

# Edy Herianto Majlan

## List of Publications by Year in descending order

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Version: 2024-02-01

81  
papers

4,195  
citations

185998

28  
h-index

128067

60  
g-index

81  
all docs

81  
docs citations

81  
times ranked

4585  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Comparison of catalyst-coated membranes and catalyst-coated substrate for PEMFC membrane electrode assembly: A review. Chinese Journal of Chemical Engineering, 2021, 33, 1-16.  | 1.7 | 50        |
| 2  | Noble-free oxygen reduction reaction catalyst supported on Sengon wood ( <i>Paraserianthes</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 7 Energy Research, 2020, 44, 1761-1774.  | 2.2 | 21        |
| 3  | Sengon wood-derived RGO supported Fe-based electrocatalyst with stabilized graphitic N-bond for oxygen reduction reaction in acidic medium. International Journal of Hydrogen Energy, 2020, 45, 23237-23253.   | 3.8 | 17        |
| 4  | High performance iron-based oxygen reduction catalyst supported on sengon wood-derived reduced graphene oxide in acidic medium. IOP Conference Series: Earth and Environmental Science, 2020, 463, 012060.   | 0.2 | 1         |
| 5  | Numerical investigation of the effect of three-dimensional modified parallel flow field designs on proton exchange membrane fuel cell performance. Chemical Engineering Science, 2020, 217, 115499.  | 1.9 | 31        |
| 6  | Preliminary Study of Poly(Tetrahydrofurfuryl Acrylate) Thin Film as a Potential Material of Ion Selective Electrodes: The Case of Nitrate Ion-Selective Electrode. Indonesian Journal of Chemistry, 2020, 20, 645.   | 0.3 | 1         |
| 7  | Impregnated carbon-ionic liquid as innovative adsorbent for H <sub>2</sub> /CO <sub>2</sub> separation from biohydrogen. International Journal of Hydrogen Energy, 2019, 44, 3414-3424.  | 3.8 | 24        |
| 8  | Fibre orientation effect on polypropylene/milled carbon fiber composites in the presence of carbon nanotubes or graphene as a secondary filler: Application on PEM fuel cell bipolar plate. International Journal of Hydrogen Energy, 2019, 44, 30618-30626. | 3.8 | 29        |
| 9  | Physiochemical Characteristics of Solid Electrolyte Membranes for High-Temperature PEM Fuel Cell. International Journal of Electrochemical Science, 2019, 14, 371-386.   | 0.5 | 21        |
| 10 | Three-dimensional study of stack on the performance of the proton exchange membrane fuel cell. Energy, 2019, 169, 338-343.   | 4.5 | 39        |
| 11 | Fabrication of multi-filler MCF/MWCNT/SG-based bipolar plates. Ceramics International, 2019, 45, 7413-7418.  | 2.3 | 24        |
| 12 | Effect of lithium hexafluorophosphate LiPF <sub>6</sub> and 1-butyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide [Bmim][TFSI] immobilized in poly(2-hydroxyethyl methacrylate) PHEMA. Polymer Bulletin, 2019, 76, 3693-3707.                       | 1.7 | 4         |
| 13 | The design and development of an HT-PEMFC test cell and test station. International Journal of Hydrogen Energy, 2019, 44, 30763-30771.   | 3.8 | 25        |
| 14 | Kesan Pemendapan Elektroforesis Gam Arab terhadap Halaju Kakisan pada Aluminium 5052. Sains Malaysiana, 2019, 48, 401-406.   | 0.3 | 1         |
| 15 | Finite Element Analysis for Stress Distribution in a Proton Exchange Membrane Fuel Cell Stack. International Journal of Integrated Engineering, 2019, 11, .  | 0.2 | 0         |
| 16 | Electrode for proton exchange membrane fuel cells: A review. Renewable and Sustainable Energy Reviews, 2018, 89, 117-134.  | 8.2 | 283       |
| 17 | Numerical analysis of flow distribution behavior in a proton exchange membrane fuel cell. Heliyon, 2018, 4, e00845.  | 1.4 | 20        |
| 18 | Optimization of energy management system for fuel-cell hybrid electric vehicles: Issues and recommendations. Applied Energy, 2018, 228, 2061-2079.   | 5.1 | 262       |

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|----|--|-----|-----------|
| 19 | Effects of Die Configuration on the Electrical Conductivity of Polypropylene Reinforced Milled Carbon Fibers: An Application on a Bipolar Plate. <i>Polymers</i> , 2018, 10, 558.                                  | 2.0 | 9         |
| 20 | Temperature Effects on Stainless Steel 316L Corrosion in the Environment of Sulphuric Acid (H <sub>2</sub> SO <sub>4</sub> ). <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 343, 012016. | 0.3 | 9         |
| 21 | Effect of ZnO Filler on PVA-Alkaline Solid Polymer Electrolyte for Aluminum-Air Battery Applications. <i>Journal of the Electrochemical Society</i> , 2018, 165, A2483-A2492.                                      | 1.3 | 34        |
| 22 | Simulation of PEMFC Stack for Portable Power Generator Application. <i>Jurnal Kejuruteraan</i> , 2018, S11, 1-10.  | 0.2 | 4         |
| 23 | Effect of Arabic Gum Electrophoresis Desposition on Corrosion of SS316L in Acidic. <i>Jurnal Kejuruteraan</i> , 2018, S11, 59-64.  | 0.2 | 0         |
| 24 | Numerical analysis of modified parallel flow field designs for fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 9210-9218.  | 3.8 | 81        |
| 25 | Acid doped polybenzimidazoles based membrane electrode assembly for high temperature proton exchange membrane fuel cell: A review. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 9156-9179.          | 3.8 | 116       |
| 26 | PEM fuel cell system control: A review. <i>Renewable Energy</i> , 2017, 113, 620-638.  | 4.3 | 444       |
| 27 | Mathematical modelling and simulation on the adsorption of Hydrogen Sulfide (H <sub>2</sub> S) gas. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 206, 012069.                           | 0.3 | 7         |
| 28 | Coating of stainless steel and titanium bipolar plates for anticorrosion in PEMFC: A review. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 9135-9148.  | 3.8 | 211       |
| 29 | A review of high-temperature proton exchange membrane fuel cell (HT-PEMFC) system. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 9293-9314.  | 3.8 | 463       |
| 30 | Ionic liquid-impregnated activated carbon for biohydrogen purification in an adsorption unit. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 206, 012071.                                 | 0.3 | 6         |
| 31 | Preliminary study on aluminum-air battery applying disposable soft drink cans and Arabic gum polymer. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 237, 012039.                         | 0.3 | 6         |
| 32 | AN IMPROVED MULTIDEVICE INTERLEAVED BOOST CONVERTER WITH NOVEL MULTIPLEX CONTROLLER FOR FUEL CELL. <i>Jurnal Teknologi (Sciences and Engineering)</i> , 2016, 79, .  | 0.3 | 0         |
| 33 | Reactant Control System for Proton Exchange Membrane Fuel Cell. <i>Procedia Engineering</i> , 2016, 148, 615-620.  | 1.2 | 5         |
| 34 | Overview biohydrogen technologies and application in fuel cell technology. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 66, 137-162.  | 8.2 | 121       |
| 35 | Effects of flow field design on water management and reactant distribution in PEMFC: a review. <i>Ionics</i> , 2016, 22, 301-316.  | 1.2 | 105       |
| 36 | PROTON EXCHANGE MEMBRANE FUEL CELL/SUPERCAPASITOR HYBRID POWER MANAGEMENT SYSTEM FOR A GOLF CART. <i>Malaysian Journal of Analytical Sciences</i> , 2016, 20, 931-945.   | 0.2 | 2         |

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|----|---|-----|-----------|
| 37 | STUDY OF HYDROGEN CONSUMPTION BY CONTROL SYSTEM IN PROTON EXCHANGE MEMBRANE FUEL CELL. Malaysian Journal of Analytical Sciences, 2016, 20, 901-912.   | 0.2 | 0         |
| 38 | ENERGY MANAGEMENT STRATEGY FOR A FUEL CELL/ULTRACAPASITOR/BATTERY HYBRID SYSTEM FOR PORTABLE APPLICATIONS. Malaysian Journal of Analytical Sciences, 2016, 20, 955-964.   | 0.2 | 0         |
| 39 | Measurement of hydrogen ion conductivity through proton exchange membrane. , 2015, , .  |     | 1         |
| 40 | Preparation and characterization of low temperature PTFE-Nafion composite membranes for hydrogen production. International Journal of Hydrogen Energy, 2015, 40, 10072-10080.   | 3.8 | 3         |
| 41 | Effects of temperature and backpressure on the performance degradation of MEA in PEMFC. International Journal of Hydrogen Energy, 2015, 40, 10960-10968.  | 3.8 | 41        |
| 42 | Recent developments in materials for aluminum-air batteries: A review. Journal of Industrial and Engineering Chemistry, 2015, 32, 1-20.   | 2.9 | 224       |
| 43 | A review on energy management system for fuel cell hybrid electric vehicle: Issues and challenges. Renewable and Sustainable Energy Reviews, 2015, 52, 802-814.   | 8.2 | 359       |
| 44 | Effect of sintering temperature on surface morphology and electrical properties of samarium-doped ceria carbonate for solid oxide fuel cells. Ceramics International, 2015, 41, 1323-1332.  | 2.3 | 24        |
| 45 | The Impact of Loading and Temperature on the Oxygen Reduction Reaction at Nitrogen-doped Carbon Nanotubes in Alkaline Medium. Electrochimica Acta, 2014, 129, 47-54.  | 2.6 | 33        |
| 46 | Fabrication of thin Ag-YSB composite cathode film for intermediate-temperature solid oxide fuel cells. Composites Part B: Engineering, 2014, 58, 193-198.   | 5.9 | 13        |
| 47 | Effect of PTFE Content and Sintering Temperature on the Properties of a Fuel Cell Electrode Backing Layer. Journal of Fuel Cell Science and Technology, 2014, 11, .   | 0.8 | 13        |
| 48 | Characterization of electrodes and performance tests on MEAs with varying platinum content and under various operational conditions. International Journal of Hydrogen Energy, 2013, 38, 9431-9437.   | 3.8 | 18        |
| 49 | Nafion/Pd-SiO <sub>2</sub> nanofiber composite membranes for direct methanol fuel cell applications. International Journal of Hydrogen Energy, 2013, 38, 9474-9483.   | 3.8 | 96        |
| 50 | Electrochemical properties of a PEMFC operating with saturated hydrogen and dry air. International Journal of Hydrogen Energy, 2013, 38, 9395-9400.   | 3.8 | 5         |
| 51 | Electrochemical and microstructural characteristics of nanoperovskite oxides Ba <sub>0.2</sub> Sr <sub>0.8</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3-<math>\delta</math></sub> (BSCF) for solid oxide fuel cells. Ceramics International, 2013, 39, 439-444. | 2.3 | 8         |
| 52 | Influence of nitrogen doping on carbon nanotubes towards the structure, composition and oxygen reduction reaction. International Journal of Hydrogen Energy, 2013, 38, 9421-9430.   | 3.8 | 46        |
| 53 | Influence of sintering temperature on the power density of samarium-doped-ceria carbonate electrolyte composites for low-temperature solid oxide fuel cells. Ceramics International, 2013, 39, 5813-5820.   | 2.3 | 30        |
| 54 | Water balance for the design of a PEM fuel cell system. International Journal of Hydrogen Energy, 2013, 38, 9409-9420.  | 3.8 | 30        |

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|----|--|-----|-----------|
| 55 | 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       |
| 56 | Water transport characteristics of a PEM fuel cell at various operating pressures and temperatures. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 9401-9408.   | 3.8 | 51        |
| 57 | Performance of direct methanol fuel cell with a palladium-silica nanofibre/Nafion composite membrane. <i>Energy Conversion and Management</i> , 2013, 75, 718-726.   | 4.4 | 53        |
| 58 | Direct synthesis of nitrogen-containing carbon nanotubes on carbon paper for fuel cell electrode. , 2012, , .  |     | 3         |
| 59 | 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        |
| 60 | Effect of nitrogen-doping concentration in carbon nanotubes on cathodic performance for proton exchange membrane fuel cell. , 2012, , .  |     | 1         |
| 61 | Hydrogen rate manipulation of proton exchange membrane fuel cell (PEMFC) stack using feedback control system. , 2012, , .  |     | 4         |
| 62 | POLYSULFONE COMPOSED OF POLYANILINE NANOPARTICLES AS NANOCOMPOSITE PROTON EXCHANGE MEMBRANE IN MICROBIAL FUEL CELL. <i>American Journal of Biochemistry and Biotechnology</i> , 2012, 8, 311-319.                        | 0.1 | 5         |
| 63 | Synthesis of palladium-doped silica nanofibers by sol-gel reaction and electrospinning process. , 2012, , .  |     | 3         |
| 64 | Bimetallic complexes in artificial photosynthesis for hydrogen production: A review. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 3066-3087.  | 3.8 | 51        |
| 65 | Passive direct methanol fuel cells for portable electronic devices. <i>Applied Energy</i> , 2011, 88, 1681-1689.   | 5.1 | 142       |
| 66 | Overview on nanostructured membrane in fuel cell applications. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 3187-3205.  | 3.8 | 129       |
| 67 | Porous NiO-SDC Carbonates Composite Anode for LT-SOFC Applications Produced by Pressureless Sintering. <i>Applied Mechanics and Materials</i> , 2011, 52-54, 488-493.  | 0.2 | 9         |
| 68 | Effect of Calcinations on Morphology of Electrospun Copper and Copper Oxide Nanofibers. <i>Applied Mechanics and Materials</i> , 2011, 52-54, 1884-1889.   | 0.2 | 1         |
| 69 | Study Effect of Stress in the Electrical Contact Resistance of Bipolar Plate and Membrane Electrode Assembly in Proton Exchange Membrane Fuel Cell: A Review. <i>Key Engineering Materials</i> , 2010, 447-448, 775-779. | 0.4 | 2         |
| 70 | Hydrogen purification using compact pressure swing adsorption system for fuel cell. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 2771-2777.   | 3.8 | 81        |
| 71 | Review on Serpentine Flow Field Design for PEM Fuel Cell System. <i>Key Engineering Materials</i> , 0, 447-448, 559-563.   | 0.4 | 5         |
| 72 | Design Models of Polymer Electrolyte Membrane Fuel Cell System. <i>Key Engineering Materials</i> , 0, 447-448, 554-558.  | 0.4 | 0         |

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|----|--|-----|-----------|
| 73 | Fabrication of Dense Composite Ceramic Electrolyte SDC-(Li/Na) <sub>2</sub> CO <sub>3</sub> . Key Engineering Materials, 0, 447-448, 666-670.  | 0.4 | 9         |
| 74 | Influence of Iron Oxide Nano Particles on Electrospun Poly (Vinylidene Fluoride)-Based Carbon Nanofibers on Hydrogen Storage. Key Engineering Materials, 0, 471-472, 1184-1189.  | 0.4 | 2         |
| 75 | Density-Functional Theory of O <sub>2</sub> Physical Adsorption on sp <sup>3</sup> and sp <sup>2</sup> Hybridized Nitrogen-Doped CNT Surfaces for Fuel Cell Electrode. Advanced Materials Research, 0, 233-235, 17-22. | 0.3 | 3         |
| 76 | Stress Analysis of Proton Exchange Membrane Fuel Cell. Applied Mechanics and Materials, 0, 52-54, 875-880.   | 0.2 | 1         |
| 77 | Operating Temperature Effects on Water Transport Behavior in a Single Cell PEMFC. Applied Mechanics and Materials, 0, 52-54, 1153-1158.  | 0.2 | 4         |
| 78 | Effect of Nickel Composition and Preparation Method for Production of Hydrogen via Glycerol Steam Reforming. Key Engineering Materials, 0, 471-472, 1046-1051.   | 0.4 | 2         |
| 79 | Investigation of Phase Transformation and Structure Evolution of Electrospun Copper Oxide Nanofibers during Thermal Annealing. Key Engineering Materials, 0, 471-472, 792-797.   | 0.4 | 0         |
| 80 | Fabrication of Porous LSCF-SDC Carbonates Composite Cathode for Solid Oxide Fuel Cell (SOFC) Applications. Key Engineering Materials, 0, 471-472, 179-184.   | 0.4 | 9         |
| 81 | Doping of Palladium in Silica Nanofibers via Electrospinning and Sol-Gel Synthesize as Hydrogen Storage Material. Key Engineering Materials, 0, 471-472, 1040-1045.  | 0.4 | 1         |