Vidyanand Vijayakumar

List of Publications by Year
in descending order

21 papers	985 citations	687363 13 h-index	752698 20 g-index
21 all docs	21 docs citations	21 times ranked	1191 citing authors

#	Article	IF	Citations
1	Zinc ion interactions in a two-dimensional covalent organic framework based aqueous zinc ion battery. Chemical Science, 2019, 10, 8889-8894.	7.4	220
2	<i>In situ</i>polymerization process: an essential design tool for lithium polymer batteries. Energy and Environmental Science, 2021, 14, 2708-2788.	30.8	140
3	Convergent Covalent Organic Framework Thin Sheets as Flexible Supercapacitor Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 28139-28146.	8.0	134
4	An all-solid-state-supercapacitor possessing a non-aqueous gel polymer electrolyte prepared using a UV-assisted in situ polymerization strategy. Journal of Materials Chemistry A, 2017, 5, 8461-8476.	10.3	83
5	Dendrite Growth Suppression by Zn²⁺â€Integrated Nafion Ionomer Membranes: Beyond Porous Separators toward Aqueous Zn/V₂O₅ Batteries with Extended Cycle Life. Energy Technology, 2019, 7, 1900442.	3.8	76
6	High-Performance Flexible Solid-State Supercapacitor with an Extended Nanoregime Interface through in Situ Polymer Electrolyte Generation. ACS Applied Materials & Interfaces, 2016, 8, 1233-1241.	8.0	59
7	Weak Intermolecular Interactions in Covalent Organic Framework-Carbon Nanofiber Based Crystalline yet Flexible Devices. ACS Applied Materials & Interfaces, 2019, 11, 30828-30837.	8.0	54
8	Nafion Ionomer-Based Single Component Electrolytes for Aqueous Zn/MnO₂ Batteries with Long Cycle Life. ACS Sustainable Chemistry and Engineering, 2020, 8, 5040-5049.	6.7	37
9	Dioxolanone-Anchored Poly(allyl ether)-Based Cross-Linked Dual-Salt Polymer Electrolytes for High-Voltage Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2020, 12, 567-579.	8.0	31
10	A rationally designed self-standing V₂O₅ electrode for high voltage non-aqueous all-solid-state symmetric (2.0 V) and asymmetric (2.8 V) supercapacitors. Nanoscale, 2018, 10, 8741-8751.	5.6	30
11	An In Situ Crossâ€Linked Nonaqueous Polymer Electrolyte for Zincâ€Metal Polymer Batteries and Hybrid Supercapacitors. Small, 2020, 16, e2002528.	10.0	24
12	Scalable Synthesis of Manganese-Doped Hydrated Vanadium Oxide as a Cathode Material for Aqueous Zinc-Metal Battery. ACS Applied Materials & Interfaces, 2020, 12, 48542-48552.	8.0	21
13	Water-in-Acid Gel Polymer Electrolyte Realized through a Phosphoric Acid-Enriched Polyelectrolyte Matrix toward Solid-State Supercapacitors. ACS Sustainable Chemistry and Engineering, 2018, 6, 12630-12640.	6.7	17
14	Interconnected polyaniline nanostructures: Enhanced interface for better supercapacitance retention. Polymer, 2021, 212, 123169.	3.8	12
15	Naphthalene dianhydride organic anode for a â€˜rocking-chairâ€™ zincâ€“proton hybrid ionÂbattery. Dalton Transactions, 2021, 50, 4237-4243.	3.3	12
16	Unravelling the Mechanism of Electrochemical Degradation of PANI in Supercapacitors: Achieving a Feasible Solution. ChemElectroChem, 2016, 3, 933-942.	3.4	10
17	Synthesis of Carbon Nanosheets and Nitrogen-Doped Carbon Nanosheets from Perylene Derivatives for Supercapacitor Application. ACS Applied Nano Materials, 2018, 1, 4576-4586.	5.0	10
18	In Situ Preparation of Ionomer as a Tool for Tripleâ€Phase Boundary Enhancement in 3D Graphene Supported Pt Catalyst. Advanced Sustainable Systems, 2021, 5, .	5.3	6

#	Article	IF	Citations
19	A sulfonated polyvinyl alcohol ionomer membrane favoring smooth electrodeposition of zinc for aqueous rechargeable zinc metal batteries. Sustainable Energy and Fuels, 2021, 5, 5557-5564.	4.9	3
20	The role and the necessary features of electrolytes for microsupercapacitors. , 2022, , 47-116.		3
21	Electrodeposited Layered Sodium Vanadyl Phosphate (Na_{<i>x</i>}VOPO₄Â·<i>n</i>H₂O) as Cathode Material for Aqueous Rechargeable Zinc Metal Batteries. Energy & Fuels, 2022, 36, 6520-6531.	5.1	3