

Amani Al-Othman

List of Publications by Year in descending order

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Version: 2024-02-01

69
papers

3,039
citations

168829

31
h-index

214428

50
g-index

70
all docs

70
docs citations

70
times ranked

2180
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Zirconium silicate-ionic liquid membranes for high-temperature hydrogen PEM fuel cells. International Journal of Hydrogen Energy, 2024, 52, 894-908. | 3.8 | 12 |
| 2 | Approaches towards the development of heteropolyacid-based high temperature membranes for PEM fuel cells. International Journal of Hydrogen Energy, 2023, 48, 6638-6656. | 3.8 | 42 |
| 3 | The surfactant-ionic liquid bi-functionalization of chitosan beads for their adsorption performance improvement toward Tartrazine. Environmental Research, 2022, 204, 111961. | 3.7 | 41 |
| 4 | Novel enzymatic graphene oxide based biosensor for the detection of glutathione in biological body fluids. Chemosphere, 2022, 287, 132187. | 4.2 | 160 |
| 5 | Applications of Metamaterials. , 2022, , 11-24. | | 3 |
| 6 | Classifications of Thermal Energy Storage Materials. , 2022, , 450-469. | | 3 |
| 7 | Artificial intelligence and numerical models in hybrid renewable energy systems with fuel cells: Advances and prospects. Energy Conversion and Management, 2022, 253, 115154. | 4.4 | 71 |
| 8 | Microwave synthesis of biochar for environmental applications. Journal of Analytical and Applied Pyrolysis, 2022, 161, 105415. | 2.6 | 14 |
| 9 | Facemask Global Challenges: The Case of Effective Synthesis, Utilization, and Environmental Sustainability. Sustainability, 2022, 14, 737. | 1.6 | 15 |
| 10 | A Critical Review on the Use of Ionic Liquids in Proton Exchange Membrane Fuel Cells. Membranes, 2022, 12, 178. | 1.4 | 49 |
| 11 | Highly proton conductive membranes based on lignin/ZrP/PTFE composite for high temperature PEM fuel cells. , 2022, , . | | 7 |
| 12 | Proton Conductivity Studies in Zirconium Phosphate/MXenes in PEM Fuel Cells. , 2022, , . | | 6 |
| 13 | Response to the Editor's letter: Comments on using of "pseudo-first-order kinetic model" [Sci. Total Environ. 750 (2021) 142370, 750 (2021) 141498, 761 (2021) 143229]. Science of the Total Environment, 2022, ,3.9 154325. | | 0 |
| 14 | Integrating forward osmosis into microbial fuel cells for wastewater treatment. , 2022, , 321-336. | | 0 |
| 15 | Integrated biopolymer and bioenergy production from organic wastes: Recent advances and future outlook. , 2022, , 261-283. | | 1 |
| 16 | Integrated microbial desalination cell and microbial electrolysis cell for wastewater treatment, bioelectricity generation, and biofuel production: Success, experience, challenges, and future prospects. , 2022, , 145-166. | | 1 |
| 17 | A hybrid photovoltaic/solar chimney seawater desalination plant. , 2022, , . | | 1 |
| 18 | A review on latest trends in cleaner biodiesel production: Role of feedstock, production methods, and catalysts. Journal of Cleaner Production, 2022, 355, 131588. | 4.6 | 129 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | The novel advancements of nanomaterials in biofuel cells with a focus on electrodes™ applications. Fuel, 2022, 322, 124237. | 3.4 | 34 |
| 20 | Ammonia: A versatile candidate for the use in energy storage systems. Renewable Energy, 2022, 194, 955-977. | 4.3 | 54 |
| 21 | Adaptive estimation of PEMFC stack model parameters - An experimental verification. International Journal of Hydrogen Energy, 2022, 47, 41663-41682. | 3.8 | 9 |
| 22 | Novel composite membrane based on zirconium phosphate-ionic liquids for high temperature PEM fuel cells. International Journal of Hydrogen Energy, 2021, 46, 6100-6109. | 3.8 | 67 |
| 23 | Characterization of paper mill sludge as a renewable feedstock for sustainable hydrogen and biofuels production. International Journal of Hydrogen Energy, 2021, 46, 4761-4775. | 3.8 | 43 |
| 24 | Emerging contaminants in the water bodies of the Middle East and North Africa (MENA): A critical review. Science of the Total Environment, 2021, 754, 142177. | 3.9 | 75 |
| 25 | Fuel cells for carbon capture and power generation: Simulation studies. International Journal of Hydrogen Energy, 2021, 46, 6139-6149. | 3.8 | 20 |
| 26 | Environmental impacts of solar photovoltaic systems: A critical review of recent progress and future outlook. Science of the Total Environment, 2021, 759, 143528. | 3.9 | 230 |
| 27 | Recent developments in pressure retarded osmosis for desalination and power generation. Renewable and Sustainable Energy Reviews, 2021, 138, 110492. | 8.2 | 53 |
| 28 | Efficient removal of phenol compounds from water environment using Ziziphus leaves adsorbent. Science of the Total Environment, 2021, 761, 143229. | 3.9 | 72 |
| 29 | Enhanced proton conduction in zirconium phosphate/ionic liquids materials for high-temperature fuel cells. International Journal of Hydrogen Energy, 2021, 46, 4857-4869. | 3.8 | 67 |
| 30 | Comprehensive analysis and correlation of ionic liquid conductivity data for energy applications. Energy, 2021, 220, 119761. | 4.5 | 23 |
| 31 | A novel technique of paper mill sludge conversion to bioethanol toward sustainable energy production: Effect of fiber recovery on the saccharification hydrolysis and fermentation. Energy, 2021, 223, 120018. | 4.5 | 17 |
| 32 | Fabrication of titanium dioxide nanomaterial for implantable highly flexible composite bioelectrode for biosensing applications. Chemosphere, 2021, 273, 129680. | 4.2 | 11 |
| 33 | Recent progress and challenges on adsorptive membranes for the removal of pollutants from wastewater. Part I: Fundamentals and classification of membranes. Case Studies in Chemical and Environmental Engineering, 2021, 3, 100086. | 2.9 | 30 |
| 34 | A characterization study for the properties of dust particles collected on photovoltaic (PV) panels in Sharjah, United Arab Emirates. Renewable Energy, 2021, 171, 133-140. | 4.3 | 49 |
| 35 | Recent progress and challenges of adsorptive membranes for the removal of pollutants from wastewater. Part II: Environmental applications. Case Studies in Chemical and Environmental Engineering, 2021, 3, 100102. | 2.9 | 19 |
| 36 | A critical review on the use of potentiometric based biosensors for biomarkers detection. Biosensors and Bioelectronics, 2021, 184, 113252. | 5.3 | 343 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Proton conduction of novel calcium phosphate nanocomposite membranes for high temperature PEM fuel cells applications. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 30641-30657. | 3.8 | 36 |
| 38 | Highly Flexible Polyaniline-Based Implantable Electrode Materials for Neural Sensing/Stimulation Applications. <i>Electronic Materials</i> , 2021, 2, 413-427. | 0.9 | 6 |
| 39 | Lessons learned from the underrepresentation of women in STEM: AI-enabled solutions and more. <i>Energy and AI</i> , 2021, 5, 100086. | 5.8 | 2 |
| 40 | Ionic liquid-assisted refinery processes – A review and industrial perspective. <i>Fuel</i> , 2021, 302, 121195. | 3.4 | 17 |
| 41 | Biodegradable polymers and their nano-composites for the removal of endocrine-disrupting chemicals (EDCs) from wastewater: A review. <i>Environmental Research</i> , 2021, 202, 111694. | 3.7 | 152 |
| 42 | A critical review on metal-based catalysts used in the pyrolysis of lignocellulosic biomass materials. <i>Journal of Environmental Management</i> , 2021, 299, 113597. | 3.8 | 42 |
| 43 | Metamaterials: Classifications and Characteristics. , 2021, , 46-46. | | 1 |
| 44 | Insights into the removal of microplastics from water using biochar in the era of COVID-19: A mini review. <i>Case Studies in Chemical and Environmental Engineering</i> , 2021, 4, 100151. | 2.9 | 41 |
| 45 | Optimal conditions for olive mill wastewater treatment using ultrasound and advanced oxidation processes. <i>Science of the Total Environment</i> , 2020, 700, 134576. | 3.9 | 81 |
| 46 | Techno-economic analysis and a novel assessment technique of paper mill sludge conversion to bioethanol toward sustainable energy production. <i>International Journal of Energy Research</i> , 2020, 44, 12602-12613. | 2.2 | 28 |
| 47 | Energy and Economic Analysis of Date Palm Biomass Feedstock for Biofuel Production in UAE: Pyrolysis, Gasification and Fermentation. <i>Energies</i> , 2020, 13, 5877. | 1.6 | 46 |
| 48 | Microbial desalination cells for water purification and power generation: A critical review. <i>Energy</i> , 2020, 209, 118493. | 4.5 | 92 |
| 49 | Comparative life cycle assessment for PEMFC stack including fuel storage materials in UAE. , 2020, , . | | 5 |
| 50 | Bio-electrodes Based on Poly(methyl methacrylate) (PMMA) for Neural Sensing. , 2020, , . | | 0 |
| 51 | Life Cycle Analysis Comparison between Single Crystalline Solar Cells and poly Crystalline Gallium in UAE. , 2020, , . | | 3 |
| 52 | Development and Characterization of Novel Composite and Flexible Electrode Based on Titanium Dioxide. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2020, 10, 1079-1087. | 1.4 | 12 |
| 53 | Implantable Electrodes Based on Poly-aniline (PANI) and Silicone for Neural Sensing/Stimulations. , 2020, , . | | 1 |
| 54 | Dynamic Model of a Proton-Exchange Membrane Fuel Cell using Equivalent Electrical Circuit. , 2019, , . | | 6 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Direct hydrocarbon fuel cells: A promising technology for improving energy efficiency. Energy, 2019, 172, 207-219. | 4.5 | 98 |
| 56 | Nuclear desalination: A state-of-the-art review. Desalination, 2019, 457, 39-61. | 4.0 | 122 |
| 57 | Kinetic and thermodynamic study of phosphate removal from water by adsorption onto (<i>Arundo) Tj ETQq1 1 0.784314 rgBT /Over 1.5 40 | 1.5 | 40 |
| 58 | Membrane separation as a pre-treatment process for oily saline water. Desalination, 2018, 447, 182-202. | 4.0 | 110 |
| 59 | Novel flexible implantable electrodes based on conductive polymers and Titanium dioxide. , 2018, , . | | 7 |
| 60 | Graphene oxide " Nafion composite membrane for effective methanol crossover reduction in passive direct methanol fuel cells. , 2018, , . | | 7 |
| 61 | Thermodynamic analysis of lithium bromide absorption chiller driven by geothermal energy. , 2018, , . | | 3 |
| 62 | Novel multi-stage flash (MSF) desalination plant driven by parabolic trough collectors and a solar pond: A simulation study in UAE. Desalination, 2018, 443, 237-244. | 4.0 | 130 |
| 63 | Proton conductivity and morphology of new composite membranes based on zirconium phosphates, phosphotungstic acid, and silicic acid for direct hydrocarbon fuel cells applications. Journal of Porous Materials, 2017, 24, 721-729. | 1.3 | 41 |
| 64 | n-Hexadecane Fuel for a Phosphoric Acid Direct Hydrocarbon Fuel Cell. Journal of Fuels, 2015, 2015, 1-9. | 0.2 | 3 |
| 65 | A modified silicic acid (Si) and sulphuric acid (S)"ZrP/PTFE/glycerol composite membrane for high temperature direct hydrocarbon fuel cells. Journal of Power Sources, 2013, 224, 158-167. | 4.0 | 27 |
| 66 | The effect of glycerol on the conductivity of Nafion-free ZrP/PTFE composite membrane electrolytes for direct hydrocarbon fuel cells. Journal of Power Sources, 2012, 199, 14-21. | 4.0 | 31 |
| 67 | Zirconium phosphate as the proton conducting material in direct hydrocarbon polymer electrolyte membrane fuel cells operating above the boiling point of water. Journal of Power Sources, 2010, 195, 2520-2525. | 4.0 | 29 |
| 68 | Gypsum crystallization and hydrochloric acid regeneration by reaction of calcium chloride solution with sulfuric acid. Hydrometallurgy, 2009, 96, 95-102. | 1.8 | 40 |
| 69 | Novel Composite Membranes Based on Polyaniline/Ionic Liquids for PEM Fuel Cells Applications. Key Engineering Materials, 0, 865, 55-60. | 0.4 | 9 |