

Manickam Minakshi

List of Publications by Year in descending order

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papers

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61984

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times ranked

4149
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	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
3	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
4	Activation-Induced Surface Modulation of Biowaste-Derived Hierarchical Porous Carbon for Supercapacitors. ChemPlusChem, 2022, 87, .	2.8	18
5	Repurposing N-Doped Grape Marc for the Fabrication of Supercapacitors with Theoretical and Machine Learning Models. Nanomaterials, 2022, 12, 1847.	4.1	20
6	Rational design on materials for developing next generation lithium-ion secondary battery. Progress in Solid State Chemistry, 2021, 62, 100298.	7.2	80
7	Suitable Electrode Materials for Hybrid Capacitors. , 2021, , 1-30.		0
8	Biowaste eggshells as efficient electrodes for energy storage. , 2021, , 475-495.		0
9	Effect of the Anionic Counterpart: Molybdate vs. Tungstate in Energy Storage for Pseudo-Capacitor Applications. Nanomaterials, 2021, 11, 580.	4.1	46
10	Alginate Biopolymer Effect on the Electrodeposition of Manganese Dioxide on Electrodes for Supercapacitors. ACS Applied Energy Materials, 2021, 4, 7040-7051.	5.1	37
11	High temperature (up to 1200°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
12	Hierarchical porous carbon from mango seed husk for electro-chemical energy storage. Chemical Engineering Journal Advances, 2021, 8, 100158.	5.2	38
13	Tuning the Nanoparticle Interfacial Properties and Stability of the Core-Shell Structure in Zn-Doped NiMoO ₄ @AWO ₄ . ACS Applied Materials & Interfaces, 2021, 13, 56116-56130.	8.0	30
14	Physico-chemical properties of CrMoN coatings - combined experimental and computational studies. Thin Solid Films, 2020, 693, 137671.	1.8	13
15	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
16	Perspectives on Nickel Hydroxide Electrodes Suitable for Rechargeable Batteries: Electrolytic vs. Chemical Synthesis Routes. Nanomaterials, 2020, 10, 1878.	4.1	34
17	Zn Metal Atom Doping on the Surface Plane of One-Dimensional NiMoO ₄ Nanorods with Improved Redox Chemistry. ACS Applied Materials & Interfaces, 2020, 12, 44815-44829.	8.0	67
18	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

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19	Tuning the morphology and redox behaviour by varying the concentration of Fe in a CoNiFe ternary oxide heterostructure for hybrid devices. <i>New Journal of Chemistry</i> , 2020, 44, 9921-9932.	2.8	13
20	Role of Additives in Electrochemical Deposition of Ternary Metal Oxide Microspheres for Supercapacitor Applications. <i>ACS Omega</i> , 2020, 5, 3405-3417.	3.5	54
21	A Hybrid Electrochemical Energy Storage Device Using Sustainable Electrode Materials. <i>ChemistrySelect</i> , 2020, 5, 1597-1606.	1.5	27
22	Design, Development and Thermal Analysis of Reusable Li-Ion Battery Module for Future Mobile and Stationary Applications. <i>Energies</i> , 2020, 13, 1477.	3.1	60
23	From Load to Net Energy Forecasting: Short-Term Residential Forecasting for the Blend of Load and PV Behind the Meter. <i>IEEE Access</i> , 2020, 8, 224343-224353.	4.2	53
24	Calcined chicken eggshell electrode for battery and supercapacitor applications. <i>RSC Advances</i> , 2019, 9, 26981-26995.	3.6	69
25	Phase evolution in calcium molybdate nanoparticles as a function of synthesis temperature and its electrochemical effect on energy storage. <i>Nanoscale Advances</i> , 2019, 1, 565-580.	4.6	49
26	Facile synthesis of a nanoporous sea sponge architecture in a binary metal oxide. <i>Nanoscale Advances</i> , 2019, 1, 1880-1892.	4.6	13
27	Egg shell membrane template stabilises formation of β -NiMoO ₄ nanowires and enhances hybrid supercapacitor behaviour. <i>Materials Letters</i> , 2019, 236, 64-68.	2.6	32
28	Adsorption removal of methylene blue from aqueous solution on carbon-coated Fe ₃ O ₄ microspheres functionalized with chloroacetic acid. <i>Science and Engineering of Composite Materials</i> , 2018, 25, 353-361.	1.4	2
29	A combined theoretical and experimental approach of a new ternary metal oxide in molybdate composite for hybrid energy storage capacitors. <i>APL Materials</i> , 2018, 6, .	5.1	26
30	Bio-waste chicken eggshells to store energy. <i>Dalton Transactions</i> , 2018, 47, 16828-16834.	3.3	40
31	Effect of oxidizer in the synthesis of NiO anchored nanostructure nickel molybdate for sodium-ion battery. <i>Materials Today Energy</i> , 2018, 10, 1-14.	4.7	23
32	New insights into the electrochemistry of magnesium molybdate hierarchical architectures for high performance sodium devices. <i>Nanoscale</i> , 2018, 10, 13277-13288.	5.6	74
33	Rescaling metal molybdate nanostructures with biopolymer for energy storage having high capacitance with robust cycle stability. <i>Dalton Transactions</i> , 2017, 46, 3588-3600.	3.3	31
34	Sustainable conversion of light to algal biomass and electricity: A net energy return analysis. <i>Energy</i> , 2017, 131, 218-229.	8.8	9
35	Effect of Transition Metal Cations on Stability Enhancement for Molybdate-Based Hybrid Supercapacitor. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 17977-17991.	8.0	82
36	Influence of the Oxide Content in the Catalytic Power of Raney Nickel in Hydrogen Generation. <i>Analytical Letters</i> , 2017, 50, 2386-2401.	1.8	18

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37	Dispersion of Ni ²⁺ ions via acetate precursor in the preparation of NaNiPO ₄ nanoparticles: effect of acetate vs. nitrate on the capacitive energy storage properties. Dalton Transactions, 2017, 46, 13704-13713.	3.3	19
38	Influence of Synthesis Temperature on the Growth and Surface Morphology of Co ₃ O ₄ Nanocubes for Supercapacitor Applications. Nanomaterials, 2017, 7, 356.	4.1	50
39	Synthesis, structural and electrochemical properties of sodium nickel phosphate for energy storage devices. Nanoscale, 2016, 8, 11291-11305.	5.6	80
40	Probing Environmental Remediation of RhB Organic Dye Using γ -MnO ₂ under Visible- Light Irradiation: Structural, Photocatalytic and Mineralization Studies. ChemistrySelect, 2016, 1, 4277-4285.	1.5	49
41	Tuning the Redox Properties of the Nanostructured CoMoO ₄ Electrode: Effects of Surfactant Content and Synthesis Temperature. ChemPlusChem, 2016, 81, 964-977.	2.8	62
42	Electrodeposition of Sea Urchin and Cauliflower-like Nickel-Cobalt-Doped Manganese Dioxide Hierarchical Nanostructures with Improved Energy Storage Behavior. ChemElectroChem, 2016, 3, 976-985.	3.4	19
43	Electrochemical synthesis of polyaniline cross-linked NiMoO ₄ nanofibre dendrites for energy storage devices. New Journal of Chemistry, 2016, 40, 7456-7464.	2.8	62
44	Role of polymeric surfactant in the synthesis of cobalt molybdate nanospheres for hybrid capacitor applications. RSC Advances, 2016, 6, 36152-36162.	3.6	25
45	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
46	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
47	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
48	Co/Mo bimetallic addition to electrolytic manganese dioxide for oxygen generation in acid medium. Scientific Reports, 2015, 5, 15208.	3.3	16
49	Pathway of Sucrose Oxidation in Manganese (Pyrolusite) Nodule. Industrial & Engineering Chemistry Research, 2015, 54, 12233-12241.	3.7	14
50	Modified electrolytic manganese dioxide (MEMD) for oxygen generation in alkaline medium. Journal of Solid State Electrochemistry, 2015, 19, 1133-1142.	2.5	18
51	Fabrication of ultrathin CoMoO ₄ nanosheets modified with chitosan and their improved performance in energy storage device. Dalton Transactions, 2015, 44, 6158-6168.	3.3	129
52	Electrolytic manganese dioxide (EMD): a perspective on worldwide production, reserves and its role in electrochemistry. RSC Advances, 2015, 5, 58255-58283.	3.6	115
53	Porous Flower-like γ -Fe ₂ O ₃ Nanostructure: A High Performance Anode Material for Lithium-ion Batteries. Electrochimica Acta, 2015, 167, 330-339.	5.2	86
54	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

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55	Electrodeposition of Pluronic F127 assisted rod-like EMD/carbon arrays for efficient energy storage. Dalton Transactions, 2015, 44, 16446-16457.	3.3	9
56	PEO nanocomposite polymer electrolyte for solid state symmetric capacitors. Bulletin of Materials Science, 2015, 38, 1577-1588.	1.7	25
57	Dual Effect of Anionic Surfactants in the Electrodeposited MnO ₂ Trafficking Redox Ions for Energy Storage. Journal of the Electrochemical Society, 2015, 162, A30-A38.	2.9	22
58	Nanocomposite Sodium Transition Metal Phosphate Prepared via Combustion Route for Hybrid Capacitor. , 2015, , 1325-1335.		0
59	New Insights into the Electrochemical Behavior of Hematite (̂±-Fe ₂ O ₃) 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
60	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
61	Structural and Electrochemical Properties of Nanocomposite Polymer Electrolyte for Electrochemical Devices. Industrial & Engineering Chemistry Research, 2014, 53, 14993-15001.	3.7	49
62	Synthesis, crystal structure and pseudocapacitor electrode properties of ̂ ³ -Bi ₂ MoO ₆ nanoplates. Solid State Sciences, 2014, 35, 18-27.	3.2	52
63	Facile and large scale combustion synthesis of ̂±-CoMoO ₄ : Mimics the redox behavior of a battery in aqueous hybrid device. Chemical Engineering Journal, 2014, 253, 502-507.	12.7	52
64	Synthesis and Characterization of Solid Polymer Electrolyte based on Activated Carbon for Solid State Capacitor. Electrochimica Acta, 2014, 137, 497-503.	5.2	81
65	Electrochemical energy storage device for securing future renewable energy. Electrochimica Acta, 2013, 101, 66-70.	5.2	17
66	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
67	Carbonate anion controlled growth of LiCoPO ₄ /C nanorods and its improved electrochemical behavior. Electrochimica Acta, 2013, 101, 18-26.	5.2	23
68	Oxalic Dihydrazide Assisted Novel Combustion Synthesized Li ₃ V ₂ (PO ₄) ₃ and LiVP ₂ O ₇ Compounds for Rechargeable Lithium Batteries. ECS Transactions, 2013, 50, 79-88.	0.5	13
69	Reversible sodiation in maricite NaMn _{1/3} Co _{1/3} Ni _{1/3} PO ₄ for renewable energy storage. Journal of Alloys and Compounds, 2013, 555, 10-15.	5.5	33
70	Nano ̂±-NiMoO ₄ as a new electrode for electrochemical supercapacitors. RSC Advances, 2013, 3, 352-357.	3.6	186
71	Maricite (NaMn _{1/3} Ni _{1/3} Co _{1/3} PO ₄)/Activated Carbon: Hybrid Capacitor. Energy & Fuels, 2013, 27, 3516-3522.	5.1	75
72	A Novel Sodium-Ion Rechargeable Battery. ECS Transactions, 2013, 45, 95-102.	0.5	7

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73	Electrodeposition of manganese dioxide: effect of quaternary amines. Journal of Solid State Electrochemistry, 2013, 17, 1349-1356.	2.5	21
74	Hydrogen Generation. Advanced Structured Materials, 2013, , 141-161.	0.5	10
75	Utilizing active multiple dopants (Co and Ni) in olivine LiMnPO ₄ . Current Opinion in Solid State and Materials Science, 2012, 16, 163-167.	11.5	23
76	Influence of sol-gel derived lithium cobalt phosphate in alkaline rechargeable battery. Journal of Sol-Gel Science and Technology, 2012, 64, 47-53.	2.4	5
77	Synthetic strategies for better battery performance through advances in materials and chemistry: Olivine LiMn _{1/3} Co _{1/3} Ni _{1/3} PO ₄ . Journal of Alloys and Compounds, 2012, 544, 62-66.	5.5	10
78	Role of structural defects in olivine cathodes. Progress in Solid State Chemistry, 2012, 40, 1-5.	7.2	49
79	Olivine-type cathode for rechargeable batteries: Role of chelating agents. Electrochimica Acta, 2012, 82, 302-308.	5.2	11
80	Looking beyond lithium-ion technology – Aqueous NaOH battery. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 1788-1792.	3.5	28
81	Structural characteristics of olivine Li(Mg _{0.5} Ni _{0.5})PO ₄ via TEM analysis. Ionics, 2012, 18, 583-590.	2.4	21
82	Synergistic effect of additives on electrochemical properties of MnO ₂ cathode in aqueous rechargeable batteries. Journal of Solid State Electrochemistry, 2012, 16, 1487-1492.	2.5	13
83	Success and serendipity on achieving high energy density for rechargeable batteries. Journal of Solid State Electrochemistry, 2012, 16, 2227-2233.	2.5	8
84	Polyvinylpyrrolidone assisted sol-gel route LiCo _{1/3} Mn _{1/3} Ni _{1/3} PO ₄ composite cathode for aqueous rechargeable battery. Electrochimica Acta, 2012, 60, 170-176.	5.2	54
85	Synthesis and Characterization of Li(Co _{0.5} Ni _{0.5})PO ₄ Cathode for Li-Ion Aqueous Battery Applications. Electrochemical and Solid-State Letters, 2011, 14, A86.	2.2	49
86	Alkaline-Earth Oxide Modified MnO ₂ Cathode: Enhanced Performance in an Aqueous Rechargeable Battery. Industrial & Engineering Chemistry Research, 2011, 50, 8792-8795.	3.7	30
87	Lithium Extraction/Insertion from/into LiCoPO ₄ in Aqueous Batteries. Industrial & Engineering Chemistry Research, 2011, 50, 1899-1905.	3.7	46
88	Characterization of alkaline-earth oxide additions to the MnO ₂ cathode in an aqueous secondary battery. Journal of Alloys and Compounds, 2011, 509, 5974-5980.	5.5	41
89	Hydrothermal synthesis of cubic γ -Fe ₂ O ₃ microparticles using glycine: Surface characterization, reaction mechanism and electrochemical activity. Journal of Alloys and Compounds, 2011, 509, 9821-9825.	5.5	46
90	Synthesis and characterization of olivine LiNiPO ₄ for aqueous rechargeable battery. Electrochimica Acta, 2011, 56, 4356-4360.	5.2	118

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91	LiNiPO ₄ Aqueous Rechargeable Battery. ECS Transactions, 2011, 35, 281-292.	0.5	2
92	Electrochemical characteristics of B ₄ C or BN added MnO ₂ cathode material for alkaline batteries. Materials Chemistry and Physics, 2010, 123, 700-705.	4.0	14
93	Anodic behavior of zinc in Zn-MnO ₂ battery using ERDA technique. International Journal of Hydrogen Energy, 2010, 35, 7618-7622.	7.1	47
94	The effect of B ₄ C addition to MnO ₂ in a cathode material for battery applications. Electrochimica Acta, 2010, 55, 1028-1033.	5.2	7
95	Lithium intercalation into amorphous FePO ₄ cathode in aqueous solutions. Electrochimica Acta, 2010, 55, 9174-9178.	5.2	44
96	The Anodic Behavior of Planar and Porous Zinc Electrodes in Alkaline Electrolyte. Electrochemical and Solid-State Letters, 2010, 13, A77.	2.2	58
97	Sn ²⁺ /MnO ₂ Aqueous Rechargeable Battery. Electrochemical and Solid-State Letters, 2010, 13, A125.	2.2	9
98	Effect of TiS ₂ Additive on LiMnPO ₄ Cathode in Aqueous Solutions. Energy & Fuels, 2010, 24, 6193-6197.	5.1	28
99	Improved performance of Bi ₂ O ₃ -doped MnO ₂ cathode on rechargeability in LiOH aqueous cell. Journal of Solid State Electrochemistry, 2009, 13, 1209-1214.	2.5	16
100	MnO ₂ cathode in an aqueous Li ₂ SO ₄ solution for battery applications. Journal of Applied Electrochemistry, 2009, 39, 1-5.	2.9	6
101	Surface analysis on discharged MnO ₂ cathode using XPS and SIMS techniques. Surface and Interface Analysis, 2009, 41, 56-60.	1.8	8
102	Microstructural and spectroscopic investigations into the effect of CeO ₂ additions on the performance of a MnO ₂ aqueous rechargeable battery. Electrochimica Acta, 2009, 54, 3244-3249.	5.2	24
103	Electrochemical characterization of an aqueous lithium rechargeable battery: The effect of CeO ₂ additions to the MnO ₂ cathode. Journal of Alloys and Compounds, 2009, 479, 87-90.	5.5	43
104	Examining manganese dioxide electrode in KOH electrolyte using TEM technique. Journal of Electroanalytical Chemistry, 2008, 616, 99-106.	3.8	35
105	The influence of bismuth oxide doping on the rechargeability of aqueous cells using MnO ₂ cathode and LiOH electrolyte. Electrochimica Acta, 2008, 53, 6323-6327.	5.2	42
106	Incorporation of TiB ₂ additive into MnO ₂ cathode and its influence on rechargeability in an aqueous battery system. Solid State Ionics, 2008, 179, 355-361.	2.7	48
107	The Zn ²⁺ /MnO 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
108	Behavior of ³ MnO ₂ Containing TiB ₂ as a Cathode in Aqueous Lithium Hydroxide Electrolyte Battery. Key Engineering Materials, 2007, 350, 159-162.	0.4	1

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109	Manganese Dioxide Cathode in the Presence of TiS ₂ as Additive on an Aqueous Lithium Secondary Cell. <i>Journal of the Electrochemical Society</i> , 2007, 154, A109.	2.9	21
110	TEM investigation of MnO ₂ cathode containing TiS ₂ and its influence in aqueous lithium secondary battery. <i>Electrochimica Acta</i> , 2007, 52, 3294-3298.	5.2	17
111	A study of lithium insertion into MnO ₂ containing TiS ₂ additive a battery material in aqueous LiOH solution. <i>Electrochimica Acta</i> , 2007, 52, 7007-7013.	5.2	32
112	Lithium insertion into manganese dioxide electrode in MnO ₂ /Zn aqueous battery. <i>Journal of Power Sources</i> , 2006, 153, 165-169.	7.8	42
113	Redox behavior and surface characterization of LiFePO ₄ in lithium hydroxide electrolyte. <i>Journal of Power Sources</i> , 2006, 158, 646-649.	7.8	79
114	Electrochemical behavior of anatase TiO ₂ in aqueous lithium hydroxide electrolyte. <i>Journal of Applied Electrochemistry</i> , 2006, 36, 599-602.	2.9	47
115	Electrochemical Behavior of Olivine-Type LiMnPO ₄ in Aqueous Solutions. <i>Electrochemical and Solid-State Letters</i> , 2006, 9, A471.	2.2	48
116	ELECTROCHEMICAL LITHIUM INSERTION INTO A MANGANESE DIOXIDE ELECTRODE IN AQUEOUS SOLUTIONS. , 2006, , .		0
117	Lithium insertion into manganese dioxide electrode in MnO ₂ /Zn aqueous battery. <i>Journal of Power Sources</i> , 2004, 130, 254-259.	7.8	110
118	Lithium insertion into manganese dioxide electrode in MnO ₂ /Zn aqueous battery. <i>Journal of Power Sources</i> , 2004, 138, 319-322.	7.8	48
119	Lithium-free transition metal phosphate cathode for Li secondary batteries. <i>Journal of Power Sources</i> , 2003, 113, 179-183.	7.8	23
120	Lithium intercalation cells LiMn ₂ O ₄ /LiTi ₂ O ₄ without metallic lithium. <i>Journal of Power Sources</i> , 2003, 114, 298-302.	7.8	18
121	Effect of cathode binder on capacity retention and cycle life in transition metal phosphate of a rechargeable lithium battery. <i>Electrochimica Acta</i> , 2003, 48, 957-963.	5.2	46
122	Lithium Insertion into NASICON Frameworks. <i>Journal of the Electrochemical Society</i> , 2003, 150, A1085.	2.9	16
123	Electrochemical and X-ray photoelectron spectroscopy studies of carbon black as an additive in Li batteries. <i>Journal of Power Sources</i> , 2002, 112, 116-120.	7.8	18