

# Chenrayan Senthil

## List of Publications by Year in descending order

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40  
papers

999  
citations

430754

18  
h-index

434063

31  
g-index

40  
all docs

40  
docs citations

40  
times ranked

1143  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomass-derived biochar materials as sustainable energy sources for electrochemical energy storage devices. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 137, 110464.	8.2	134
2	Micelle templated NiO hollow nanospheres as anode materials in lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 7337-7344.	5.2	80
3	Biomass seaweed-derived nitrogen self-doped porous carbon anodes for sodium-ion batteries: Insights into the structure and electrochemical activity. <i>Journal of Energy Chemistry</i> , 2022, 64, 286-295.	7.1	65
4	Nitrogen-doped carbon-coated Li[Ni <sub>0.8</sub> Co <sub>0.1</sub> Mn <sub>0.1</sub> ]O <sub>2</sub> cathode material for enhanced lithium-ion storage. <i>Applied Surface Science</i> , 2019, 492, 871-878.	3.1	58
5	Nitrogen Rich Carbon Coated TiO <sub>2</sub> Nanoparticles as Anode for High Performance Lithium-ion Battery. <i>Electrochimica Acta</i> , 2017, 255, 417-427.	2.6	56
6	Understanding Excess Li Storage beyond LiC <sub>6</sub> in Reduced Dimensional Scale Graphene. <i>ACS Nano</i> , 2021, 15, 797-808.	7.3	50
7	Thermochemical conversion of eggshell as biological waste and its application as a functional material for lithium-ion batteries. <i>Chemical Engineering Journal</i> , 2019, 372, 765-773.	6.6	49
8	Ultrathin MoS <sub>2</sub> sheets supported on N-rich carbon nitride nanospheres with enhanced lithium storage properties. <i>Applied Surface Science</i> , 2017, 410, 215-224.	3.1	45
9	Flame retardant high-power Li-S flexible batteries enabled by bio-macromolecular binder integrating conformal fractions. <i>Nature Communications</i> , 2022, 13, 145.	5.8	42
10	Electrochemical performance of porous CaFe <sub>2</sub> O <sub>4</sub> as a promising anode material for lithium-ion batteries. <i>Applied Surface Science</i> , 2019, 491, 757-764.	3.1	41
11	An efficient mesoporous carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) functionalized Pd catalyst for carbon-carbon bond formation reactions. <i>RSC Advances</i> , 2016, 6, 49376-49386.	1.7	35
12	3D-printed architecture of Li-ion batteries and its applications to smart wearable electronic devices. <i>Applied Materials Today</i> , 2020, 20, 100688.	2.3	29
13	Tin selenide/N-doped carbon composite as a conversion and alloying type anode for sodium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020, 834, 154304.	2.8	29
14	Reactive template synthesis of Li <sub>1.2</sub> Mn <sub>0.54</sub> Ni <sub>0.13</sub> Co <sub>0.13</sub> O <sub>2</sub> nanorod cathode for Li-ion batteries: Influence of temperature over structural and electrochemical properties. <i>Electrochimica Acta</i> , 2019, 317, 398-407.	2.6	27
15	An encapsulation of nitrogen and sulphur dual-doped carbon over Li[Ni <sub>0.8</sub> Co <sub>0.1</sub> Mn <sub>0.1</sub> ]O <sub>2</sub> for lithium-ion battery applications. <i>Applied Surface Science</i> , 2020, 511, 145580.	3.1	26
16	Metallic 1T MoS <sub>2</sub> overlapped nitrogen-doped carbon superstructures for enhanced sodium-ion storage. <i>Applied Surface Science</i> , 2019, 491, 180-186.	3.1	22
17	NASICON type ordered mesoporous lithium-aluminum-titanium-phosphate as electrode materials for lithium-ion batteries. <i>Microporous and Mesoporous Materials</i> , 2017, 240, 57-64.	2.2	20
18	Selective ion transport of catalytic hybrid aerofilm interlayer for long-stable Li-S batteries. <i>Energy Storage Materials</i> , 2022, 47, 472-481.	9.5	20

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19	N-rich graphitic carbon nitride functionalized graphene oxide nanosheet hybrid as anode for high performance lithium-ion batteries. <i>Materials Research Express</i> , 2018, 5, 016307.	0.8	18
20	The dual role of micelles as templates and reducing agents for the fabrication of catalytically active hollow silver nanospheres. <i>Chemical Communications</i> , 2015, 51, 733-736.	2.2	17
21	Robust, Ultrasmooth Fluorinated Lithium Metal Interphase Feasible via Lithiophilic Graphene Quantum Dots for Dendrite-Free Batteries. <i>Small</i> , 2022, 18, e2200919.	5.2	16
22	Micelle-templated synthesis of Pt hollow nanospheres for catalytic hydrogen evolution. <i>RSC Advances</i> , 2016, 6, 11370-11377.	1.7	14
23	Multichannel red phosphorus with a nanoporous architecture: A novel anode material for sodium-ion batteries. <i>Journal of Power Sources</i> , 2020, 470, 228459.	4.0	14
24	High energy storage of Li-ions on keggin-type polyoxometalate as electrodes for rechargeable lithium batteries. <i>Journal of Physics and Chemistry of Solids</i> , 2020, 142, 109468.	1.9	14
25	Freestanding conversion-type anode via one-pot formation for flexible Li-ion battery. <i>Chemical Engineering Journal</i> , 2022, 427, 130937.	6.6	12
26	Alleviating the initial coulombic efficiency loss and enhancing the electrochemical performance of Li <sub>1.2</sub> Mn <sub>0.54</sub> Ni <sub>0.13</sub> Co <sub>0.13</sub> O <sub>2</sub> using I <sup>2</sup> -MnO <sub>2</sub> . <i>Applied Surface Science</i> , 2019, 489, 336-345.	3.1	10
27	Fabrication of Hollow Co <sub>3</sub> O <sub>4</sub> Nanospheres and Their Nanocomposites of CNT and rGO as High-Performance Anodes for Lithium-Ion Batteries. <i>ChemistrySelect</i> , 2018, 3, 5502-5511.	0.7	7
28	Investigation of various cobalt concentrations on LiV <sub>2</sub> O <sub>5</sub> as cathode materials with tunable high rate capability and operating voltage in Li-ion batteries. <i>Applied Surface Science</i> , 2019, 489, 624-630.	3.1	7
29	High energy density of multivalent glass-ceramic cathodes for Li-ion rechargeable cells and as an efficient photocatalyst for organic degradation. <i>Energy Storage</i> , 2020, 2, e133.	2.3	7
30	Nitrogen self-doped carbon sheets anchored hematite nanodots as efficient Li-ion storage anodes through pseudocapacitance mediated redox process. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 85, 289-296.	2.9	6
31	Sustainable-inspired design of efficient organic electrodes for rechargeable sodium-ion batteries: Conversion of P-waste into E-wealth device. <i>Sustainable Materials and Technologies</i> , 2021, 28, e00247.	1.7	5
32	Unlocking Rapid Charging and Extended Lifetimes for Li-Ion Batteries Using Freestanding Quantum Conversion-Type Aerofilm Anode. <i>ACS Nano</i> , 2021, 15, 18437-18447.	7.3	5
33	Chemically engineered alloy anode enabling fully reversible conversion reaction: design of a C-Sn-bonded aerofilm anode. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3595-3604.	5.2	4
34	Nickel/carbon core/shell nanotubes: Lanthanum nickel alloy catalyzed synthesis, characterization and studies on their ferromagnetic and lithium-ion storage properties. <i>Materials Research Bulletin</i> , 2014, 60, 621-627.	2.7	3
35	Solvothermally synthesized Ti-rich LiMnTiO <sub>4</sub> as cathode material for high Li storage. <i>Journal of Materials Science</i> , 2018, 53, 4406-4416.	1.7	3
36	Vanadium silicon-oxyfluoride nanowires for lithium storage systems: A perfect synergy for dynamic simple spot synthesis. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 269, 115164.	1.7	3

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37	One dimensional vanadium boron-oxyfluoride nanostructures for lithium storage systems. Materials Letters, 2021, 293, 129706.	1.3	2
38	Nanostructured nonoxide nanomaterials an introduction. , 2022, , 1-24.		2
39	Experimental dataset on tailoring hematite nanodots embedded nitrogen-rich carbon layers for lithium-ion batteries. Data in Brief, 2020, 30, 105472.	0.5	1
40	Fabrication of ZnO Hollow Nanospheres and Their Electrochemical Reactivity in Lithium Ion Batteries (LIBs). Journal of Nanoelectronics and Optoelectronics, 2015, 10, 135-139.	0.1	1