

# Wai Yin Wong

## List of Publications by Year in descending order

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66  
papers

2,279  
citations

236612

25  
h-index

214527

47  
g-index

67  
all docs

67  
docs citations

67  
times ranked

2953  
citing authors

#	ARTICLE	IF	CITATIONS
1	Carbon and non-carbon support materials for platinum-based catalysts in fuel cells. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 7823-7854.	3.8	210
2	Additives in proton exchange membranes for low- and high-temperature fuel cell applications: A review. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 6116-6135.	3.8	207
3	Recent progress in nitrogen-doped carbon and its composites as electrocatalysts for fuel cell applications. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 9370-9386.	3.8	157
4	A review on production and characterization of biochars for application in direct carbon fuel cells. <i>Chemical Engineering Research and Design</i> , 2018, 118, 152-166.	2.7	134
5	Recent progress of anode catalysts and their support materials for methanol electrooxidation reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 14744-14769.	3.8	132
6	Deep eutectic solvents for extraction-desulphurization: A review. <i>Journal of Molecular Liquids</i> , 2019, 275, 312-322.	2.3	126
7	Development of Poly(Vinyl Alcohol)-Based Polymers as Proton Exchange Membranes and Challenges in Fuel Cell Application: A Review. <i>Polymer Reviews</i> , 2020, 60, 171-202.	5.3	94
8	An overview of the electrochemical performance of modified graphene used as an electrocatalyst and as a catalyst support in fuel cells. <i>Applied Catalysis A: General</i> , 2015, 497, 198-210.	2.2	88
9	Review of Chitosan-Based Polymers as Proton Exchange Membranes and Roles of Chitosan-Supported Ionic Liquids. <i>International Journal of Molecular Sciences</i> , 2020, 21, 632.	1.8	81
10	Recent developments and performance review of metal working fluids. <i>Tribology International</i> , 2017, 114, 389-401.	3.0	63
11	Effect of nitrogen precursors on the electrochemical performance of nitrogen-doped reduced graphene oxide towards oxygen reduction reaction. <i>Journal of Alloys and Compounds</i> , 2016, 677, 112-120.	2.8	61
12	Thermophysical properties of glycerol and polyethylene glycol (PEG 600) based DES. <i>Journal of Molecular Liquids</i> , 2018, 252, 439-444.	2.3	59
13	Recent Progress in the Development of Aromatic Polymer-Based Proton Exchange Membranes for Fuel Cell Applications. <i>Polymers</i> , 2020, 12, 1061.	2.0	53
14	Sulfonated graphene oxide as an inorganic filler in promoting the properties of a polybenzimidazole membrane as a high temperature proton exchange membrane. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 27510-27526.	3.8	49
15	A comprehensive review of $\text{MXenes}$ as catalyst supports for the oxygen reduction reaction in fuel cells. <i>International Journal of Energy Research</i> , 2021, 45, 15760-15782.	2.2	49
16	Nitrogen-containing carbon nanotubes as cathodic catalysts for proton exchange membrane fuel cells. <i>Diamond and Related Materials</i> , 2012, 22, 12-22.	1.8	47
17	Influence of nitrogen doping on carbon nanotubes towards the structure, composition and oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 9421-9430.	3.8	46
18	Synthesis of silver/nitrogen-doped reduced graphene oxide through a one-step thermal solid-state reaction for oxygen reduction in an alkaline medium. <i>Journal of Power Sources</i> , 2016, 324, 412-420.	4.0	45

#	ARTICLE	IF	CITATIONS
19	Current progress on 3D graphene-based photocatalysts: From synthesis to photocatalytic hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 9324-9340.	3.8	44
20	Recent developments on transition metal-based electrocatalysts for application in anion exchange membrane water electrolysis. <i>International Journal of Energy Research</i> , 2022, 46, 2241-2276.	2.2	41
21	The Impact of Loading and Temperature on the Oxygen Reduction Reaction at Nitrogen-doped Carbon Nanotubes in Alkaline Medium. <i>Electrochimica Acta</i> , 2014, 129, 47-54.	2.6	33
22	Effect of various Fe/Co ratios and annealing temperatures on a Fe/Co catalyst supported with nitrogen-doped reduced graphene oxide towards the oxygen reduction reaction. <i>Journal of Alloys and Compounds</i> , 2020, 816, 152573.	2.8	31
23	Application of Biochar Derived from Different Types of Biomass and Treatment Methods as a Fuel Source for Direct Carbon Fuel Cells. <i>Energies</i> , 2019, 12, 2477.	1.6	29
24	Effect of deep eutectic solvent in proton conduction and thermal behaviour of chitosan-based membrane. <i>Journal of Molecular Liquids</i> , 2018, 269, 675-683.	2.3	27
25	Effect of temperature on the oxygen reduction reaction kinetic at nitrogen-doped carbon nanotubes for fuel cell cathode. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 11444-11450.	3.8	26
26	Study of the plasticising effect on polymer and its development in fuel cell application. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 79, 794-805.	8.2	24
27	Protic ionic liquids as next-generation proton exchange membrane materials: Current status & future perspectives. <i>Reactive and Functional Polymers</i> , 2022, 171, 105160.	2.0	24
28	Perspectives on carbon-alternative materials as Pt catalyst supports for a durable oxygen reduction reaction in proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2022, 534, 231422.	4.0	23
29	Noble-free oxygen reduction reaction catalyst supported on Sengon wood ( <i>Paraserianthes Tj ETQq1 1 0.784314 rgBT /Overlock</i> ) <i>Energy Research</i> , 2020, 44, 1761-1774.	2.2	21
30	Nitrogen-doped carbon xerogels catalyst for oxygen reduction reaction: Improved structural and catalytic activity by enhancing nitrogen species and cobalt insertion. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 28789-28802.	3.8	20
31	Hybrid Composite Membrane of Phosphorylated Chitosan/Poly (Vinyl Alcohol)/Silica as a Proton Exchange Membrane. <i>Membranes</i> , 2021, 11, 675.	1.4	18
32	Effect of carbon precursor and initial pH on cobalt-doped carbon xerogel for oxygen reduction. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 11047-11055.	3.8	17
33	Sengon wood-derived RGO supported Fe-based electrocatalyst with stabilized graphitic N-bond for oxygen reduction reaction in acidic medium. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 23237-23253.	3.8	17
34	Proton Conductivity Enhancement at High Temperature on Polybenzimidazole Membrane Electrolyte with Acid-Functionalized Graphene Oxide Fillers. <i>Membranes</i> , 2022, 12, 344.	1.4	16
35	Recent biopolymers used for membrane fuel cells: Characterization analysis perspectives. <i>International Journal of Energy Research</i> , 2022, 46, 16178-16207.	2.2	16
36	Radiation-Grafted Anion-Exchange Membrane for Fuel Cell and Electrolyzer Applications: A Mini Review. <i>Membranes</i> , 2021, 11, 397.	1.4	15

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37	Phosphorylated chitosan/poly(vinyl alcohol) based proton exchange membranes modified with propylammonium nitrate ionic liquid and silica filler for fuel cell applications. International Journal of Hydrogen Energy, 2022, 47, 19217-19236.	3.8	14
38	Pretreated mesocarp fibre biochars as carbon fuel for direct carbon fuel cells. International Journal of Hydrogen Energy, 2021, 46, 16762-16775.	3.8	13
39	Influences of crosslinked carboxylic acid monomers on the proton conduction characteristics of chitosan/SPVA composite membranes. Polymer, 2020, 203, 122782.	1.8	11
40	Physical properties optimization of POME-groundnut-naphthenic based graphene nanolubricant using response surface methodology. Journal of Cleaner Production, 2018, 193, 277-289.	4.6	9
41	NiPd Supported on Mesostructured Silica Nanoparticle as Efficient Anode Electrocatalyst for Methanol Electrooxidation in Alkaline Media. Catalysts, 2020, 10, 1235.	1.6	9
42	MXene-graphene hybrid nanoflakes as friction modifiers for outboard engine oil. IOP Conference Series: Materials Science and Engineering, 2020, 834, 012039.	0.3	8
43	High photoelectrochemical performance of a p-type reduced graphene oxide-copper oxide/Cu foil ( $rGO@CuO/Cu$ ) photoelectrode prepared by a one-pot hydrothermal method. International Journal of Energy Research, 2021, 45, 13865-13877.	2.2	7
44	Elucidating the roles of the Fe-Nx active sites and pore characteristics on Fe-Pani-biomass-derived RGO as oxygen reduction catalysts in PEMFCs. Materials Research Bulletin, 2022, 145, 111526.	2.7	7
45	Power generation from palm kernel shell biochar in a direct carbon fuel cell. SN Applied Sciences, 2020, 2, 1.	1.5	6
46	Tunable morphology and band gap alteration of CuO-ZnO nanostructures based photocathode for solar photoelectrochemical cells. Materials Research Express, 2020, 7, 125010.	0.8	6
47	Comparative Study On Water Uptake And Ionic Transport Properties Of Pre- And Post Sulfonated Chitosan/PVA polymer Exchange Membrane. IOP Conference Series: Materials Science and Engineering, 0, 458, 012017.	0.3	5
48	Molecular dynamic simulation approach to understand the physical and proton transport properties of chitosan/sulfonated Poly(Vinyl alcohol) composite membranes. Polymer, 2021, 217, 123458.	1.8	5
49	Effect of acid treatments on thermal properties of bacterial cellulose produced from cassava liquid waste. Materials Today: Proceedings, 2022, 57, 1174-1178.	0.9	5
50	Synthesis of Graphene/CU <sub>2</sub> O Thin Film Photoelectrode via Facile Hydrothermal Method for Photoelectrochemical Measurement. Sains Malaysiana, 2019, 48, 1233-1238.	0.3	4
51	Effect of Iron Loading on the Catalytic Activity of Fe/N-Doped Reduced Graphene Oxide Catalysts via Irradiation. Applied Sciences (Switzerland), 2021, 11, 205.	1.3	4
52	Density-Functional Theory of $O_{2}$ ; Physical Adsorption on $sp^{3}$ and $sp^{2}$ ; Hybridized Nitrogen-Doped CNT Surfaces for Fuel Cell Electrode. Advanced Materials Research, 0, 233-235, 17-22.	0.3	3
53	Direct synthesis of nitrogen-containing carbon nanotubes on carbon paper for fuel cell electrode. , 2012, , .		3
54	THERMOPHYSICAL PROPERTIES OF DEEP EUTECTIC SOLVENT-CARBON NANOTUBES (DES-CNT) BASED NANOLUBRICANT. Journal of Thermal Engineering, 0, , 15-26.	0.8	3

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55	Corrosion Inhibition of Cold-rolled Low Carbon Steel with Pulse Fiber Laser Ablation in Water. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 2805-2814.	1.2	2
56	Parametric optimization of pulsed laser ablation on stainless steel for improving corrosion resistance by Taguchi method. <i>Materials Research Express</i> , 2019, 6, 026533.	0.8	2
57	Enhancement in hydrolytic stability and proton conductivity of optimised chitosan/sulfonated poly(vinyl alcohol) composite membrane with inorganic fillers. <i>International Journal of Energy Research</i> , 2021, 45, 21307-21323.	2.2	2
58	Effect of annealing time on chemical vapor deposition growth of 3D graphene for photoelectrochemical water splitting. <i>Materials Today: Proceedings</i> , 2022, 57, 1215-1219.	0.9	2
59	Effect of nitrogen-doping concentration in carbon nanotubes on cathodic performance for proton exchange membrane fuel cell. , 2012, , .		1
60	Potential of methanol production from the photoelectrochemical reduction of CO <sub>2</sub> on rGO-CuO/Cu composite. <i>Materials Today: Proceedings</i> , 2021, , .	0.9	1
61	Morphological Studies on the Agglomeration of FeCo Supported Nitrogen-doped Reduced Graphene Oxide Catalyst Prepared at Varying Annealing Temperature. <i>Jurnal Kejuruteraan</i> , 2018, SI1, 31-36.	0.2	1
62	Microstructure and Discharge Performance of Aluminum Al 6061 Alloy as Anode for Electrolyte Activated Battery. <i>Sains Malaysiana</i> , 2020, 49, 3243-3254.	0.3	1
63	Physicochemical characterization of Amine-functionalized Bio-nanosilica extracted from rice husk ash as a platinum support. <i>Materials Today: Proceedings</i> , 2021, , .	0.9	1
64	Supercapacitor performance gains from structural modification of carbon electrodes using gamma radiations. <i>Journal of Electrochemical Science and Engineering</i> , 0, , .	1.6	1
65	Nanotechnology: Emerging Opportunities for Fuel Cell Applications. , 2019, , 135-174.		0
66	Module Stabilizing of Biocarbon Based Electrochemical Capacitor. <i>International Journal of Sustainable Transportation Technology</i> , 2019, 2, 32-38.	0.1	0