

Thandavarayan Maiyalagan

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.

216
papers

8,658
citations

43
h-index

89
g-index

233
ext. papers

10,461
ext. citations

5.5
avg, IF

6.94
L-index

#	Paper	IF	Citations
216	Novel Dispersion of 1D Nanofiber Fillers for Fast Ion-Conducting Nanocomposite Polymer Blend Quasi-Solid Electrolytes for Dye-Sensitized Solar Cells.. <i>ACS Omega</i> , 2022 , 7, 1658-1670	3.9	2
215	Synergistically enhanced electrocatalytic activity of cerium oxide/manganese tungstate composite for oxygen reduction reaction. <i>Journal of Materials Science: Materials in Electronics</i> , 2022 , 33, 9538	2.1	0
214	Reduced graphene oxide (RGO)-supported Pd/CeO ₂ nanocomposites as highly active electrocatalysts for facile formic acid oxidation. <i>New Journal of Chemistry</i> , 2022 , 46, 2478-2486	3.6	0
213	A quick guide to the assessment of key electrochemical performance indicators for the oxygen reduction reaction: A comprehensive review. <i>International Journal of Hydrogen Energy</i> , 2022 , 47, 7113-7138	6.7	3
212	Polypyrrole and polyaniline-based membranes for fuel cell devices: A review. <i>Surfaces and Interfaces</i> , 2022 , 29, 101738	4.1	2
211	Synthesis, Characterizations, and Electrochemical Performances of Highly Porous, Anhydrous CoNiCO for Pseudocapacitive Energy Storage Applications.. <i>ACS Omega</i> , 2022 , 7, 1975-1987	3.9	2
210	Ordered mesoporous Pt-Ru-Ir nanostructures as superior bifunctional electrocatalyst for oxygen reduction/oxygen evolution reactions. <i>Journal of Colloid and Interface Science</i> , 2022 , 608, 207-218	9.3	5
209	Band Edge Engineering of BiOX/CuFe ₂ O ₄ Heterostructures for Efficient Water Splitting. <i>ACS Applied Energy Materials</i> , 2022 , 5, 3821-3833	6.1	3
208	Fabrication of Ni/Mg/Ag alloy electrodeposited material on the aluminium surface using anodizing technique and their enhanced corrosion resistance for engineering application. <i>Materials Chemistry and Physics</i> , 2022 , 282, 125900	4.4	0
207	Enhanced Electrocatalytic Activity of Cobalt-Doped Ceria Embedded on Nitrogen, Sulfur-Doped Reduced Graphene Oxide as an Electrocatalyst for Oxygen Reduction Reaction. <i>Catalysts</i> , 2022 , 12, 6	4	2
206	A catalyst-free preparation of conjugated poly iron-phthalocyanine and its superior oxygen reduction reaction activity. <i>Chemical Engineering Journal</i> , 2022 , 445, 136784	14.7	3
205	Synthesis, Characterization, and Ionic Conductivity Studies of Simultaneously Substituted K- and Ga-Doped BaZrO. <i>ACS Omega</i> , 2021 , 6, 30327-30334	3.9	0
204	La K FeO: An Anion Intercalative Pseudocapacitive Electrode for Supercapacitor Application. <i>ACS Omega</i> , 2021 , 6, 30488-30498	3.9	2
203	N-Doped Carbon Nanotubes Derived from Graphene Oxide with Embedment of FeCo Nanoparticles as Bifunctional Air Electrode for Rechargeable Liquid and Flexible All-Solid-State Zinc-Air Batteries. <i>Advanced Science</i> , 2021 , 8, 2004572	13.6	48
202	Ultrasensitive detection of disinfection byproduct trichloroacetamide in drinking water with Ag nanoprism@MoS ₂ heterostructure-based electrochemical sensor. <i>Sensors and Actuators B: Chemical</i> , 2021 , 332, 129526	8.5	8
201	Atmospheric-Pressure Plasma Jet-Induced Ultrafast Construction of an Ultrathin Nonstoichiometric Nickel Oxide Layer with Mixed Ni ³⁺ /Ni ²⁺ Ions and Rich Oxygen Defects as an Efficient Electrocatalyst for Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2021 , 4, 5059-5069	6.1	9
200	Synthesis, characterization and electrocatalytic study of Pd supported on CeO ₂ /S-rGO composite towards hydrogen and oxygen evolution reaction. <i>Journal of Materials Science: Materials in Electronics</i> , 2021 , 32, 12241-12252	2.1	

199	Recent Trends in Bimetallic Oxides and Their Composites as Electrode Materials for Supercapacitor Applications. <i>ChemElectroChem</i> , 2021 , 8, 1723-1746	4.3	27
198	rGO-encapsulated Sn-doped V ₂ O ₅ nanorods for high-performance Supercapacitors. <i>Materials Today Communications</i> , 2021 , 27, 102357	2.5	4
197	A review on carbon and non-precious metal based cathode catalysts in microbial fuel cells. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 3056-3089	6.7	41
196	CoS ₂ /MoS ₂ decorated with nitrogen doped reduced graphene oxide and multiwalled carbon nanotube 3D hybrid as efficient electrocatalyst for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 13952-13959	6.7	14
195	In-situ development of metal organic frameworks assisted ZnMgAl layered triple hydroxide 2D/2D hybrid as an efficient photocatalyst for organic dye degradation. <i>Chemosphere</i> , 2021 , 270, 128616	8.4	15
194	Ternary AlMgAg alloy promoted palladium nanoparticles as potential catalyst for enhanced electro-oxidation of ethanol. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 4036-4044	6.7	4
193	Effect of various aqueous electrolytes on the electrochemical performance of MnO ₂ nanorods as electrode materials for supercapacitor application. <i>Electrochimica Acta</i> , 2021 , 366, 137412	6.7	23
192	ZnO nanoparticles decorated multiwall carbon nanotube assisted ZnMgAl layered triple hydroxide hybrid photocatalyst for visible light-driven organic pollutants removal. <i>Journal of Environmental Chemical Engineering</i> , 2021 , 9, 104909	6.8	8
191	Synergistic catalytic activity of palladium-silver alloy nanoparticle for anodic oxidation of ethanol in alkali. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 14212-14224	6.7	2
190	Numerical analysis on transport properties of self-humidifying dual catalyst layer via 3-D reconstruction technique. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 14639-14650	6.7	0
189	Spindle-shaped CeO ₂ /biochar carbon with oxygen-vacancy as an effective and highly durable electrocatalyst for oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 2128-2142	6.7	9
188	Effect of carbon material additives on hydrogen evolution at rechargeable alkaline iron battery electrodes. <i>Materials Science for Energy Technologies</i> , 2021 , 4, 236-241	5.2	0
187	An efficient Cu/functionalized graphene oxide catalyst for synthesis of 5-substituted 1H-tetrazoles. <i>Chemical Papers</i> , 2021 , 75, 2891-2899	1.9	2
186	Effect of support material on the electrocatalytic activity of palladium Nanoparticle toward hydrogen evolution reaction. <i>Materials Research Express</i> , 2021 , 8, 025501	1.7	3
185	Effect of various aqueous electrolytes on the electrochemical performance of V ₂ O ₅ spindle-like nanostructures as electrode material for supercapacitor application. <i>Journal of Materials Science: Materials in Electronics</i> , 2021 , 32, 6623-6635	2.1	2
184	Influence of aloe-vera gel mediated CuO coated LiNiPO ₄ cathode material in rechargeable battery applications. <i>Inorganic Chemistry Communication</i> , 2021 , 125, 108459	3.1	0
183	Enhanced electrochemical performance of cobalt doped MoS ₂ /N, S-rGO composite as Electrode Materials for Supercapacitor Application. <i>Materials Letters</i> , 2021 , 299, 130075	3.3	4
182	Activated carbon derived from bamboo-leaf with effect of various aqueous electrolytes as electrode material for supercapacitor applications. <i>Materials Letters</i> , 2021 , 301, 130335	3.3	5

181	Improved methanol electrooxidation catalyzed by ordered mesoporous Pt-Ru-Ir alloy nanostructures with trace Ir content. <i>Electrochimica Acta</i> , 2021 , 394, 139148	6.7	3
180	Molecular-MN4 vs atomically dispersed MN4 electrocatalysts for oxygen reduction reaction. <i>Coordination Chemistry Reviews</i> , 2021 , 446, 214122	23.2	35
179	Recent progress in Tungsten disulphide based Photocatalyst for Hydrogen Production and Environmental Remediation. <i>Chemical Engineering Journal</i> , 2021 , 424, 130393	14.7	3
178	Layered-like structure of TiO ₂ -Ti ₃ C ₂ Mxene as an efficient sulfur host for room-temperature sodium-sulfur batteries. <i>Journal of Alloys and Compounds</i> , 2021 , 883, 160910	5.7	2
177	Metal-organic framework (MOF-5) incorporated on NiCo ₂ O ₄ as electrode material for supercapacitor application. <i>Materials Letters</i> , 2021 , 302, 130338	3.3	8
176	Effect of various aqueous electrolytes on the electrochemical performance of porous NiO nanocrystals as electrode material for supercapacitor applications. <i>Materials Letters</i> , 2021 , 302, 130415	3.3	1
175	Solvothermal synthesis and characterizations of graphene-ZnBi ₁₂ O ₂₀ nanocomposites for visible-light driven photocatalytic applications. <i>Ceramics International</i> , 2020 , 46, 18534-18543	5.1	8
174	Corrosion and Alloy Engineering in Rational Design of High Current Density Electrodes for Efficient Water Splitting. <i>Advanced Energy Materials</i> , 2020 , 10, 1904020	21.8	56
173	r-GO supported g-C ₃ N ₄ /NiMgAl layered triple hydroxide hybrid as a Visible Light photocatalyst for organic dye removal. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020 , 602, 125078	5.1	5
172	Carbon dots and Bi ₄ O ₅ Br ₂ adhered on TiO ₂ nanoparticles: Impressively boosted photocatalytic efficiency for removal of pollutants under visible light. <i>Separation and Purification Technology</i> , 2020 , 250, 117179	8.3	25
171	MnO ₂ cacti-like nanostructured platform powers the enhanced electrochemical immunobiosensing of cortisol. <i>Sensors and Actuators B: Chemical</i> , 2020 , 317, 128134	8.5	7
170	Hydrogen evolution reaction catalyzed by microstructured SrMoO ₄ decorated on three-dimensional nanostructured rGO/f-MWCNT in acidic medium. <i>Ionics</i> , 2020 , 26, 5055-5064	2.7	3
169	MnO ₂ Nanoclusters Decorated on GrapheneModified Pencil Graphite Electrode for Non-Enzymatic Determination of Cholesterol. <i>Electroanalysis</i> , 2020 , 32, 2128-2136	3	7
168	Bimetallic PtCu-decorated reduced graphene oxide (RGO)-TiO ₂ nanocomposite for efficient oxygen reduction reaction. <i>Synthetic Metals</i> , 2020 , 266, 116433	3.6	12
167	TEMPO mediated electrocatalytic oxidation of pyridyl carbinol using palladium nanoparticles dispersed on biomass derived porous nanoparticles. <i>Electrochimica Acta</i> , 2020 , 354, 136624	6.7	15
166	High performance, 3D-hierarchical CoS ₂ /CoSe@C nanohybrid as an efficient electrocatalyst for hydrogen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2020 , 838, 155537	5.7	15
165	Influence of phosphorus on the electrocatalytic activity of palladium nickel nanoalloy supported on N-doped reduced graphene oxide for ethanol oxidation reaction. <i>Electrochimica Acta</i> , 2020 , 342, 136028	6.7	25
164	Effect of cobalt doping on the electrochemical performance of trimanganese tetraoxide. <i>Nanotechnology</i> , 2020 , 31, 285401	3.4	2

163	An efficient CoMoS ₂ nanosheets on nitrogen, sulfur dual doped reduced graphene oxide as an electrocatalyst for the hydrogen evolution reaction. <i>International Journal of Energy Research</i> , 2020 , 45, 17397	4.5	5
162	Insight into the effects of microstructure and nitrogen doping configuration for hollow graphene spheres on oxygen reduction reaction and sodium-ion storage performance. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 16569-16582	6.7	7
161	Water Splitting: Corrosion and Alloy Engineering in Rational Design of High Current Density Electrodes for Efficient Water Splitting (Adv. Energy Mater. 24/2020). <i>Advanced Energy Materials</i> , 2020 , 10, 2070107	21.8	1
160	Spinel oxide ZnCr ₂ O ₄ incorporated with ZnS quantum dots for application on visible light driven photocatalyst Azo dye degradation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020 , 590, 124505	5.1	19
159	Synergetic effect between MoS ₂ and N, S- doped reduced graphene oxide supported palladium nanoparticles for hydrogen evolution reaction. <i>Materials Chemistry and Physics</i> , 2020 , 251, 123106	4.4	15
158	Three-Dimensional Fibrous Iron as Anode Current Collector for Rechargeable Zinc-Air Batteries. <i>Energies</i> , 2020 , 13, 1429	3.1	5
157	Bio-inspired proton conducting phytigel derived zwitterionic complex membranes for fuel cells. <i>International Journal of Energy Research</i> , 2020 , 45, 17120	4.5	1
156	Hybrid lithium-ion capacitors based on novel 1-butyl-3-methylimidazolium bis(nonafluorobutanesulfonyl imide) (BMImBNFSI) ionic liquid electrolytes: a detailed investigation of electrochemical and cycling behaviors. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 5216-5227	5.5	6
155	Ionic Liquid-Based Electrolytes for Energy Storage Devices: A Brief Review on Their Limits and Applications. <i>Polymers</i> , 2020 , 12,	4.5	61
154	Fundamental Principles of Lithium Ion Batteries 2020 , 1-37		
153	Advanced High Voltage Cathode Materials for Rechargeable Lithium Ion Batteries 2020 , 171-203		
152	Hydrothermal synthesis and characterization studies of Fe ₂ O ₃ /MnO ₂ nanocomposites for energy storage supercapacitor application. <i>Ceramics International</i> , 2020 , 46, 6222-6233	5.1	29
151	Nickel-phosphate pompon flowers nanostructured network enables the sensitive detection of microRNA. <i>Talanta</i> , 2020 , 209, 120511	6.2	8
150	Na _{0.4} (Mn _{0.33} Co _{0.33} Ni _{0.33})O ₂ surface grafted with SnO nanorods: A cathode materials for rechargeable sodium ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2020 , 856, 113633	4.1	4
149	Tailoring the thickness of MoSe ₂ layer of the hierarchical double-shelled N-doped carbon@MoSe ₂ hollow nanoboxes for efficient and stable hydrogen evolution reaction. <i>Journal of Catalysis</i> , 2020 , 381, 363-373	7.3	35
148	Investigation on the electrochemical properties of hydrothermally synthesized pure and Nickel doped Zinc Sulfide microspheres for supercapacitor electrode applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2020 , 31, 19204-19212	2.1	4
147	Conversion of maize straw into nitrogen-doped porous graphitized carbon with ultra-high surface area as excellent oxygen reduction electrocatalyst for flexible zinc-air batteries. <i>Electrochimica Acta</i> , 2020 , 362, 137143	6.7	17
146	Unique Host Matrix to Disperse Pd Nanoparticles for Electrochemical Sensing of Morin: Sustainable Engineering Approach. <i>ACS Biomaterials Science and Engineering</i> , 2020 , 6, 5264-5273	5.5	14

145	Nanorods of Bi ₂ O ₃ for photocatalytic degradation of methylene blue. <i>Materials Today: Proceedings</i> , 2020 ,	1.4	1
144	Novel ternary g-C ₃ N ₄ nanosheet/Ag ₂ MoO ₄ /AgI photocatalysts: Impressive photocatalysts for removal of various contaminants. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020 , 403, 112871	4.7	15
143	Electrocatalytic Investigation of M@Pd (M=Ni, Co, Cu) Core-Shell Nanostructure Supported on N, S-Doped Reduced Graphene Oxide towards Hydrogen and Oxygen Evolution Reaction. <i>ChemistrySelect</i> , 2020 , 5, 9989-9998	1.8	4
142	Paper flower-derived porous carbons with high-capacitance by chemical and physical activation for sustainable applications. <i>Arabian Journal of Chemistry</i> , 2020 , 13, 2995-3007	5.9	19
141	Comparative analysis of various techniques to improve the performance of novel wheat germ oil □ an experimental study. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 5745-5756	6.7	7
140	Numerical and experimental investigation on 25 cm ² and 100 cm ² PEMFC with novel sinuous flow field for effective water removal and enhanced performance. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 7848-7862	6.7	24
139	Effect of cerium on electrochemical properties of V ₂ O ₅ nanoparticles synthesized via non-aqueous sol-gel technique. <i>Ionics</i> , 2020 , 26, 905-912	2.7	7
138	Glutathione capped inverted core-shell quantum dots as an efficient photocatalyst for degradation of organic dyes. <i>Materials Science in Semiconductor Processing</i> , 2020 , 106, 104760	4.3	8
137	Adoption of novel porous inserts in the flow channel of pem fuel cell for the mitigation of cathodic flooding. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 7863-7872	6.7	22
136	Activated charcoal and reduced graphene sheets composite structure for highly electro-catalytically active counter electrode material and water treatment. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 7751-7763	6.7	17
135	One-step hydrothermal synthesis of CaWO ₄ /Ag ₂ WO ₄ heterojunction: An efficient photocatalyst for removal of organic contaminants. <i>Materials Science in Semiconductor Processing</i> , 2019 , 104, 104693	4.3	20
134	Rational design of ZnFe ₂ O ₄ /g-C ₃ N ₄ nanocomposite for enhanced photo-Fenton reaction and supercapacitor performance. <i>Applied Surface Science</i> , 2019 , 498, 143807	6.7	62
133	Hydrothermal synthesis of three dimensional reduced graphene oxide-multiwalled carbon nanotube hybrids anchored with palladium-cerium oxide nanoparticles for alcohol oxidation reaction. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 4962-4973	6.7	18
132	Enhanced electrochemical performance of MnO ₂ /NiO nanocomposite for supercapacitor electrode with excellent cycling stability. <i>Journal of Materials Science: Materials in Electronics</i> , 2019 , 30, 5222-5232 ^{2.1}	2.1	25
131	Supercapacitive properties of manganese nitride thin film electrodes prepared by reactive magnetron sputtering: Effect of different electrolytes. <i>Ceramics International</i> , 2019 , 45, 17120-17127	5.1	14
130	Recent Progress in Ruthenium Oxide-Based Composites for Supercapacitor Applications. <i>ChemElectroChem</i> , 2019 , 6, 4343-4372	4.3	95
129	Novel sonochemical synthesis of FeO nanospheres decorated on highly active reduced graphene oxide nanosheets for sensitive detection of uric acid in biological samples. <i>Ultrasonics Sonochemistry</i> , 2019 , 58, 104618	8.9	34
128	Electrochemical Energy Storage Properties of Ni-Mn-Oxide Electrodes for Advance Asymmetric Supercapacitor Application. <i>Langmuir</i> , 2019 , 35, 8257-8267	4	26

127	A review on ZnO nanostructured materials: energy, environmental and biological applications. <i>Nanotechnology</i> , 2019 , 30, 392001	3.4	215
126	Robust bifunctional catalytic activities of N-doped carbon aerogel-nickel composites for electrocatalytic hydrogen evolution and hydrogenation of nitrocompounds. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 13334-13344	6.7	29
125	Camphor sulphonic acid doped novel polycarbazole-g-C ₃ N ₄ as an efficient electrode material for supercapacitor. <i>Journal of Materials Science: Materials in Electronics</i> , 2019 , 30, 8736-8750	2.1	11
124	FeCo Alloy Nanoparticles Coated by an Ultrathin N-Doped Carbon Layer and Encapsulated in Carbon Nanotubes as a Highly Efficient Bifunctional Air Electrode for Rechargeable Zn-Air Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 8530-8541	8.3	90
123	Enhanced Electro-catalytic Activity of Nitrogen-doped Reduced Graphene Oxide Supported PdCu Nanoparticles for Formic Acid Electro-oxidation. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 14808-14819	6.7	38
122	Dye-sensitized solar cell (DSSC) coated with energy down shift layer of nitrogen-doped carbon quantum dots (N-CQDs) for enhanced current density and stability. <i>Applied Surface Science</i> , 2019 , 483, 425-431	6.7	50
121	Functionalized Mesoporous Carbon Nanostructures for Efficient Removal of Eriochrome Black-T from Aqueous Solution. <i>Journal of Chemical & Engineering Data</i> , 2019 , 64, 1305-1321	2.8	19
120	Self-assembled nitrogen-doped graphene quantum dots (N-GQDs) over graphene sheets for superb electro-photocatalytic activity. <i>Applied Surface Science</i> , 2019 , 480, 1035-1046	6.7	30
119	Influence of chromium content on microstructural and electrochemical supercapacitive properties of vanadium nitride thin films developed by reactive magnetron co-sputtering process. <i>Ceramics International</i> , 2019 , 45, 12643-12653	5.1	17
118	Fabrication of MoS ₂ /WSe ₂ heterostructures as electrocatalyst for enhanced hydrogen evolution reaction. <i>Applied Surface Science</i> , 2019 , 480, 611-620	6.7	53
117	Cobalt Oxide Porous Nanocubes-Based Electrochemical Immunobiosensing of Hepatitis B Virus DNA in Blood Serum and Urine Samples. <i>Analytical Chemistry</i> , 2019 , 91, 5824-5833	7.8	27
116	Ternary nickel cobalt manganese spinel oxide nanoparticles as heterogeneous electrocatalysts for oxygen evolution and oxygen reduction reaction. <i>Materials Chemistry and Physics</i> , 2019 , 229, 190-196	4.4	17
115	Influence of the Nafion agglomerate morphology on the water-uptake behavior and fuel cell performance in the proton exchange membrane fuel cells. <i>Applied Surface Science</i> , 2019 , 481, 777-784	6.7	19
114	Highly sensitive enzyme-free amperometric sensing of hydrogen peroxide in real samples based on Co ₃ O ₄ nanocolumn structures. <i>Analytical Methods</i> , 2019 , 11, 2292-2302	3.2	13
113	Photodegradation Activity of Nitrogen-rich Graphitic Carbon Nitride Intercalated ZnOMg-Al Layered Double Hydroxide Ternary Nanocomposites on Methylene Blue Dye. <i>ChemistrySelect</i> , 2019 , 4, 2982-2990	1.8	20
112	Effect of hydroxyl (OH) group position in alcohol on performance, emission and combustion characteristics of SI engine. <i>Energy Conversion and Management</i> , 2019 , 189, 195-201	10.6	21
111	A novel particle-in-nanoplate architecture of iron nickel phosphide intertwined with carbon nanotubes for efficient water oxidation and high-performance sodium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2019 , 791, 1220-1230	5.7	15
110	Synergistic effect of hybrid Ce ³⁺ /Ce ⁴⁺ doped Bi ₂ O ₃ nano-sphere photocatalyst for enhanced photocatalytic degradation of alizarin red S dye and its NUV excited photoluminescence studies. <i>Journal of Environmental Chemical Engineering</i> , 2019 , 7, 103053	6.8	18

109	Rechargeable Zinc-Ion Battery Based on Choline Chloride-Urea Deep Eutectic Solvent. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A1063-A1069	3.9	48
108	Nanocomposites of Zr(IV)-Based Metal-Organic Frameworks and Reduced Graphene Oxide for Electrochemically Sensing Ciprofloxacin in Water. <i>ACS Applied Nano Materials</i> , 2019 , 2, 2367-2376	5.6	69
107	Microwave-assisted synthesis of gadolinium(III) oxide decorated reduced graphene oxide nanocomposite for detection of hydrogen peroxide in biological and clinical samples. <i>Journal of Electroanalytical Chemistry</i> , 2019 , 837, 167-174	4.1	13
106	Metal-organic framework derived NiMo polyhedron as an efficient hydrogen evolution reaction electrocatalyst. <i>Applied Surface Science</i> , 2019 , 478, 916-923	6.7	32
105	Highly interconnected porous TiO ₂ -Ni-MOF composite aerogel photoanodes for high power conversion efficiency in quasi-solid dye-sensitized solar cells. <i>Applied Surface Science</i> , 2019 , 496, 143646	6.7	33
104	Phosphorus Doped MoS ₂ Nanosheet Promoted with Nitrogen, Sulfur Dual Doped Reduced Graphene Oxide as an Effective Electrocatalyst for Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2019 , 2, 6184-6194	6.1	36
103	Electrochemically Sensing of Trichloroacetic Acid with Iron(II) Phthalocyanine and Zn-Based Metal Organic Framework Nanocomposites. <i>ACS Sensors</i> , 2019 , 4, 1934-1941	9.2	38
102	Superior supercapacitance behavior of oxygen self-doped carbon nanospheres: a conversion of Allium cepa peel to energy storage system. <i>Biomass Conversion and Biorefinery</i> , 2019 , 11, 1311	2.3	28
101	Shape- and size-tunable synthesis of tin sulfide thin films for energy applications by electrodeposition. <i>Applied Surface Science</i> , 2019 , 479, 167-176	6.7	14
100	Microwave-assisted synthesis of europium(III) oxide decorated reduced graphene oxide nanocomposite for detection of chloramphenicol in food samples. <i>Composites Part B: Engineering</i> , 2019 , 161, 29-36	10	35
99	Electrochemical analysis of Graphene Oxide/Polyaniline/Polyvinyl alcohol composite nanofibers for supercapacitor applications. <i>Applied Surface Science</i> , 2018 , 449, 551-557	6.7	61
98	Enhanced pseudocapacitance from finely ordered pristine MnO ₂ nanorods at favourably high current density using redox additive. <i>Applied Surface Science</i> , 2018 , 449, 492-499	6.7	30
97	Highly active graphene-supported palladium-nickel alloy nanoparticles for catalytic reduction of 4-nitrophenol. <i>Applied Surface Science</i> , 2018 , 449, 764-771	6.7	47
96	Photocatalytic degradation of 2,4-dichlorophenoxyacetic acid - A comparative study in hydrothermal TiO ₂ and commercial TiO ₂ . <i>Applied Surface Science</i> , 2018 , 449, 371-379	6.7	40
95	Physicochemical and electrochemical properties of Gd ³⁺ -doped ZnSe thin films fabricated by single-step electrochemical deposition process. <i>Journal of Solid State Electrochemistry</i> , 2018 , 22, 1197-1207	2.6	24
94	Influence of designed electrode surfaces on double layer capacitance in aqueous electrolyte: Insights from standard models. <i>Applied Surface Science</i> , 2018 , 449, 445-453	6.7	22
93	Synthesis, thermal and magnetic behavior of iron oxide-polymer nanocomposites. <i>Science and Engineering of Composite Materials</i> , 2018 , 25, 189-195	1.5	7
92	Precise control of morphology of ultrafine LiMn ₂ O ₄ nanorods as a supercapacitor electrode via a two-step hydrothermal method. <i>CrystEngComm</i> , 2018 , 20, 5707-5717	3.3	16

91	Recent advances in 2-D nanostructured metal nitrides, carbides, and phosphides electrodes for electrochemical supercapacitors [A brief review]. <i>Journal of Industrial and Engineering Chemistry</i> , 2018 , 67, 12-27	6.3	78
90	One-pot hydrothermal synthesis of CuCo ₂ S ₄ /RGO nanocomposites for visible-light photocatalytic applications. <i>Journal of Physics and Chemistry of Solids</i> , 2018 , 123, 242-253	3.9	22
89	Recent developments of metal oxide based heterostructures for photocatalytic applications towards environmental remediation. <i>Journal of Solid State Chemistry</i> , 2018 , 267, 35-52	3.3	120
88	Exploration of the Active Center Structure of Nitrogen-Doped Graphene for Control over the Growth of Co ₃ O ₄ for a High-Performance Supercapacitor. <i>ACS Applied Energy Materials</i> , 2018 , 1, 143-153	6.1	50
87	Electrochemical performances of LiNi _{1-x} MnxPO ₄ (x = 0.05-0.2) olivine cathode materials for high voltage rechargeable lithium ion batteries. <i>Applied Surface Science</i> , 2018 , 449, 435-444	6.7	21
86	Electrochemical Oxygen Reduction Activity of Metal Embedded Nitrogen Doped Carbon Nanostructures Derived from Pyrolysis of Nitrogen-Rich Guanidinium Salt. <i>Journal of the Electrochemical Society</i> , 2017 , 164, F781-F789	3.9	7
85	Recent Advances in Nanostructured Electrocatalysts for Low-temperature Direct Alcohol Fuel Cells 2017 , 347-371		4
84	Heteroatom-doped Nanostructured Carbon Materials as ORR Electrocatalysts for Low-temperature Fuel Cells 2017 , 401-421		2
83	Morphology and phase tuning of Fe and MnO ₂ nanocacti evolved at varying modes of acid count for their well-coordinated energy storage and visible-light-driven photocatalytic behaviour. <i>RSC Advances</i> , 2017 , 7, 25041-25053	3.7	37
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- 1 Recent advances in MXene as electrocatalysts for sustainable energy generation: A review on surface engineering and compositing of MXene. *International Journal of Energy Research*, 4.5 2