Manickam Minakshi

List of Publications by Year
in descending order

123	4,361	61984	138484
papers	citations	43 h-index	58 g-index

128	128	128	4149
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nano Î±-NiMoO₄as a new electrode for electrochemical supercapacitors. RSC Advances, 2013, 3, 352-357.	3.6	186
2	Fabrication of ultrathin CoMoO₄nanosheets modified with chitosan and their improved performance in energy storage device. Dalton Transactions, 2015, 44, 6158-6168.	3.3	129
3	Synthesis and characterization of olivine LiNiPO4 for aqueous rechargeable battery. Electrochimica Acta, 2011, 56, 4356-4360.	5.2	118
4	Electrolytic manganese dioxide (EMD): a perspective on worldwide production, reserves and its role in electrochemistry. RSC Advances, 2015, 5, 58255-58283.	3.6	115
5	Lithium insertion into manganese dioxide electrode in MnO2/Zn aqueous battery. Journal of Power Sources, 2004, 130, 254-259.	7.8	110
6	Porous Flower-like Î±-Fe2O3 Nanostructure: A High Performance Anode Material for Lithium-ion Batteries. Electrochimica Acta, 2015, 167, 330-339.	5.2	86
7	Effect of Transition Metal Cations on Stability Enhancement for Molybdate-Based Hybrid Supercapacitor. ACS Applied Materials & Interfaces, 2017, 9, 17977-17991.	8.0	82
8	Synthesis and Characterization of Solid Polymer Electrolyte based on Activated Carbon for Solid State Capacitor. Electrochimica Acta, 2014, 137, 497-503.	5.2	81
9	Synthesis, structural and electrochemical properties of sodium nickel phosphate for energy storage devices. Nanoscale, 2016, 8, 11291-11305.	5.6	80
10	Rational design on materials for developing next generation lithium-ion secondary battery. Progress in Solid State Chemistry, 2021, 62, 100298.	7.2	80
11	Redox behavior and surface characterization of LiFePO4 in lithium hydroxide electrolyte. Journal of Power Sources, 2006, 158, 646-649.	7.8	79
12	Maricite (NaMn_{1/3}Ni_{1/3}Co_{1/3}PO₄)/Activated Carbon: Hybrid Capacitor. Energy & Fuels, 2013, 27, 3516-3522.	5.1	75
13	New insights into the electrochemistry of magnesium molybdate hierarchical architectures for high performance sodium devices. Nanoscale, 2018, 10, 13277-13288.	5.6	74
14	A biopolymer gel-decorated cobalt molybdate nanowafer: effective graft polymer cross-linked with an organic acid for better energy storage. New Journal of Chemistry, 2016, 40, 2863-2877.	2.8	69
15	Calcined chicken eggshell electrode for battery and supercapacitor applications. RSC Advances, 2019, 9, 26981-26995.	3.6	69
16	Zn Metal Atom Doping on the Surface Plane of One-Dimesional NiMoO₄ Nanorods with Improved Redox Chemistry. ACS Applied Materials & Interfaces, 2020, 12, 44815-44829.	8.0	67
17	Tuning the Redox Properties of the Nanostructured CoMoO₄ Electrode: Effects of Surfactant Content and Synthesis Temperature. ChemPlusChem, 2016, 81, 964-977.	2.8	62
18	Electrochemical synthesis of polyaniline cross-linked NiMoO₄ nanofibre dendrites for energy storage devices. New Journal of Chemistry, 2016, 40, 7456-7464.	2.8	62

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19	Design, Development and Thermal Analysis of Reusable Li-Ion Battery Module for Future Mobile and Stationary Applications. Energies, 2020, 13, 1477.	3.1	60
20	The Anodic Behavior of Planar and Porous Zinc Electrodes in Alkaline Electrolyte. Electrochemical and Solid-State Letters, 2010, 13, A77.	2.2	58
21	Polyvinylpyrrolidone assisted solâ€“gel route LiCo1/3Mn1/3Ni1/3PO4 composite cathode for aqueous rechargeable battery. Electrochimica Acta, 2012, 60, 170-176.	5.2	54
22	Role of Additives in Electrochemical Deposition of Ternary Metal Oxide Microspheres for Supercapacitor Applications. ACS Omega, 2020, 5, 3405-3417.	3.5	54
23	From Load to Net Energy Forecasting: Short-Term Residential Forecasting for the Blend of Load and PV Behind the Meter. IEEE Access, 2020, 8, 224343-224353.	4.2	53
24	Synthesis, crystal structure and pseudocapacitor electrode properties of Î³-Bi2MoO6 nanoplates. Solid State Sciences, 2014, 35, 18-27.	3.2	52
25	Facile and large scale combustion synthesis of Î±-CoMoO4: Mimics the redox behavior of a battery in aqueous hybrid device. Chemical Engineering Journal, 2014, 253, 502-507.	12.7	52
26	Synthesis, and crystal and electronic structure of sodium metal phosphate for use as a hybrid capacitor in non-aqueous electrolyte. Dalton Transactions, 2015, 44, 20108-20120.	3.3	50
27	Influence of Synthesis Temperature on the Growth and Surface Morphology of Co3O4 Nanocubes for Supercapacitor Applications. Nanomaterials, 2017, 7, 356.	4.1	50
28	Synthesis and Characterization of Li(Co0.5Ni0.5)PO4 Cathode for Li-Ion Aqueous Battery Applications. Electrochemical and Solid-State Letters, 2011, 14, A86.	2.2	49
29	Role of structural defects in olivine cathodes. Progress in Solid State Chemistry, 2012, 40, 1-5.	7.2	49
30	Structural and Electrochemical Properties of Nanocomposite Polymer Electrolyte for Electrochemical Devices. Industrial & Engineering Chemistry Research, 2014, 53, 14993-15001.	3.7	49
31	Probing Environmental Remediation of RhB Organic Dye Using Î±-MnO₂under Visible- Light Irradiation: Structural, Photocatalytic and Mineralization Studies. ChemistrySelect, 2016, 1, 4277-4285.	1.5	49
32	Phase evolution in calcium molybdate nanoparticles as a function of synthesis temperature and its electrochemical effect on energy storage. Nanoscale Advances, 2019, 1, 565-580.	4.6	49
33	Lithium insertion into manganese dioxide electrode in MnO2/Zn aqueous battery. Journal of Power Sources, 2004, 138, 319-322.	7.8	48
34	Electrochemical Behavior of Olivine-Type LiMnPO[sub 4] in Aqueous Solutions. Electrochemical and Solid-State Letters, 2006, 9, A471.	2.2	48
35	Incorporation of TiB2 additive into MnO2 cathode and its influence on rechargeability in an aqueous battery system. Solid State Ionics, 2008, 179, 355-361.	2.7	48
36	The Znâ€“MnO[sub 2] Battery: The Influence of Aqueous LiOH and KOH Electrolytes on the Intercalation Mechanism. Electrochemical and Solid-State Letters, 2008, 11, A145.	2.2	48

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37	Correlation among physical and electrochemical behaviour of nanostructured electrolytic manganese dioxide from leach liquor and synthetic for aqueous asymmetric capacitor. Physical Chemistry Chemical Physics, 2016, 18, 4711-4720.	2.8	48
38	Electrochemical behavior of anatase TiO2 in aqueous lithium hydroxide electrolyte. Journal of Applied Electrochemistry, 2006, 36, 599-602.	2.9	47
39	Anodic behavior of zinc in Zn-MnO2 battery using ERDA technique. International Journal of Hydrogen Energy, 2010, 35, 7618-7622.	7.1	47
40	Effect of cathode binder on capacity retention and cycle life in transition metal phosphate of a rechargeable lithium battery. Electrochimica Acta, 2003, 48, 957-963.	5.2	46
41	Lithium Extractionâ^'Insertion from/into LiCoPO₄ in Aqueous Batteries. Industrial & Engineering Chemistry Research, 2011, 50, 1899-1905.	3.7	46
42	Hydrothermal synthesis of cubic Î±-Fe2O3 microparticles using glycine: Surface characterization, reaction mechanism and electrochemical activity. Journal of Alloys and Compounds, 2011, 509, 9821-9825.	5.5	46
43	Effect of the Anionic Counterpart: Molybdate vs. Tungstate in Energy Storage for Pseudo-Capacitor Applications. Nanomaterials, 2021, 11, 580.	4.1	46
44	Lithium intercalation into amorphous FePO4 cathode in aqueous solutions. Electrochimica Acta, 2010, 55, 9174-9178.	5.2	44
45	Electrochemical characterization of an aqueous lithium rechargeable battery: The effect of CeO2 additions to the MnO2 cathode. Journal of Alloys and Compounds, 2009, 479, 87-90.	5.5	43
46	Lithium insertion into manganese dioxide electrode in MnO2/Zn aqueous battery. Journal of Power Sources, 2006, 153, 165-169.	7.8	42
47	The influence of bismuth oxide doping on the rechargeability of aqueous cells using MnO2 cathode and LiOH electrolyte. Electrochimica Acta, 2008, 53, 6323-6327.	5.2	42
48	Characterization of alkaline-earth oxide additions to the MnO2 cathode in an aqueous secondary battery. Journal of Alloys and Compounds, 2011, 509, 5974-5980.	5.5	41
49	Bio-waste chicken eggshells to store energy. Dalton Transactions, 2018, 47, 16828-16834.	3.3	40
50	Hierarchical porous carbon from mango seed husk for electro-chemical energy storage. Chemical Engineering Journal Advances, 2021, 8, 100158.	5.2	38
51	Alginate Biopolymer Effect on the Electrodeposition of Manganese Dioxide on Electrodes for Supercapacitors. ACS Applied Energy Materials, 2021, 4, 7040-7051.	5.1	37
52	Examining manganese dioxide electrode in KOH electrolyte using TEM technique. Journal of Electroanalytical Chemistry, 2008, 616, 99-106.	3.8	35
53	Traditional salt-in-water electrolyte vs. water-in-salt electrolyte with binary metal oxide for symmetric supercapacitors: capacitive vs. faradaic. Dalton Transactions, 2020, 49, 11743-11755.	3.3	35
54	Perspectives on Nickel Hydroxide Electrodes Suitable for Rechargeable Batteries: Electrolytic vs. Chemical Synthesis Routes. Nanomaterials, 2020, 10, 1878.	4.1	34

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55	Reversible sodiation in maricite NaMn1/3Co1/3Ni1/3PO4 for renewable energy storage. Journal of Alloys and Compounds, 2013, 555, 10-15.	5.5	33
56	A study of lithium insertion into MnO2 containing TiS2 additive a battery material in aqueous LiOH solution. Electrochimica Acta, 2007, 52, 7007-7013.	5.2	32
57	Egg shell membrane template stabilises formation of Î²-NiMoO4 nanowires and enhances hybrid supercapacitor behaviour. Materials Letters, 2019, 236, 64-68.	2.6	32
58	Rescaling metal molybdate nanostructures with biopolymer for energy storage having high capacitance with robust cycle stability. Dalton Transactions, 2017, 46, 3588-3600.	3.3	31
59	Alkaline-Earth Oxide Modified MnO₂ Cathode: Enhanced Performance in an Aqueous Rechargeable Battery. Industrial & Engineering Chemistry Research, 2011, 50, 8792-8795.	3.7	30
60	Tuning the Nanoparticle Interfacial Properties and Stability of the Coreâ€“Shell Structure in Zn-Doped NiMoO₄@AWO₄. ACS Applied Materials & Interfaces, 2021, 13, 56116-56130.	8.0	30
61	Effect of TiS₂Additive on LiMnPO₄Cathode in Aqueous Solutions. Energy & Fuels, 2010, 24, 6193-6197.	5.1	28
62	Looking beyond lithium-ion technology â€“ Aqueous NaOH battery. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 1788-1792.	3.5	28
63	A Hybrid Electrochemical Energy Storage Device Using Sustainable Electrode Materials. ChemistrySelect, 2020, 5, 1597-1606.	1.5	27
64	A combined theoretical and experimental approach of a new ternary metal oxide in molybdate composite for hybrid energy storage capacitors. APL Materials, 2018, 6, .	5.1	26
65	PEO nanocomposite polymer electrolyte for solid state symmetric capacitors. Bulletin of Materials Science, 2015, 38, 1577-1588.	1.7	25
66	Role of polymeric surfactant in the synthesis of cobalt molybdate nanospheres for hybrid capacitor applications. RSC Advances, 2016, 6, 36152-36162.	3.6	25
67	Microstructural and spectroscopic investigations into the effect of CeO2 additions on the performance of a MnO2 aqueous rechargeable battery. Electrochimica Acta, 2009, 54, 3244-3249.	5.2	24
68	Lithium-free transition metal phosphate cathode for Li secondary batteries. Journal of Power Sources, 2003, 113, 179-183.	7.8	23
69	Utilizing active multiple dopants (Co and Ni) in olivine LiMnPO4. Current Opinion in Solid State and Materials Science, 2012, 16, 163-167.	11.5	23
70	Carbonate anion controlled growth of LiCoPO4/C nanorods and its improved electrochemical behavior. Electrochimica Acta, 2013, 101, 18-26.	5.2	23
71	Effect of oxidizer in the synthesis of NiO anchored nanostructure nickel molybdate for sodium-ion battery. Materials Today Energy, 2018, 10, 1-14.	4.7	23
72	Dual Effect of Anionic Surfactants in the Electrodeposited MnO₂Trafficking Redox Ions for Energy Storage. Journal of the Electrochemical Society, 2015, 162, A30-A38.	2.9	22

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73	Manganese Dioxide Cathode in the Presence of TiS[sub 2] as Additive on an Aqueous Lithium Secondary Cell. Journal of the Electrochemical Society, 2007, 154, A109.	2.9	21
74	Structural characteristics of olivine Li(Mg0.5Ni0.5)PO4 via TEM analysis. Ionics, 2012, 18, 583-590.	2.4	21
75	Electrodeposition of manganese dioxide: effect of quaternary amines. Journal of Solid State Electrochemistry, 2013, 17, 1349-1356.	2.5	21
76	Highly Energetic and Stable Gadolinium/Bismuth Molybdate with a Fast Reactive Species, Redox Mechanism of Aqueous Electrolyte. ACS Applied Energy Materials, 2020, 3, 12385-12399.	5.1	21
77	Repurposing N-Doped Grape Marc for the Fabrication of Supercapacitors with Theoretical and Machine Learning Models. Nanomaterials, 2022, 12, 1847.	4.1	20
78	Electrodeposition of Sea Urchin and Cauliflowerâ€like Nickelâ€/Cobaltâ€Doped Manganese Dioxide Hierarchical Nanostructures with Improved Energyâ€Storage Behavior. ChemElectroChem, 2016, 3, 976-985.	3.4	19
79	Dispersion of Ni²⁺ ions via acetate precursor in the preparation of NaNiPO₄ nanoparticles: effect of acetate vs. nitrate on the capacitive energy storage properties. Dalton Transactions, 2017, 46, 13704-13713.	3.3	19
80	Consequences of electrodeposition parameters on the microstructure and electrochemical behavior of electrolytic manganese dioxide (EMD) for supercapacitor. Ceramics International, 2022, 48, 19913-19924.	4.8	19
81	Electrochemical and X-ray photoelectron spectroscopy studies of carbon black as an additive in Li batteries. Journal of Power Sources, 2002, 112, 116-120.	7.8	18
82	Lithium intercalation cells LiMn2O4/LiTi2O4 without metallic lithium. Journal of Power Sources, 2003, 114, 298-302.	7.8	18
83	Modified electrolytic manganese dioxide (MEMD) for oxygen generation in alkaline medium. Journal of Solid State Electrochemistry, 2015, 19, 1133-1142.	2.5	18
84	Influence of the Oxide Content in the Catalytic Power of Raney Nickel in Hydrogen Generation. Analytical Letters, 2017, 50, 2386-2401.	1.8	18
85	Activationâ€Induced Surface Modulation of Biowasteâ€Derived Hierarchical Porous Carbon for Supercapacitors. ChemPlusChem, 2022, 87, .	2.8	18
86	TEM investigation of MnO2 cathode containing TiS2 and its influence in aqueous lithium secondary battery. Electrochimica Acta, 2007, 52, 3294-3298.	5.2	17
87	Electrochemical energy storage device for securing future renewable energy. Electrochimica Acta, 2013, 101, 66-70.	5.2	17
88	Lithium Insertion into NASICON Frameworks. Journal of the Electrochemical Society, 2003, 150, A1085.	2.9	16
89	Improved performance of Bi2O3-doped MnO2 cathode on rechargeability in LiOH aqueous cell. Journal of Solid State Electrochemistry, 2009, 13, 1209-1214.	2.5	16
90	Co/Mo bimetallic addition to electrolytic manganese dioxide for oxygen generation in acid medium. Scientific Reports, 2015, 5, 15208.	3.3	16

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91	Probing the electrochemical properties of biopolymer modified EMD nanoflakes through electrodeposition for high performance alkaline batteries. Dalton Transactions, 2016, 45, 5557-5567.	3.3	15
92	Electrochemical characteristics of B4C or BN added MnO2 cathode material for alkaline batteries. Materials Chemistry and Physics, 2010, 123, 700-705.	4.0	14
93	Pathway of Sucrose Oxidation in Manganese (Pyrolusite) Nodule. Industrial & Engineering Chemistry Research, 2015, 54, 12233-12241.	3.7	14
94	Synergistic effect of additives on electrochemical properties of MnO2 cathode in aqueous rechargeable batteries. Journal of Solid State Electrochemistry, 2012, 16, 1487-1492.	2.5	13
95	Oxalic Dihydrazide Assisted Novel Combustion Synthesized Li₃V₂(PO₄)₃and LiVP₂O₇Compounds for Rechargeable Lithium Batteries. ECS Transactions, 2013, 50, 79-88.	0.5	13
96	Facile synthesis of a nanoporous sea sponge architecture in a binary metal oxide. Nanoscale Advances, 2019, 1, 1880-1892.	4.6	13
97	Physico-chemical properties of CrMoN coatings - combined experimental and computational studies. Thin Solid Films, 2020, 693, 137671.	1.8	13
98	Tuning the morphology and redox behaviour by varying the concentration of Fe in a CoNiFe ternary oxide heterostructure for hybrid devices. New Journal of Chemistry, 2020, 44, 9921-9932.	2.8	13
99	Olivine-type cathode for rechargeable batteries: Role of chelating agents. Electrochimica Acta, 2012, 82, 302-308.	5.2	11
100	Synthetic strategies for better battery performance through advances in materials and chemistry: Olivine LiMn1/3Co1/3Ni1/3PO4. Journal of Alloys and Compounds, 2012, 544, 62-66.	5.5	10
101	Hydrogen Generation. Advanced Structured Materials, 2013, , 141-161.	0.5	10
102	Snâ€“MnO[sub 2] Aqueous Rechargeable Battery. Electrochemical and Solid-State Letters, 2010, 13, A125.	2.2	9
103	Influence of the microstructure and its stability on the electrochemical properties of EMD produced from a range of precursors. Journal of Solid State Electrochemistry, 2013, 17, 3191-3198.	2.5	9
104	Electrodeposition of Pluronic F127 assisted rod-like EMD/carbon arrays for efficient energy storage. Dalton Transactions, 2015, 44, 16446-16457.	3.3	9
105	Sustainable conversion of light to algal biomass and electricity: A net energy return analysis. Energy, 2017, 131, 218-229.	8.8	9
106	Surface analysis on discharged MnO₂ cathode using XPS and SIMS techniques. Surface and Interface Analysis, 2009, 41, 56-60.	1.8	8
107	Success and serendipity on achieving high energy density for rechargeable batteries. Journal of Solid State Electrochemistry, 2012, 16, 2227-2233.	2.5	8
108	The effect of B4C addition to MnO2 in a cathode material for battery applications. Electrochimica Acta, 2010, 55, 1028-1033.	5.2	7

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109	A Novel Sodium-Ion Rechargeable Battery. ECS Transactions, 2013, 45, 95-102.	0.5	7
110	Enhancement of thermal and mechanical stabilities of silicon doped titanium nitride coating by manipulation of sputtering conditions. Journal of Materials Research and Technology, 2022, 17, 1122-1131.	5.8	7
111	MnO2 cathode in an aqueous Li2SO4 solution for battery applications. Journal of Applied Electrochemistry, 2009, 39, 1-5.	2.9	6
112	Influence of solâ€“gel derived lithium cobalt phosphate in alkaline rechargeable battery. Journal of Sol-Gel Science and Technology, 2012, 64, 47-53.	2.4	5
113	High temperature (up to 1200ÂÂ°C) thermal-mechanical stability of Si and Ni doped CrN framework coatings. Journal of Materials Research and Technology, 2021, 14, 2406-2419.	5.8	5
114	Effect of Non-ionic Surfactants and Its Role in K Intercalation in Electrolytic Manganese Dioxide. Metallurgical and Materials Transactions E, 2014, 1, 226-238.	0.5	3
115	Ionic Mass Transfer at Point Electrodes Located at Cathode Support Plate in an Electrorefining Cell in Presence of Rectangular Turbulent Promoters. Sustainability, 2022, 14, 880.	3.2	3
116	LiNiPO4 Aqueous Rechargeable Battery. ECS Transactions, 2011, 35, 281-292.	0.5	2
117	New Insights into the Electrochemical Behavior of Hematite (Î±-Fe2O3) Microparticles in Strong Aqueous Basic Electrolyte: Formation of Metallic Iron. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2023-2029.	2.2	2
118	Adsorption removal of methylene blue from aqueous solution on carbon-coated Fe₃O₄ microspheres functionalized with chloroacetic acid. Science and Engineering of Composite Materials, 2018, 25, 353-361.	1.4	2
119	Behavior of Î³-MnO₂ Containing TiB₂ as a Cathode in Aqueous Lithium Hydroxide Electrolyte Battery. Key Engineering Materials, 2007, 350, 159-162.	0.4	1
120	Suitable Electrode Materials for Hybrid Capacitors. , 2021, , 1-30.		0
121	Biowaste eggshells as efficient electrodes for energy storage. , 2021, , 475-495.		0
122	ELECTROCHEMICAL LITHIUM INSERTION INTO A MANGANESE DIOXIDE ELECTRODE IN AQUEOUS SOLUTIONS. , 2006, , .		0
123	Nanocomposite Sodium Transition Metal Phosphate Prepared via Combustion Route for Hybrid Capacitor. , 2015, , 1325-1335.		0