2004</b> , 103, 99-113	4.7	19
59	Adsorption isotherm mechanism of amino organic compounds as mild steel corrosion inhibitors by electrochemical measurement method. <i>Central South University</i> , <b>2010</b> , 17, 34-39		18
58	Sodium alginate/alumina composite biomembrane preparation and performance in DMFC application. <i>Polymer Testing</i> , <b>2020</b> , 81, 106183	4.5	18
57	Optimization of hot pressing parameters in membrane electrode assembly fabrication by response surface method. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 9484-9493	6.7	17
56	TiO Nanotube-Carbon (TNT-C) as Support for Pt-based Catalyst for High Methanol Oxidation Reaction in Direct Methanol Fuel Cell. <i>Nanoscale Research Letters</i> , <b>2016</b> , 11, 553	5	17
55	Membrane-less micro fuel cell system design and performance: An overview. <i>International Journal of Energy Research</i> , <b>2019</b> , 43, 8956-8972	4.5	16
54	Preliminary Study of Alkaline Direct Ethanol Fuel Cell by using Crosslinked Quaternized Poly (Vinyl Alcohol)/Graphene Oxide Membrane. <i>Jurnal Kejuruteraan</i> , <b>2018</b> , 30, 219-227	0	16
53	Potential of sodium alginate/titanium oxide biomembrane nanocomposite in DMFC application. <i>International Journal of Energy Research</i> , <b>2019</b> , 43, 8057	4.5	15

52	Current status, opportunities, and challenges in fuel cell catalytic application of aerogels. <i>International Journal of Energy Research</i> , <b>2019</b> , 43, 2447-2467	4.5	15
51	Biogenic platinum from agricultural wastes extract for improved methanol oxidation reaction in direct methanol fuel cell. <i>Journal of Advanced Research</i> , <b>2021</b> , 28, 63-75	13	15
50	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> , <b>2021</b> , 144, 110984	16.2	15
49	Sustainable route of synthesis platinum nanoparticles using orange peel extract. <i>International Journal of Green Energy</i> , <b>2019</b> , 16, 1518-1526	3	14
48	Nanostructured Pd-Based Electrocatalyst and Membrane Electrode Assembly Behavior in a Passive Direct Glycerol Fuel Cell. <i>Nanoscale Research Letters</i> , <b>2019</b> , 14, 52	5	14
47	Fabrication and Characterization of New Composite TiO <sub>2</sub> Carbon Nanofiber Anodic Catalyst Support for Direct Methanol Fuel Cell via Electrospinning Method. <i>Nanoscale Research Letters</i> , <b>2017</b> , 12, 613	5	14
46	Carbon nanotube, graphene oxide and montmorillonite as conductive fillers in polymer electrolyte membrane for fuel cell: an overview. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 1309-1346	4.5	14
45	Performance of quaternized poly(vinyl alcohol)-based electrolyte membrane in passive alkaline DEFCs application: RSM optimization approach. <i>Journal of Applied Polymer Science</i> , <b>2019</b> , 136, 47526	2.9	13
44	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> , <b>2015</b> , 30, 153-159	6.3	13
43	An overview of power electronics applications in fuel cell systems: DC and AC converters. <i>Scientific World Journal, The</i> , <b>2014</b> , 2014, 103709	2.2	13
42	Hydrogen production by methanol-steam reforming using Ni <sub>2</sub> Mo <sub>2</sub> Cu/Alumina trimetallic catalysts. <i>Asia-Pacific Journal of Chemical Engineering</i> , <b>2010</b> , 5, 862-868	1.3	13
41	Study on the electronic properties and molecule adsorption of W <sub>18</sub> O <sub>49</sub> nanowires as a catalyst support in the cathodes of direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2015</b> , 288, 461-472	8.9	12
40	Novel heat-treated cobalt phthalocyanine/carbon-tungsten oxide nanowires (CoPc/C-W <sub>18</sub> O <sub>49</sub> ) cathode catalyst for direct methanol fuel cell. <i>Journal of Electroanalytical Chemistry</i> , <b>2017</b> , 803, 19-29	4.1	12
39	Facile preparation of ultra-low Pt loading graphene-immobilized electrode for methanol oxidation reaction. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 16005-16014	6.7	11
38	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> , <b>2019</b> , 43, 8275	4.5	11
37	Mass and heat transport in direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 9847-9855	8.9	11
36	Novel anode catalyst for direct methanol fuel cells. <i>Scientific World Journal, The</i> , <b>2014</b> , 2014, 547604	2.2	10
35	Overview on Vapor Feed Direct Methanol Fuel Cell. <i>APCBEE Procedia</i> , <b>2012</b> , 3, 40-45		10

34	Evaluation of Quaternized polyvinyl alcohol/graphene oxide-based membrane towards improving the performance of air-breathing passive direct methanol fuel cells. <i>International Journal of Energy Research</i> , <b>2020</b> , 44, 8988-9000	4.5	9
33	The potential of novel carbon nanocages as a carbon support for an enhanced methanol electro-oxidation reaction in a direct methanol fuel cell. <i>International Journal of Energy Research</i> , <b>2020</b> , 44, 10071-10086	4.5	9
32	A review of alkaline solid polymer membrane in the application of AEM electrolyzer: Materials and characterization. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 18337	4.5	9
31	Advanced modification of scandia-stabilized zirconia electrolytes for solid oxide fuel cells application: A review. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 4871-4887	4.5	8
30	Molecular dynamics simulations of sodium alginate/sulfonated graphene oxide membranes properties. <i>Heliyon</i> , <b>2018</b> , 4, e00808	3.6	8
29	Biodiesel Progress in Malaysia. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , <b>2012</b> , 34, 2139-2146	1.6	7
28	EFFECT OF ORGANIC CARBON LOADING (OCL) ON SIMULTANEOUS NH <sub>4</sub> <sup>+</sup> -N AND Mn <sup>2+</sup> REMOVAL IN DRINKING WATER USING A BAF SYSTEM. <i>Environmental Engineering and Management Journal</i> , <b>2011</b> , 10, 1733-1742	0.6	7
27	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> , <b>2015</b> , 40, 11931-11942	6.7	6
26	NiPd Supported on Mesostructured Silica Nanoparticle as Efficient Anode Electrocatalyst for Methanol Electrooxidation in Alkaline Media. <i>Catalysts</i> , <b>2020</b> , 10, 1235	4	6
25	Radiotracer technology in mixing processes for industrial applications. <i>Scientific World Journal, The</i> , <b>2014</b> , 2014, 768604	2.2	6
24	Removal of ion in drinking water treatment using locally isolated heterotrophic nitrifier. <i>Desalination and Water Treatment</i> , <b>2012</b> , 50, 294-301		5
23	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> , <b>2020</b> , 279, 128517	3.3	5
22	Study on kinetic energy of a novel metal composite for anode catalyst in direct methanol fuel cell. <i>International Journal of Energy Research</i> , <b>2015</b> , 39, 181-190	4.5	4
21	HRT EFFECT ON SIMULTANEOUS COD, AMMONIA AND MANGANESE REMOVAL FROM DRINKING WATERTREATMENT SYSTEM USING A BIOLOGICAL AERATED FILTER (BAF). <i>Environmental Engineering and Management Journal</i> , <b>2018</b> , 17, 199-207	0.6	4
20	Research and innovation in the electrocatalyst development toward glycerol oxidation reaction. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 12693-12727	4.5	4
19	Potential of Nafion/eggshell composite membrane for application in direct methanol fuel cell. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 2245-2264	4.5	4
18	Fuel cells as an advanced alternative energy source for the residential sector applications in Malaysia. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 5032-5057	4.5	4
17	Structural mechanism investigation on methanol crossover and stability of a passive direct methanol fuel cell performance via modified micro-porous layer. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 12928-12943	4.5	4

16	Anode structure with double-catalyst layers for improving the direct ethanol fuel cell performance. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 22302-22314	6.7	3
15	Superior stability and methanol tolerance of a metal-free nitrogen-doped hierarchical porous carbon electrocatalyst derived from textile waste. <i>Journal of Materials Research and Technology</i> , <b>2021</b> , 11, 1834-1846	5.5	3
14	Effect of alkali doping on alkaline stability and cell performance of quaternization polyvinyl alcohol/graphene oxide membranes for passive DEFCs. <i>Materials Letters</i> , <b>2021</b> , 292, 129651	3.3	3
13	Optimization of a continuous hybrid impeller mixer via computational fluid dynamics. <i>Scientific World Journal, The</i> , <b>2014</b> , 2014, 619474	2.2	2
12	Inhibition of Mild Steel Corrosion under Hydrodynamic Conditions <b>2010</b> ,		2
11	Enhanced performance of methanol oxidation reaction via green synthesis of platinum electro-catalyst from sugar cane bagasse. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 7380-7403	4.5	2
10	Optimization of integrated impeller mixer via radiotracer experiments. <i>Scientific World Journal, The</i> , <b>2014</b> , 2014, 242658	2.2	1
9	Enhancement on the Quaternized sodium alginate/polyvinyl alcohol membrane performance in the application of passive DEFCs. <i>Materials Letters</i> , <b>2022</b> , 309, 131388	3.3	1
8	Critical review on development of magnesium alloy as anode in Mg-Air fuel cell and additives in electrolyte. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 15739-15759	4.5	1
7	Introduction to direct alcohol fuel cells (DAFCs) <b>2021</b> , 49-70		1
6	Application of graphene in low-temperature fuel cell technology: An overview. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 18318	4.5	1
5	Microporous and mesoporous structure catalysts for the production of 5-hydroxymethylfurfural (5-HMF). <i>International Journal of Energy Research</i> ,	4.5	1
4	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> , <b>2021</b> , 46, 30937-30947	6.7	1
3	Ecarrageenan/polyvinyl alcohol-graphene oxide biopolymer composite membrane for application of air-breathing passive direct ethanol fuel cells. <i>Journal of Applied Polymer Science</i> , <b>2022</b> , 139, 52256	2.9	0
2	Catalytic Activity of Silver Metal Supported on Doped Graphene in Alkaline Medium for Oxygen Reduction Reaction. <i>Advanced Materials Research</i> , <b>2019</b> , 1155, 55-69	0.5	
1	Direct dimethyl ether fuel cells (DDMEFCs) <b>2021</b> , 177-189		