# Sandip Maurya, S Maurya, Sk Maurya

List of Publications by Year
in descending order

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Version: 2024-02-01

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|---|---|---|---|
| 63 papers | 2,227 citations | 236833 25 h-index | 254106 43 g-index |
| 68 all docs | 68 docs citations | 68 times ranked | 2081 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Durable and highly selective ion transport of a sulfonated Diels Alder Poly(phenylene) for vanadium redox flow batteries. Journal of Power Sources, 2022, 520, 230805. | 4.0 | 9 |
| 2 | Protonated phosphonic acid electrodes for high power heavy-duty vehicle fuel cells. Nature Energy, 2022, 7, 248-259. | 19.8 | 65 |
| 3 | Dispersing Agents Impact Performance of Protonated Phosphonic Acid High-Temperature Polymer Electrolyte Membrane Fuel Cells. ACS Energy Letters, 2022, 7, 1642-1647. | 8.8 | 11 |
| 4 | Fundamental Aspects of the Electron Transfer Processes in Non-Aqueous Redox Flow Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 2029-2029. | 0.0 | 0 |
| 5 | Quaternized poly(arylene ether benzonitrile) membranes for vanadium redox flow batteries. Journal of Membrane Science, 2021, 617, 118565. | 4.1 | 23 |
| 6 | Synergistically integrated phosphonated poly(pentafluorostyrene) for fuel cells. Nature Materials, 2021, 20, 370-377. | 13.3 | 112 |
| 7 | Iron-iminopyridine complexes as charge carriers for non-aqueous redox flow battery applications. Energy Storage Materials, 2021, 37, 576-586. | 9.5 | 18 |
| 8 | Performance and durability of anion exchange membrane water electrolyzers using down-selected polymer electrolytes. Journal of Materials Chemistry A, 2021, 9, 22670-22683. | 5.2 | 34 |
| 9 | Ultrafine Pt cluster and RuO<sub>2</sub> heterojunction anode catalysts designed for ultra-low Pt-loading anion exchange membrane fuel cells. Nanoscale Horizons, 2020, 5, 316-324. | 4.1 | 34 |
| 10 | Unusually High Concentration of Alkyl Ammonium Hydroxide in the Cationâ€“Hydroxideâ€“Water Coadsorbed Layer on Pt. ACS Applied Materials & Interfaces, 2020, 12, 1825-1831. | 4.0 | 15 |
| 11 | Role of phosphate source in improving the proton conductivity of tin pyrophosphate and its composite electrolytes. Journal of Materials Chemistry A, 2020, 8, 16345-16354. | 5.2 | 15 |
| 12 | Asymmetric electrode ionomer for low relative humidity operation of anion exchange membrane fuel cells. Journal of Materials Chemistry A, 2020, 8, 14135-14144. | 5.2 | 60 |
| 13 | Stabilizing Single-Atom Iron Electrocatalysts for Oxygen Reduction via Ceria Confining and Trapping. ACS Catalysis, 2020, 10, 2452-2458. | 5.5 | 103 |
| 14 | Fabrication of a composite anion exchange membrane with aligned ion channels for a high-performance non-aqueous vanadium redox flow battery. RSC Advances, 2020, 10, 5010-5025. | 1.7 | 21 |
| 15 | Exploring Redox Active and Electrochemically Stable Organic Molecules for > 3 V Non-Aqueous Redox Flow Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 206-206. | 0.0 | 0 |
| 16 | The Effect of Backbone Structure on Functional Properties in Anion Exchange Membranes; Comparison of Poly(fluorene) with Poly(biphenylene) and Poly(terphenylene)s. ECS Meeting Abstracts, 2020, MA2020-02, 2268-2268. | 0.0 | 0 |
| 17 | On the origin of permanent performance loss of anion exchange membrane fuel cells: Electrochemical oxidation of phenyl group. Journal of Power Sources, 2019, 436, 226866. | 4.0 | 69 |
| 18 | Alkaline Stability of Quaternized Dielsâ€“Alder Polyphenylenes. Macromolecules, 2019, 52, 5419-5428. | 2.2 | 82 |

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|---|---|---|---|
| 19 | Linked Picolinamide Nickel Complexes as Redox Carriers for Nonaqueous Flow Batteries. ChemSusChem, 2019, 12, 1304-1309. | 3.6 | 11 |
| 20 | Adsorption of Polyaromatic Backbone Impacts the Performance of Anion Exchange Membrane Fuel Cells. Chemistry of Materials, 2019, 31, 4195-4204. | 3.2 | 91 |
| 21 | Synthesis of Aromatic Anion Exchange Membranes by Friedelâ€“Crafts Bromoalkylation and Cross-Linking of Polystyrene Block Copolymers. Macromolecules, 2019, 52, 2139-2147. | 2.2 | 152 |
| 22 | How does a small structural change of anode ionomer make a big difference in alkaline membrane fuel cell performance?. Journal of Materials Chemistry A, 2019, 7, 25040-25046. | 5.2 | 55 |
| 23 | Caveat of High Temperature Accelerated Stability Test for Anion Exchange Membranes. ECS Meeting Abstracts, 2019, , . | 0.0 | 0 |
| 24 | Crosslinked Quaternized Poly(arylene ether benzonitrile) Membranes for Vanadium Redox Flow Batteries. ECS Meeting Abstracts, 2019, , . | 0.0 | 0 |
| 25 | Iron(tris pyridyl-imine) Complexes As Redox Couples for Non-Aqueous Redox Flow Battery Applications. ECS Meeting Abstracts, 2019, , . | 0.0 | 0 |
| 26 | Electrochemical Synthesis of Ammonia Using Origami-like Molybdenum Carbide Nanoflakes As Nitrogen Reduction Reaction Catalyst. ECS Meeting Abstracts, 2019, , . | 0.0 | 0 |
| 27 | Durability-Limiting Factor of Anion Exchange Membrane Fuel Cells. ECS Meeting Abstracts, 2019, , . | 0.0 | 0 |
| 28 | Intermediate temperature fuel cells via an ion-pair coordinated polymer electrolyte. Energy and Environmental Science, 2018, 11, 979-987. | 15.6 | 67 |
| 29 | Toward Improved Alkaline Membrane Fuel Cell Performance Using Quaternized Aryl-Ether Free Polyaromatics. Chemistry of Materials, 2018, 30, 2188-2192. | 3.2 | 77 |
| 30 | Impact of ionomer adsorption on alkaline hydrogen oxidation activity and fuel cell performance. Current Opinion in Electrochemistry, 2018, 12, 189-195. | 2.5 | 55 |
| 31 | Effect of flow field geometry on operating current density, capacity and performance of vanadium redox flow battery. Journal of Power Sources, 2018, 404, 20-27. | 4.0 | 81 |
| 32 | Acid-catalyzed benzoylation reactions of Diels-Alder polyphenylenes. Polymer, 2018, 158, 190-197. | 1.8 | 3 |
| 33 | Rational design of polyaromatic ionomers for alkaline membrane fuel cells with >1 W cm<sup>â^'2</sup> power density. Energy and Environmental Science, 2018, 11, 3283-3291. | 15.6 | 209 |
| 34 | Surface Adsorption Affects the Performance of Alkaline Anion-Exchange Membrane Fuel Cells. ACS Catalysis, 2018, 8, 9429-9439. | 5.5 | 55 |
| 35 | A rejuvenation process to enhance the durability of low Pt loaded polymer electrolyte membrane fuel cells. Journal of Power Sources, 2018, 396, 345-354. | 4.0 | 18 |
| 36 | Evaluation of Varying Electrocatalysts for the Intermediate Temperature Electrochemical Synthesis of Ammonia. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |

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|---|---|---|---|
| 37 | Progress Toward High Voltage, High Cycle Life Non-Aqueous Flow Cells for Grid Scale Energy Storage. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 38 | Development of High Capacity Metal-Ligand Electrolytes for Grid-Scale Non-Aqueous Redox Flow Battery. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 39 | Why Pt-Ru Catalyst Works Better for Alkaline Hydrogen Oxidation Reaction?. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 40 | (Invited) Electrochemical Synthesis of Ammonia Using Ion Conducting Membranes. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 41 | Dimethyl Substituted Polyaromatic Alkaline Ionomers for Better Alkaline Hydrogen Oxidation. ECS Meeting Abstracts, 2018, , . | 0.0 | 1 |
| 42 | Strategies to Enhance the Performance of Polybenzimidazole Membrane Based Vanadium Redox Flow Batteries. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 43 | (Invited) Electrochemical Ammonia Synthesis Using Intermediate Temperature Proton Conducting Membranes. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 44 | Polyaromatic Ionomers for High Performance Alkaline Membrane Fuel Cells. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 45 | Effect of Cerium, Cobalt and Nickel Contaminants on the Oxygen Reduction Reaction at Platinum Electrodes. ECS Transactions, 2017, 80, 861-867. | 0.3 | 10 |
| 46 | Effect of Flow Field Geometry on Operating Current Density, Capacity and Performance of Vanadium Redox Flow Battery. ECS Meeting Abstracts, 2017, , . | 0.0 | 0 |
| 47 | Importance of Resonance Structure on Alkaline Stability. ECS Meeting Abstracts, 2017, , . | 0.0 | 1 |
| 48 | Effect of Cerium, Cobalt and Nickel Contaminants on the Oxygen Reduction Reaction at Platinum Electrodes. ECS Meeting Abstracts, 2017, , . | 0.0 | 0 |
| 49 | Organic Molecular Catalyst for Hydrogen Evolution Reaction. ECS Meeting Abstracts, 2017, , . | 0.0 | 0 |
| 50 | SnP2O7 Based Membranes for Intermediate Temperature Electrochemical-Synthesis of Ammonia. ECS Meeting Abstracts, 2017, , . | 0.0 | 0 |
| 51 | Nitrogen-Deficient ORR Active Sites Formation by Iron-Assisted Water Vapor Activation of Electrospun Carbon Nanofibers. Journal of Physical Chemistry C, 2016, 120, 7705-7714. | 1.5 | 48 |
| 52 | Proof-of-concept experiments of an acid-base junction flow battery by reverse bipolar electrodialysis for an energy conversion system. Electrochemistry Communications, 2016, 72, 157-161. | 2.3 | 29 |
| 53 | SPPO pore-filled composite membranes with electrically aligned ion channels via a lab-scale continuous caster for fuel cells: An optimal DC electric field strength-IEC relationship. Journal of Membrane Science, 2016, 501, 15-23. | 4.1 | 18 |
| 54 | Amphoteric nanoporous polybenzimidazole membrane with extremely low crossover for a vanadium redox flow battery. RSC Advances, 2016, 6, 5198-5204. | 1.7 | 68 |

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| 55 | Influence of membrane structure on the operating current densities of non-aqueous redox flow batteries: Organicâ€“inorganic composite membranes based on a semi-interpenetrating polymer network. Journal of Power Sources, 2015, 296, 245-254. | 4.0 | 25 |
| 56 | A review on recent developments of anion exchange membranes for fuel cells and redox flow batteries. RSC Advances, 2015, 5, 37206-37230. | 1.7 | 209 |
| 57 | Anion exchange membrane prepared from simultaneous polymerization and quaternization of 4-vinyl pyridine for non-aqueous vanadium redox flow battery applications. Journal of Power Sources, 2014, 255, 325-334. | 4.0 | 66 |
| 58 | Stability of composite anion exchange membranes with various functional groups and their performance for energy conversion. Journal of Membrane Science, 2013, 443, 28-35. | 4.1 | 87 |
| 59 | Tailoring the molecular weight cut off values of polyacrylonitrile based hollow fibre ultrafiltration membranes with improved fouling resistance by chemical modification. Journal of Membrane Science, 2013, 425-426, 251-261. | 4.1 | 38 |
| 60 | Preparation of polysulfoneâ€“polyamide thin film composite hollow fiber nanofiltration membranes and their performance in the treatment of aqueous dye solutions. Desalination, 2012, 304, 11-19. | 4.0 | 59 |
| 61 | Structure-performance-fouling studies of polysulfone microfiltration hollow fibre membranes. Bulletin of Materials Science, 2012, 35, 817-822. | 0.8 | 9 |
| 62 | Structure and performance of nanofiltration membrane prepared in a large-scale at CSIR-CSMCRI using indigenous coating unit. Desalination, 2012, 288, 8-15. | 4.0 | 11 |
| 63 | Preparation and surface modification of hollow fibre membranes for drinking water disinfection and water reclamation. International Journal of Nuclear Desalination, 2010, 4, 149. | 0.2 | 2 |