

# Vipin Kumar

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

35  
papers

1,745  
citations

22  
h-index

38  
g-index

38  
ext. papers

2,076  
ext. citations

10.6  
avg, IF

5.2  
L-index

#	Paper	IF	Citations
35	Theory-guided experimental design in battery materials research.. <i>Science Advances</i> , <b>2022</b> , 8, eabm2422	14.3	9
34	Implications of Na-ion solvation on Na anode Electrolyte interphase. <i>Trends in Chemistry</i> , <b>2021</b> ,	14.8	3
33	Recent advances in cathode engineering to enable reversible room-temperature aluminium Sulfur batteries. <i>Nanoscale Advances</i> , <b>2021</b> , 3, 1569-1581	5.1	8
32	Room-Temperature Sodium Sulfur Batteries and Beyond: Realizing Practical High Energy Systems through Anode, Cathode, and Electrolyte Engineering. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003493	21.8	50
31	Unveiling the physiochemical aspects of the matrix in improving sulfur-loading for room-temperature sodium Sulfur batteries. <i>Materials Advances</i> , <b>2021</b> , 2, 4165-4189	3.3	8
30	Design and construction of a three-dimensional electrode with biomass-derived carbon current collector and water-soluble binder for high-sulfur-loading lithium-sulfur batteries <b>2020</b> , 2, 635-645		15
29	An artificial metal-alloy interphase for high-rate and long-life sodium Sulfur batteries. <i>Energy Storage Materials</i> , <b>2020</b> , 29, 1-8	19.4	62
28	Tailoring binder cathode interactions for long-life room-temperature sodium Sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 22983-22997	13	29
27	Tri-rutile layered niobium-molybdates for all solid-state symmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 20141-20150	13	2
26	A High-Performance Magnesium Triflate-based Electrolyte for Rechargeable Magnesium Batteries. <i>Cell Reports Physical Science</i> , <b>2020</b> , 1, 100265	6.1	24
25	A Biphasic Interphase Design Enabling High Performance in Room Temperature Sodium-Sulfur Batteries. <i>Cell Reports Physical Science</i> , <b>2020</b> , 1, 100044	6.1	34
24	Self-powered pressure sensor for ultra-wide range pressure detection. <i>Nano Research</i> , <b>2017</b> , 10, 3557-3570	17.0	85
23	Multi-responsive supercapacitors: Smart solution to store electrical energy. <i>Materials Today Energy</i> , <b>2017</b> , 4, 41-57	7	25
22	Fast charging self-powered electric double layer capacitor. <i>Journal of Power Sources</i> , <b>2017</b> , 342, 70-78	8.9	70
21	Investigation of Charge Transfer Kinetics at Carbon/Hydroquinone Interfaces for Redox-Active-Electrolyte Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 33728-33734	9.5	19
20	Ti-Doped WO <sub>3</sub> synthesized by a facile wet bath method for improved electrochromism. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 9995-10000	7.1	27
19	Highly Transparent, Stretchable, and Self-Healing Ionic-Skin Triboelectric Nanogenerators for Energy Harvesting and Touch Applications. <i>Advanced Materials</i> , <b>2017</b> , 29, 1702181	24	255

18	Localized Charge Transfer in Two-Dimensional Molybdenum Trioxide. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 27045-27053	9.5	7
17	Metal Organic Framework-Derived Metal Phosphates as Electrode Materials for Supercapacitors. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1501833	21.8	165
16	Enhanced Piezoelectric Energy Harvesting Performance of Flexible PVDF-TrFE Bilayer Films with Graphene Oxide. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 521-9	9.5	221
15	Ultra-large optical modulation of electrochromic porous WO film and the local monitoring of redox activity. <i>Chemical Science</i> , <b>2016</b> , 7, 1373-1382	9.4	153
14	Design of Mixed-Metal Silver Decamolybdate Nanostructures for High Specific Energies at High Power Density. <i>Advanced Materials</i> , <b>2016</b> , 28, 6966-75	24	27
13	Formation of hexagonal-molybdenum trioxide (h-MoO <sub>3</sub> ) nanostructures and their pseudocapacitive behavior. <i>Nanoscale</i> , <b>2015</b> , 7, 11777-86	7.7	60
12	Redox Active Polyaniline-h-MoO <sub>3</sub> Hollow Nanorods for Improved Pseudocapacitive Performance. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 9041-9049	3.8	67
11	Oxygen-Ions-Mediated Pseudocapacitive Charge Storage in Molybdenum Trioxide Nanobelts. <i>ChemNanoMat</i> , <b>2015</b> , 1, 403-408	3.5	3
10	MOFs-derived copper sulfides embedded within porous carbon octahedra for electrochemical capacitor applications. <i>Chemical Communications</i> , <b>2015</b> , 51, 3109-12	5.8	135
9	Insights on the fundamental capacitive behavior: a case study of MnO <sub>2</sub> . <i>Small</i> , <b>2014</b> , 10, 3568-78	11	41
8	Aniline Tetramer-Graphene Oxide Composites for High Performance Supercapacitors. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400781	21.8	38
7	Topotactic Phase Transformation of Hexagonal MoO <sub>3</sub> to Layered MoO <sub>3</sub> -II and Its Two-Dimensional (2D) Nanosheets. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 5533-5539	9.6	46
6	The effect of deposition time on the structural and optical properties of EGa <sub>2</sub> O <sub>3</sub> nanowires grown using CVD technique. <i>Journal of Nanoparticle Research</i> , <b>2014</b> , 16, 1	2.3	22
5	Synthesis of pyramidal and prismatic hexagonal MoO <sub>3</sub> nanorods using thiourea. <i>CrystEngComm</i> , <b>2013</b> , 15, 7663	3.3	23
4	Towards autonomous high-throughput multiscale modelling of battery interfaces. <i>Energy and Environmental Science</i> ,	35.4	3
3	Exploration of the Unique Structural Chemistry of Sulfur Cathode for High-Energy Rechargeable Beyond-Li Batteries. <i>Advanced Energy and Sustainability Research</i> , 2100157	1.6	2
2	Challenges in regulating interfacial-chemistry of the sodium-metal anode for room-temperature sodium-sulfur batteries. <i>Energy Storage</i> , e264	2.8	3
1	Guiding Uniform Sodium Deposition through Host Modification for Sodium Metal Batteries. <i>Batteries and Supercaps</i> ,	5.6	3

