Prasanna Kadirvelayutham

List of Publications by Year
in descending order

45 papers	1,523 citations	270111 25 h-index	355658 38 g-index
45 all docs	45 docs citations	45 times ranked	2440 citing authors

#	Article	IF	Citations
1	Recent Advances in Nanostructured Transition Metal Carbide- and Nitride-Based Cathode Electrocatalysts for Liâ€“O2 Batteries (LOBs): A Brief Review. Nanomaterials, 2020, 10, 2106.	1.9	14
2	Biopolymer phytagel-derived porous nanocarbon as efficient electrode material for high-performance symmetric solid-state supercapacitors. Journal of Industrial and Engineering Chemistry, 2019, 80, 258-264.	2.9	17
3	Improving self-discharge and anti-corrosion performance of Zn-air batteries using conductive polymer-coated Zn active materials. Journal of Industrial and Engineering Chemistry, 2019, 76, 396-402.	2.9	32
4	Chitosan complements entrapment of silicon inside nitrogen doped carbon to improve and stabilize the capacity of Li-ion batteries. Scientific Reports, 2019, 9, 3318.	1.6	30
5	Metal-organic framework derived NiMo polyhedron as an efficient hydrogen evolution reaction electrocatalyst. Applied Surface Science, 2019, 478, 916-923.	3.1	55
6	Shape- and size-tunable synthesis of tin sulfide thin films for energy applications by electrodeposition. Applied Surface Science, 2019, 479, 167-176.	3.1	22
7	Asymmetric supercapacitor based on carbon nanofibers as the anode and two-dimensional copper cobalt oxide nanosheets as the cathode. Chemical Engineering Journal, 2019, 366, 390-403.	6.6	113
8	Hierarchically structured mesoporous bimetallic oxides as a potential anode material for rechargeable lithium batteries. Journal of Alloys and Compounds, 2019, 771, 555-564.	2.8	19
9	Facile method to synthesis hybrid phase 1T@2H MoSe2 nanostructures for rechargeable lithium ion batteries. Journal of Electroanalytical Chemistry, 2019, 833, 333-339.	1.9	39
10	Bandgap tuned and oxygen vacant TiO2â^'x anode materials with enhanced electrochemical properties for lithium ion batteries. Journal of Industrial and Engineering Chemistry, 2019, 71, 177-183.	2.9	28
11	Al-Doped Li[Ni0.78Co0.1Mn0.1Al0.02]O2 for High Performance of Lithium Ion Batteries. Ceramics International, 2019, 45, 6972-6977.	2.3	78
12	Electrochemical and cycling performance of neodymium (Nd3+) doped LiNiPO4 cathode materials for high voltage lithium-ion batteries. Materials Letters, 2019, 237, 224-227.	1.3	19
13	Synthesis of highly crystalline octahedron 3D-Zn2SnO4 as an advanced high-performance anode material for lithium ion batteries. Applied Surface Science, 2018, 449, 514-520.	3.1	17
14	Non-enzymatic glucose sensing platform using self assembled cobalt oxide/graphene nanocomposites immobilized graphite modified electrode. Journal of Materials Science: Materials in Electronics, 2018, 29, 6763-6770.	1.1	13
15	Wet chemical synthesis and characterization of nanocrystalline ZnWO4 for application in Li-ion batteries. Materials Chemistry and Physics, 2018, 207, 367-372.	2.0	19
16	Highly porous CeO2 nanostructures prepared via combustion synthesis for supercapacitor applications. Applied Surface Science, 2018, 449, 454-460.	3.1	90
17	Effect of dimethyl carbonate (DMC) on the electrochemical and cycling properties of solid polymer electrolytes (PVP-MSA) and its application for proton batteries. Solid State Ionics, 2018, 321, 106-114.	1.3	24
18	Electrochemical performances of LiNi1â^'xMnxPO4 (xâ€¯=â€¯0.05â€“0.2) olivine cathode materials for high voltage rechargeable lithium ion batteries. Applied Surface Science, 2018, 449, 435-444.	3.1	27

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19	Preparation and Characterization of the LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ Cathode Active Material by Electrophoretic Deposition. Journal of Nanoscience and Nanotechnology, 2018, 18, 6494-6498.	0.9	9
20	Improved electrochemical, mechanical and transport properties of novel lithium bisnonafluoro-1-butanesulfonimidate (LiBNFSI) based solid polymer electrolytes for rechargeable lithium ion batteries. Journal of Industrial and Engineering Chemistry, 2017, 52, 224-234.	2.9	26
21	The effects of mechanical alloying on the self-discharge and corrosion behavior in Zn-air batteries. Journal of Industrial and Engineering Chemistry, 2017, 53, 247-252.	2.9	39
22	Time-efficient synthesis of MnO 2 encapsulated Î±-Fe 2 O 3 ellipsoids for lithium ion battery applications. Journal of Alloys and Compounds, 2017, 720, 300-308.	2.8	25
23	Shield effect of polyaniline between zinc active material and aqueous electrolyte in zinc-air batteries. Applied Surface Science, 2017, 422, 406-412.	3.1	47
24	Headway in rhodanide anion based ternary gel polymer electrolytes (TILGPEs) for applications in rechargeable lithium ion batteries: an efficient route to achieve high electrochemical and cycling performances. RSC Advances, 2017, 7, 19211-19222.	1.7	18
25	Titanium oxide nanofibers decorated nickel-rich cathodes as high performance electrodes in lithium ion batteries. Journal of Industrial and Engineering Chemistry, 2017, 51, 223-228.	2.9	27
26	An enhanced electrochemical and cycling properties of novel boronic Ionic liquid based ternary gel polymer electrolytes for rechargeable Li/LiCoO2 cells. Scientific Reports, 2017, 7, 11103.	1.6	36
27	A facile and highly efficient short-time homogenization hydrothermal approach for the smart production of high-quality Î±-Fe₂O₃ for rechargeable lithium batteries. Journal of Materials Chemistry A, 2017, 5, 16712-16721.	5.2	45
28	Agar templated electrodeposition of binary zinc-cobalt alloy and formation of zinc-cobalt-carbon nanocomposite for application in secondary lithium batteries. Journal of Alloys and Compounds, 2017, 697, 450-460.	2.8	16
29	Facile synthesis of thermally reduced graphene oxide-sepiolite nanohybrid via intercalation and thermal reduction method. Applied Clay Science, 2017, 135, 510-515.	2.6	23
30	A Rapid One-Pot Synthesis of Novel High-Purity Methacrylic Phosphonic Acid (PA)-Based Polyhedral Oligomeric Silsesquioxane (POSS) Frameworks via Thiol-Ene Click Reaction. Polymers, 2017, 9, 192.	2.0	10
31	Physical and Electrochemical Properties of CuO-Coated Li[Ni_{0.8}Co_{0.1}Mn_{0.1}]O₂ Cathodes at Elevated Temperature for Lithium Ion Batteries. Journal of Nanoscience and Nanotechnology, 2017, 17, 8093-8099.	0.9	16
32	Eco-friendly nitrogen-containing carbon encapsulated LiMn2O4 cathodes to enhance the electrochemical properties in rechargeable Li-ion batteries. Scientific Reports, 2016, 6, 29826.	1.6	54
33	Structural and electrochemical evaluation of bismuth doped lithium titanium oxides for lithium ion batteries. Journal of Power Sources, 2015, 280, 23-29.	4.0	41
34	Environment-Friendly Cathodes Using Biopolymer Chitosan with Enhanced Electrochemical Behavior for Use in Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 7884-7890.	4.0	63
35	Physical and electrochemical performance of LiNi 1/3 Co 1/3 Mn 1/3 O 2 cathodes coated by Sb 2 O 3 using a solâ€“gel process. Materials Chemistry and Physics, 2015, 158, 45-51.	2.0	33
36	Facile longitudinal unzipping of carbon nanotubes to graphene nanoribbons and their effects on LiMn2O4 cathodes in rechargeable lithium-ion batteries. Acta Materialia, 2015, 100, 11-18.	3.8	35

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37	Effect of Additives on Electrochemical and Corrosion Behavior of Gel Type Electrodes for Zn-Air System. Industrial & Engineering Chemistry Research, 2014, 53, 17370-17375.	1.8	15
38	Depth profile studies on nickel rich cathode material surfaces after cycling with an electrolyte containing vinylene carbonate at elevated temperature. Physical Chemistry Chemical Physics, 2014, 16, 17062-17071.	1.3	48
39	Polyethylene separator: stretched and coated with porous nickel oxide nanoparticles for enhancement of its efficiency in Li-ion batteries. Electrochimica Acta, 2014, 137, 273-279.	2.6	36
40	Effects of inorganic salts on the morphological, structural, and electrochemical properties of prepared nickel-rich Li[Ni0.6Co0.2Mn0.2]O2. Journal of Power Sources, 2014, 268, 349-355.	4.0	64
41	Effect of SiO2 coating on polyethylene separator with different stretching ratios for application in lithium ion batteries. Materials Chemistry and Physics, 2014, 146, 545-550.	2.0	58
42	Characterization of Li-rich xLi2MnO3Â·(1â^'x)Li[MnyNizCo1â^'yâ^'z]O2 as cathode active materials for Li-ion batteries. Electrochimica Acta, 2013, 108, 32-38.	2.6	27
43	Silver effect of Coâ€“Ni composite material on energy storage and structural behavior for Li-ion batteries. Applied Surface Science, 2013, 276, 433-436.	3.1	8
44	Optimization of electrophoretic suspension to fabricate Li[Ni1/3Co1/3Mn1/3]O2 based positive electrode for Li-ion batteries. Electrochimica Acta, 2013, 95, 295-300.	2.6	17
45	Physical, thermal, and electrochemical characterization of stretched polyethylene separators for application in lithium-ion batteries. Journal of Solid State Electrochemistry, 2013, 17, 1377-1382.	1.2	31