

# Mohammed Harun Chakrabarti

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

4,275  
citations

186265  
28  
h-index

189892  
50  
g-index

52  
all docs

52  
docs citations

52  
times ranked

5358  
citing authors

#	ARTICLE	IF	CITATIONS
1	Charge Carrier Molecular Sieve (CCMS) Membranes with Anti-aging Effect for Long-Life Vanadium Redox Flow Batteries. ACS Applied Energy Materials, 2022, 5, 1505-1515.	5.1	9
2	A cost-effective alkaline polysulfide-air redox flow battery enabled by a dual-membrane cell architecture. Nature Communications, 2022, 13, 2388.	12.8	15
3	Modern practices in electrophoretic deposition to manufacture energy storage electrodes. International Journal of Energy Research, 2022, 46, 13205-13250.	4.5	17
4	Practical aspects of electrophoretic deposition to produce commercially viable supercapacitor energy storage electrodes. RSC Advances, 2021, 11, 20641-20650.	3.6	7
5	Trichome-like Carbon-Metal Fabrics Made of Carbon Microfibers, Carbon Nanotubes, and Fe-Based Nanoparticles as Electrodes for Regenerative Hydrogen/Vanadium Flow Cells. ACS Applied Nano Materials, 2021, 4, 10754-10763.	5.0	7
6	Modelling of redox flow battery electrode processes at a range of length scales: a review. Sustainable Energy and Fuels, 2020, 4, 5433-5468.	4.9	29
7	Hybrid Redox Flow Cells with Enhanced Electrochemical Performance via Binderless and Electrophoretically Deposited Nitrogen-Doped Graphene on Carbon Paper Electrodes. ACS Applied Materials & Interfaces, 2020, 12, 53869-53878.	8.0	19
8	Evaluation of a Non-Aqueous Vanadium Redox Flow Battery Using a Deep Eutectic Solvent and Graphene-Modified Carbon Electrodes via Electrophoretic Deposition. Batteries, 2020, 6, 38.	4.5	21
9	Hydrogen/functionalized benzoquinone for a high-performance regenerative fuel cell as a potential large-scale energy storage platform. Journal of Materials Chemistry A, 2020, 8, 3933-3941.	10.3	27
10	Practical Aspect of Electrophoretic Deposition to Produce Commercially Viable Activated Carbon Supercapacitor Electrode. ECS Meeting Abstracts, 2020, MA2020-02, 3783-3783.	0.0	1
11	Charge/discharge and cycling performance of flexible carbon paper electrodes in a regenerative hydrogen/vanadium fuel cell. International Journal of Hydrogen Energy, 2019, 44, 30093-30107.	7.1	14
12	Characterization of a Regenerative Hydrogen-Vanadium Fuel Cell Using an Experimentally Validated Unit Cell Model. Journal of the Electrochemical Society, 2019, 166, A3511-A3524.	2.9	8
13	Screening of effective electrolyte additives for zinc-based redox flow battery systems. Journal of Power Sources, 2019, 412, 44-54.	7.8	54
14	Uncovering the mechanisms of electrolyte permeation in porous electrodes for redox flow batteries through real time <i>in situ</i> 3D imaging. Sustainable Energy and Fuels, 2018, 2, 2068-2080.	4.9	34
15	Performance Enhancement of Reduced Graphene Oxide-Modified Carbon Electrodes for Vanadium Redox-Flow Systems. ChemElectroChem, 2017, 4, 194-200.	3.4	17
16	Investigation of Ammonium- and Phosphonium-Based Deep Eutectic Solvents as Electrolytes for a Non-Aqueous All-Vanadium Redox Cell. Journal of the Electrochemical Society, 2016, 163, A632-A638.	2.9	37
17	The Effect of Temperature on Kinetics and Diffusion Coefficients of Metallocene Derivatives in Polyol-Based Deep Eutectic Solvents. PLoS ONE, 2015, 10, e0144235.	2.5	33
18	Mathematical modelling and experimental validation of an anode-supported tubular solid oxide fuel cell for heat and power generation. Energy, 2015, 90, 1759-1768.	8.8	13

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19	One Dimensional Mathematical Modelling of the All-Vanadium and Vanadium/Oxygen Redox Flow Batteries. ECS Transactions, 2015, 66, 1-23.	0.5	7
20	Temperature Effects on the Kinetics of Ferrocene and Cobaltocenium in Methyltriphenylphosphonium Bromide Based Deep Eutectic Solvents. Journal of the Electrochemical Society, 2015, 162, H617-H624.	2.9	6
21	The Influence of Ziegler-Natta and Metallocene Catalysts on Polyolefin Structure, Properties, and Processing Ability. Materials, 2014, 7, 5069-5108.	2.9	135
22	An enhancement to Vynnycky's model for the all-vanadium redox flow battery. Electrochimica Acta, 2014, 120, 167-179.	5.2	51
23	Prospects of applying ionic liquids and deep eutectic solvents for renewable energy storage by means of redox flow batteries. Renewable and Sustainable Energy Reviews, 2014, 30, 254-270.	16.4	212
24	Redox Flow Battery for Energy Storage. Arabian Journal for Science and Engineering, 2013, 38, 723-739.	1.1	64
25	Technical Evaluation of Pongame and Jatropha B20 Fuels in Pakistan. Arabian Journal for Science and Engineering, 2013, 38, 759-766.	1.1	4
26	The electrochemical behaviour of ferrocene in deep eutectic solvents based on quaternary ammonium and phosphonium salts. Physical Chemistry Chemical Physics, 2013, 15, 1707-1714.	2.8	53
27	Thermal stress management of a solid oxide fuel cell using neural network predictive control. Energy, 2013, 62, 320-329.	8.8	56
28	Fuel blending effects on the co-gasification of coal and biomass – A review. Biomass and Bioenergy, 2013, 57, 249-263.	5.7	123
29	Cyclic Voltammetry of Metallic Acetylacetonate Salts in Quaternary Ammonium and Phosphonium Based Deep Eutectic Solvents. Journal of Solution Chemistry, 2013, 42, 2329-2341.	1.2	22
30	Physicochemical properties of ammonium-based deep eutectic solvents and their electrochemical evaluation using organometallic reference redox systems. Electrochimica Acta, 2013, 113, 205-211.	5.2	90
31	The application of nano-crystalline PbO <sub>2</sub> as an anode for the simultaneous bio-electrochemical denitrification and organic matter removal in an up-flow undivided reactor. Electrochimica Acta, 2013, 94, 327-335.	5.2	35
32	Electrochemical approaches to the production of graphene flakes and their potential applications. Carbon, 2013, 54, 1-21.	10.3	285
33	Progress in the electrochemical modification of graphene-based materials and their applications. Electrochimica Acta, 2013, 107, 425-440.	5.2	112
34	A review on the effect of bio-electrodes on denitrification and organic matter removal processes in bio-electrochemical systems. Journal of Industrial and Engineering Chemistry, 2013, 19, 1-13.	5.8	90
35	Kinetic analysis on thermo-gravimetric profiles of pulverised coal pyrolysis and gasification under different oxy-fuel environments. Canadian Journal of Chemical Engineering, 2013, 91, 1936-1944.	1.7	8
36	Dynamic modelling and sensitivity analysis of a tubular SOFC fuelled with NH <sub>3</sub> as a possible replacement for H <sub>2</sub> . Chemical Engineering Research and Design, 2012, 90, 1871-1882.	5.6	27

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37	Status of biodiesel research and development in Pakistan. Renewable and Sustainable Energy Reviews, 2012, 16, 4396-4405.	16.4	31
38	Modeling of a Tubular SOFC: The Effect of the Thermal Radiation of Fuel Components and CO Participating in the Electrochemical Process. Fuel Cells, 2012, 12, 761-772.	2.4	9
39	The effect of temperature on various parameters in coal, biomass and CO-gasification: A review. Renewable and Sustainable Energy Reviews, 2012, 16, 5584-5596.	16.4	274
40	Hydrogen production by Chlamydomonas reinhardtii in a two-stage process with and without illumination at alkaline pH. International Journal of Hydrogen Energy, 2012, 37, 4930-4934.	7.1	33
41	Removal of total ammonia nitrogen (TAN), nitrate and total organic carbon (TOC) from aquaculture wastewater using electrochemical technology: A review. Desalination, 2012, 285, 1-13.	8.2	393
42	Kinetics of gasification of coal, biomass and their blends in air (N <sub>2</sub> /O <sub>2</sub> ) and different oxy-fuel (O <sub>2</sub> /CO <sub>2</sub> ) atmospheres. Energy, 2012, 37, 665-672.	8.8	64
43	Performance evaluation of biodiesel from used domestic waste oils: A review. Chemical Engineering Research and Design, 2012, 90, 164-179.	5.6	86
44	All-Chromium Redox Flow Battery for Renewable Energy Storage. International Journal of Green Energy, 2011, 8, 248-264.	3.8	45
45	Progress in Flow Battery Research and Development. Journal of the Electrochemical Society, 2011, 158, R55.	2.9	1,208
46	Ruthenium based redox flow battery for solar energy storage. Energy Conversion and Management, 2011, 52, 2501-2508.	9.2	78
47	Techno-economic comparison between B10 of Eruca sativa L. and other indigenous seed oils in Pakistan. Chemical Engineering Research and Design, 2011, 89, 165-171.	5.6	47
48	Use of a membrane bioreactor in effluent treatment from electroplating industry: Oil and grease. , 2011, , .		0
49	Charge–Discharge Performance of a Novel Undivided Redox Flow Battery for Renewable Energy Storage. International Journal of Green Energy, 2010, 7, 445-460.	3.8	29
50	A membrane free electrochemical cell using porous flow-through graphite felt electrodes. Journal of Applied Electrochemistry, 2008, 38, 637-644.	2.9	20
51	Evaluation of electrolytes for redox flow battery applications. Electrochimica Acta, 2007, 52, 2189-2195.	5.2	216