

Hyun-Seok Kim

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7720697/publications.pdf>

Version: 2024-02-01

178
papers

5,753
citations

70961

41
h-index

106150

65
g-index

180
all docs

180
docs citations

180
times ranked

5185
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on ZnO nanostructured materials: energy, environmental and biological applications. Nanotechnology, 2019, 30, 392001.	1.3	365
2	Recent Advances in Metal Chalcogenides (MX; X = S, Se) Nanostructures for Electrochemical Supercapacitor Applications: A Brief Review. Nanomaterials, 2018, 8, 256.	1.9	221
3	Recent developments of metal oxide based heterostructures for photocatalytic applications towards environmental remediation. Journal of Solid State Chemistry, 2018, 267, 35-52.	1.4	187
4	A facile mechanochemical preparation of Co ₃ O ₄ @g-C ₃ N ₄ for application in supercapacitors and degradation of pollutants in water. Journal of Hazardous Materials, 2021, 407, 124360.	6.5	163
5	Engineering the novel MoSe ₂ -Mo ₂ C hybrid nanoarray electrodes for energy storage and water splitting applications. Applied Catalysis B: Environmental, 2020, 264, 118531.	10.8	136
6	Recent progress on synthetic strategies and applications of transition metal phosphides in energy storage and conversion. Ceramics International, 2021, 47, 4404-4425.	2.3	131
7	Ionic Liquid-Based Electrolytes for Energy Storage Devices: A Brief Review on Their Limits and Applications. Polymers, 2020, 12, 918.	2.0	124
8	In vitro cytotoxicity activity of novel Schiff base ligand-lanthanide complexes. Scientific Reports, 2018, 8, 3054.	1.6	113
9	Recent advances in 2-D nanostructured metal nitrides, carbides, and phosphides electrodes for electrochemical supercapacitors – A brief review. Journal of Industrial and Engineering Chemistry, 2018, 67, 12-27.	2.9	111
10	Improved Hydrogen Evolution Reaction Performance using MoS ₂ -WS ₂ Heterostructures by Physicochemical Process. ACS Sustainable Chemistry and Engineering, 2018, 6, 8400-8409.	3.2	111
11	Nanostructured CuO/Co ₂ O ₄ @ nitrogen doped MWCNT hybrid composite electrode for high-performance supercapacitors. Composites Part B: Engineering, 2019, 166, 74-85.	5.9	92
12	One-pot facile methodology to synthesize MoS ₂ -graphene hybrid nanocomposites for supercapacitors with improved electrochemical capacitance. Composites Part B: Engineering, 2019, 161, 555-563.	5.9	85
13	Fabrication of MoS ₂ /WSe ₂ heterostructures as electrocatalyst for enhanced hydrogen evolution reaction. Applied Surface Science, 2019, 480, 611-620.	3.1	82
14	Hybrid Design Using Carbon Nanotubes Decorated with Mo ₂ C and W ₂ C Nanoparticles for Supercapacitors and Hydrogen Evolution Reactions. ACS Sustainable Chemistry and Engineering, 2020, 8, 12248-12259.	3.2	73
15	Hierarchical Flowerlike 3D nanostructure of Co ₃ O ₄ @MnO ₂ /N-doped Graphene oxide (NGO) hybrid composite for a high-performance supercapacitor. Scientific Reports, 2018, 8, 16543.	1.6	71
16	Engineering MoSe ₂ /WS ₂ Hybrids to Replace the Scarce Platinum Electrode for Hydrogen Evolution Reactions and Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 5061-5072.	4.0	69
17	Highly efficient solid-state synthesis of Co ₃ O ₄ on multiwalled carbon nanotubes for supercapacitors. Journal of Alloys and Compounds, 2021, 887, 161307.	2.8	67
18	Highly interconnected porous TiO ₂ -Ni-MOF composite aerogel photoanodes for high power conversion efficiency in quasi-solid dye-sensitized solar cells. Applied Surface Science, 2019, 496, 143646.	3.1	64

#	ARTICLE	IF	CITATIONS
19	Unveiling a binary metal selenide composite of CuSe polyhedrons/CoSe ₂ nanorods decorated graphene oxide as an active electrode material for high-performance hybrid supercapacitors. <i>Chemical Engineering Journal</i> , 2022, 427, 131535.	6.6	63
20	Facile Route to NiO Nanostructured Electrode Grown by Oblique Angle Deposition Technique for Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 17220-17225.	4.0	60
21	Facile preparation of molybdenum carbide (Mo ₂ C) nanoparticles and its effective utilization in electrochemical sensing of folic acid via imprinting. <i>Biosensors and Bioelectronics</i> , 2019, 140, 111330.	5.3	59
22	Fabrication strategies and surface tuning of hierarchical gold nanostructures for electrochemical detection and removal of toxic pollutants. <i>Journal of Hazardous Materials</i> , 2021, 420, 126648.	6.5	59
23	Design of Basal Plane Edges in Metal-Doped Nanostripes-Structured MoSe ₂ Atomic Layers To Enhance Hydrogen Evolution Reaction Activity. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 458-469.	3.2	58
24	Design of WSe ₂ /MoS ₂ Heterostructures as the Counter Electrode to Replace Pt for Dye-Sensitized Solar Cell. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13195-13205.	3.2	57
25	Nanosheet-like ZnCo ₂ O ₄ @nitrogen doped graphene oxide/polyaniline composite for supercapacitor application: Effect of polyaniline incorporation. <i>Journal of Alloys and Compounds</i> , 2020, 830, 154734.	2.8	57
26	Engineering the active sites tuned MoS ₂ nanoarray structures by transition metal doping for hydrogen evolution and supercapacitor applications. <i>Journal of Alloys and Compounds</i> , 2022, 893, 162271.	2.8	57
27	Metal-organic framework derived NiMo polyhedron as an efficient hydrogen evolution reaction electrocatalyst. <i>Applied Surface Science</i> , 2019, 478, 916-923.	3.1	55
28	Fabrication of manganese oxide@nitrogen doped graphene oxide/polypyrrole (MnO ₂ @NGO/PPy) hybrid composite electrodes for energy storage devices. <i>Journal of Materials Research and Technology</i> , 2019, 8, 4227-4238.	2.6	54
29	Microwave-assisted Facile and Ultrafast Growth of ZnO Nanostructures and Proposition of Alternative Microwave-assisted Methods to Address Growth Stoppage. <i>Scientific Reports</i> , 2016, 6, 24870.	1.6	52
30	CuS/WS ₂ and CuS/MoS ₂ heterostructures for high performance counter electrodes in dye-sensitized solar cells. <i>Solar Energy</i> , 2018, 171, 122-129.	2.9	50
31	Engineering MoTe ₂ and Janus SeMoTe nanosheet structures: First-principles roadmap and practical uses in hydrogen evolution reactions and symmetric supercapacitors. <i>Nano Energy</i> , 2021, 87, 106161.	8.2	50
32	MoS ₂ @X ₂ C (X=Mo or W) hybrids for enhanced supercapacitor and hydrogen evolution performances. <i>Chemical Engineering Journal</i> , 2021, 421, 127843.	6.6	49
33	Porous materials of nitrogen doped graphene oxide@SnO ₂ electrode for capable supercapacitor application. <i>Scientific Reports</i> , 2019, 9, 12622.	1.6	48
34	Ni(OH) ₂ -decorated nitrogen doped MWCNT nanosheets as an efficient electrode for high performance supercapacitors. <i>Scientific Reports</i> , 2019, 9, 6034.	1.6	48
35	A nanocrystalline structured NiO/MnO ₂ @nitrogen-doped graphene oxide hybrid nanocomposite for high performance supercapacitors. <i>New Journal of Chemistry</i> , 2017, 41, 15517-15527.	1.4	47
36	Facile and cost-effective methodology to fabricate MoS ₂ counter electrode for efficient dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2018, 151, 7-14.	2.0	47

#	ARTICLE	IF	CITATIONS
37	Sonochemically exfoliated polymer-carbon nanotube interface for high performance supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 1792-1799.	5.0	47
38	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.	3.8	45
39	One-Pot Facile Methodology to Synthesize Chitosan-ZnO-Graphene Oxide Hybrid Composites for Better Dye Adsorption and Antibacterial Activity. <i>Nanomaterials</i> , 2017, 7, 363.	1.9	44
40	Highly porous, hierarchical microglobules of Co ₃ O ₄ embedded N-doped carbon matrix for high performance asymmetric supercapacitors. <i>Applied Surface Science</i> , 2020, 529, 147147.	3.1	44
41	Schiff base rare earth metal complexes: Studies on functional, optical and thermal properties and assessment of antibacterial activity. <i>International Journal of Biological Macromolecules</i> , 2019, 124, 403-410.	3.6	43
42	Unveiling the Redox Electrochemistry of MOF-Derived NiCo@GC Polyhedron as an Advanced Electrode Material for Boosting Specific Energy of the Supercapattery. <i>Small</i> , 2022, 18, e2107284.	5.2	43
43	Mesoporous SnSe ₂ -grafted N-doped carbon composites with integrated flaky structure for electrochemical sensing of carbendazim. <i>Ceramics International</i> , 2022, 48, 16023-16032.	2.3	43
44	Hierarchical structured nano-polyhedrons of CeO ₂ @ZIF-8 composite for high performance supercapacitor applications. <i>Journal of Alloys and Compounds</i> , 2021, 875, 160074.	2.8	42
45	Evaluation of the physical, optical, and electrical properties of SnO ₂ : F thin films prepared by nebulized spray pyrolysis for optoelectronics. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 3648-3656.	1.1	41
46	Least Squares Neural Network-Based Wireless E-Nose System Using an SnO ₂ Sensor Array. <i>Sensors</i> , 2018, 18, 1446.	2.1	40
47	Controlled synthesis of SnO ₂ @NiCo ₂ O ₄ /nitrogen doped multiwalled carbon nanotube hybrids as an active electrode material for supercapacitors. <i>Journal of Alloys and Compounds</i> , 2019, 794, 186-194.	2.8	40
48	Facile method to synthesis hybrid phase 1T@2H MoSe ₂ nanostructures for rechargeable lithium ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2019, 833, 333-339.	1.9	39
49	One-Pot Synthesis of W ₂ C/WS ₂ Hybrid Nanostructures for Improved Hydrogen Evolution Reactions and Supercapacitors. <i>Nanomaterials</i> , 2020, 10, 1597.	1.9	39
50	Core shell nanostructured of Co ₃ O ₄ @RuO ₂ assembled on nitrogen-doped graphene sheets electrode for an efficient supercapacitor application. <i>Journal of Alloys and Compounds</i> , 2021, 877, 160297.	2.8	39
51	Cubic nanostructure of Co ₃ O ₄ @nitrogen doped graphene oxide/polyindole composite efficient electrodes for high performance energy storage applications. <i>Journal of Materials Research and Technology</i> , 2020, 9, 11464-11475.	2.6	38
52	Ultrasonically derived WSe ₂ nanostructure embedded MXene hybrid composites for supercapacitors and hydrogen evolution reactions. <i>Renewable Energy</i> , 2022, 185, 585-597.	4.3	38
53	Synthesis of Mo ₂ C and W ₂ C Nanoparticle Electrocatalysts for the Efficient Hydrogen Evolution Reaction in Alkali and Acid Electrolytes. <i>Frontiers in Chemistry</i> , 2019, 7, 716.	1.8	37
54	An enhanced electrochemical and cycling properties of novel boronic ionic liquid based ternary gel polymer electrolytes for rechargeable Li/LiCoO ₂ cells. <i>Scientific Reports</i> , 2017, 7, 11103.	1.6	36

#	ARTICLE	IF	CITATIONS
55	Electrodeposition of Unary Oxide on a Bimetallic Hydroxide as a Highly Active and Stable Catalyst for Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 16392-16400.	3.2	35
56	Sheet-like morphology CuCo ₂ O ₄ bimetallic nanoparticles adorned on graphene oxide composites for symmetrical energy storage applications. <i>Journal of Alloys and Compounds</i> , 2022, 892, 162182.	2.8	35
57	Hierarchical NiCo / NiO / NiCo ₂ O ₄ composite formation by solvothermal reaction as a potential electrode material for hydrogen evolutions and asymmetric supercapacitors. <i>International Journal of Energy Research</i> , 2021, 45, 19947-19961.	2.2	33
58	Fabrication of MoSe ₂ decorated three-dimensional graphene composites structure as a highly stable electrocatalyst for improved hydrogen evolution reaction. <i>Renewable Energy</i> , 2019, 143, 1659-1669.	4.3	32
59	Synthesis and characterization of ZnO nanoflakes anchored carbon nanoplates for antioxidant and anticancer activity in MCF7 cell lines. <i>Materials Science and Engineering C</i> , 2019, 102, 536-540.	3.8	32
60	Enhanced electrocatalytic properties in MoS ₂ /MoTe ₂ hybrid heterostructures for dye-sensitized solar cells. <i>Applied Surface Science</i> , 2020, 504, 144401.	3.1	32
61	Porous, 3D-hierarchical NiMoO ₄ rectangular nanosheets for selective conductometric ethanol gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2021, 347, 130615.	4.0	31
62	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.	2.8	30
63	ZIF-8 templated assembly of La ³⁺ -anchored ZnO distorted nano-hexagons as an efficient active photocatalyst for the detoxification of rhodamine B in water. <i>Environmental Pollution</i> , 2021, 272, 116018.	3.7	30
64	Enhanced removal of organic dye by activated carbon decorated TiO ₂ nanoparticles from Mentha Aquatica leaves via ultrasonic approach. <i>Ceramics International</i> , 2021, 47, 8732-8739.	2.3	30
65	Mixed-phase MoS ₂ decorated reduced graphene oxide hybrid composites for efficient symmetric supercapacitors. <i>International Journal of Energy Research</i> , 2021, 45, 9193-9209.	2.2	28
66	Fabrication of NiCo ₂ S ₄ accumulated on metal organic framework nanostructured with multiwalled carbon nanotubes composite material for supercapacitor application. <i>Ceramics International</i> , 2022, 48, 29102-29110.	2.3	28
67	Synthesis of MoS ₂ (1-x)Se _{2x} and WS ₂ (1-x)Se _{2x} alloys for enhanced hydrogen evolution reaction performance. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 2068-2074.	3.0	27
68	Development of a WS ₂ /MoTe ₂ heterostructure as a counter electrode for the improved performance in dye-sensitized solar cells. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 3178-3183.	3.0	27
69	Synthesis of novel Sn _{1-x} Zn _x O-chitosan nanocomposites: Structural, morphological and luminescence properties and investigation of antibacterial properties. <i>International Journal of Biological Macromolecules</i> , 2019, 138, 546-555.	3.6	27
70	Facile and cost-effective growth of MoS ₂ on 3D porous graphene-coated Ni foam for robust and stable hydrogen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2019, 788, 267-276.	2.8	27
71	Influence of selenium precursors on the formation of iron selenide nanostructures (FeSe ₂): Efficient Electro-Fenton catalysts for detoxification of harmful organic dyestuffs. <i>Chemosphere</i> , 2021, 272, 129639.	4.2	27
72	Hexagonal nanostructured cobalt oxide @ nitrogen doped multiwalled carbon nanotubes/polypyrrole composite for supercapacitor and electrochemical glucose sensor. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 205, 111840.	2.5	27

#	ARTICLE	IF	CITATIONS
73	Structural, optical, electrical and morphological properties of different concentration sol-gel ZnO seeds and consanguineous ZnO nanostructured growth dependence on seeds. <i>Journal of Alloys and Compounds</i> , 2017, 729, 571-582.	2.8	24
74	Effect of dimethyl carbonate (DMC) on the electrochemical and cycling properties of solid polymer electrolytes (PVP-MSA) and its application for proton batteries. <i>Solid State Ionics</i> , 2018, 321, 106-114.	1.3	24
75	Switchable p-n gas response for 3D-hierarchical NiFe ₂ O ₄ porous microspheres for highly selective and sensitive toluene gas sensors. <i>Journal of Alloys and Compounds</i> , 2021, 886, 161281.	2.8	24
76	Effect of bath concentration on the growth and photovoltaic response of SILAR-deposited CuO thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 120, 1105-1111.	1.1	23
77	Designing the MXene/molybdenum diselenide hybrid nanostructures for high-performance symmetric supercapacitor and hydrogen evolution applications. <i>International Journal of Energy Research</i> , 2021, 45, 18770-18785.	2.2	23
78	Photocatalytic degradation efficiency of ZnO, GO and PVA nanoadsorbents for crystal violet, methylene blue and trypan blue dyes. <i>Optik</i> , 2021, 238, 166671.	1.4	23
79	Synthesis and Antibacterial Properties of Novel ZnMn ₂ O ₄ @Chitosan Nanocomposites. <i>Nanomaterials</i> , 2019, 9, 1589.	1.9	22
80	Shape- and size-tunable synthesis of tin sulfide thin films for energy applications by electrodeposition. <i>Applied Surface Science</i> , 2019, 479, 167-176.	3.1	22
81	Theoretical evaluation and experimental investigation of layered 2H/1T-phase MoS ₂ and its reduced graphene-oxide hybrids for hydrogen evolution reactions. <i>Journal of Alloys and Compounds</i> , 2021, 868, 159272.	2.8	22
82	Visible light-driven photocatalytic rapid degradation of organic contaminants engaging manganese dioxide-incorporated iron oxide three dimensional nanoflowers. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 2347-2357.	5.0	22
83	Impact of Molybdenum Dichalcogenides on the Active and Hole-Transport Layers for Perovskite Solar Cells, X-Ray Detectors, and Photodetectors. <i>Small</i> , 2022, 18, e2104216.	5.2	22
84	Investigations on Fe doped SnS thin films by nebulizer spray pyrolysis technique for solar cell applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 8024-8034.	1.1	21
85	Biopolymer film fabrication for skin mimetic tissue regenerative wound dressing applications. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2022, 71, 196-207.	1.8	21
86	Spray pressure variation effect on the properties of CdS thin films for photodetector applications. <i>Ceramics International</i> , 2021, 47, 7608-7616.	2.3	21
87	Fabrication of Fe ₂ O ₃ nanostructure on CNT for oxygen evolution reaction. <i>Ceramics International</i> , 2022, 48, 29081-29086.	2.3	21
88	An investigation on SnS layers for solar cells fabrication with CdS, SnS ₂ and ZnO window layers prepared by nebulizer spray method. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	1.1	20
89	Facile Synthesis of Molybdenum Diselenide Layers for High-Performance Hydrogen Evolution Electrocatalysts. <i>ACS Omega</i> , 2018, 3, 5799-5807.	1.6	20
90	Operational Improvement of AlGaIn/GaN High Electron Mobility Transistor by an Inner Field-Plate Structure. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 974.	1.3	20

#	ARTICLE	IF	CITATIONS
91	MoS ₂ @Mo ₂ C hybrid nanostructures formation as an efficient anode material for lithium-ion batteries. <i>Journal of Materials Research and Technology</i> , 2021, 14, 2382-2393.	2.6	20
92	V ₂ O ₅ nano sheets assembled on nitrogen doped multiwalled carbon nanotubes/carboxy methyl cellulose composite for two-electrode configuration of supercapacitor applications. <i>Ceramics International</i> , 2022, 48, 29247-29256.	2.3	20
93	Supercapacitor performance of MnO ₂ /NiCo ₂ O ₄ @N-MWCNT hybrid nanocomposite electrodes. <i>Journal of Sol-Gel Science and Technology</i> , 2019, 91, 154-164.	1.1	19
94	Electrochemical and cycling performance of neodymium (Nd ³⁺) doped LiNiPO ₄ cathode materials for high voltage lithium-ion batteries. <i>Materials Letters</i> , 2019, 237, 224-227.	1.3	19
95	Microstructural and electrical properties evaluation of lead doped tin sulfide thin films. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 93, 52-61.	1.1	19
96	Characteristics of Mo ₂ C-CNTs hybrid blended hole transport layer in the perovskite solar cells and X-ray detectors. <i>Journal of Alloys and Compounds</i> , 2021, 885, 161039.	2.8	19
97	Microstructurally assembled transition metal oxides with cellulose nanocrystals for high-performance supercapacitors. <i>Journal of Energy Storage</i> , 2022, 50, 104712.	3.9	19
98	Construction of dye-sensitized solar cells using wet chemical route synthesized MoSe ₂ counter electrode. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 69, 379-386.	2.9	18
99	Evaluation of the Corrosion Resistance Properties of Electroplated Chitosan-Zn ^{1-x} Cu ^x O Composite Thin Films. <i>Nanomaterials</i> , 2017, 7, 432.	1.9	17
100	Analysis of Sn Concentration Effect on Morphological, Optical, Electrical and Photonic Properties of Spray-Coated Sn-Doped CdO Thin Films. <i>Coatings</i> , 2018, 8, 167.	1.2	17
101	Biopolymer phytagel-derived porous nanocarbon as efficient electrode material for high-performance symmetric solid-state supercapacitors. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 80, 258-264.	2.9	17
102	Facile preparation of tungsten carbide nanoparticles for an efficient oxalic acid sensor via imprinting. <i>Microchemical Journal</i> , 2020, 159, 105404.	2.3	17
103	Influence of morphological tuned nanostructure hybrid layers on efficient bulk heterojunction organic solar cell and X-ray detector performances. <i>Applied Surface Science</i> , 2021, 543, 148863.	3.1	17
104	Effect of ruthenium oxide on the capacitance and gas sensing performances of cobalt oxide @nitrogen-doped graphene oxide composites. <i>International Journal of Energy Research</i> , 2021, 45, 19547-19559.	2.2	17
105	Hierarchical Co ₃ O ₄ decorated nitrogen-doped graphene oxide nanosheets for energy storage and gas sensing applications. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 101, 253-261.	2.9	17
106	Praseodymium doped PbS thin films for optoelectronic applications prepared by nebulizer spray pyrolysis. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	1.1	16
107	Fabrication of nanostructured SnO ₂ @Co ₃ O ₄ /nitrogen doped graphene oxide composite for symmetric and asymmetric storage devices. <i>Journal of Materials Research and Technology</i> , 2020, 9, 4183-4193.	2.6	16
108	Thermal Analysis and Operational Characteristics of an AlGaIn/GaN High Electron Mobility Transistor with Copper-Filled Structures: A Simulation Study. <i>Micromachines</i> , 2020, 11, 53.	1.4	16

#	ARTICLE	IF	CITATIONS
109	Ternary Zn _{1-x} Ni _x Se nanostructures as efficient photocatalysts for detoxification of hazardous Congo red, methyl orange, and chrome yellow dyes in wastewater sources. <i>Environmental Research</i> , 2021, 201, 111587.	3.7	16
110	<sc> MnO₂</sc> / <sc> Co₃ O₄</sc> with N and S co-doped graphene oxide bimetallic nanocomposite for hybrid supercapacitor and photosensor applications. <i>International Journal of Energy Research</i> , 2022, 46, 4494-4505.	2.2	16
111	Nanostructurally engineered TiO ₂ embedded <i>Mentha aquatica</i> biowaste derived carbon for supercapacitor applications. <i>Chemosphere</i> , 2022, 289, 133197.	4.2	16
112	NH ₄ OH Treatment for an Optimum Morphological Trade-off to Hydrothermal Ga-Doped n-ZnO/p-Si Heterostructure Characteristics. <i>Materials</i> , 2018, 11, 37.	1.3	15
113	Self-Supportive Bimetallic Selenide Heteronanostructures as High-Efficiency Electro(pre)catalysts for Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 13114-13123.	3.2	15
114	Fabrication of InGaZnO-SnO ₂ /PCBM hybrid electron transfer layer for high-performance Perovskite solar cell and X-ray detector. <i>Journal of Alloys and Compounds</i> , 2022, 906, 164399.	2.8	15
115	Recent Advances in Nanostructured Transition Metal Carbide- and Nitride-Based Cathode Electrocatalysts for Li-O ₂ Batteries (LOBs): A Brief Review. <i>Nanomaterials</i> , 2020, 10, 2106.	1.9	14
116	Metal organic framework-derived Ni ₄ Mo/MoO ₂ @C composite nanospheres as the sensing materials for hydrogen sulfide detection. <i>Journal of Alloys and Compounds</i> , 2022, 900, 163421.	2.8	14
117	Electrospun nanofibrous ZnO/PVA/PVP composite films for efficient antimicrobial face masks. <i>Ceramics International</i> , 2022, 48, 29197-29204.	2.3	14
118	Growth Method-Dependent and Defect Density-Oriented Structural, Optical, Conductive, and Physical Properties of Solution-Grown ZnO Nanostructures. <i>Nanomaterials</i> , 2017, 7, 266.	1.9	13
119	Photosensing effect of indium-doped ZnO thin films and its heterostructure with silicon. <i>Journal of Asian Ceramic Societies</i> , 2022, 10, 108-119.	1.0	13
120	Development of <sc>MXene</sc> / <sc> WO₃</sc> embedded <sc>PEDOT</sc> : <sc>PSS</sc> hole transport layers for highly efficient perovskite solar cells and X-ray detectors. <i>International Journal of Energy Research</i> , 2022, 46, 12485-12497.	2.2	13
121	Thermal Analysis of AlGaIn/GaN High-Electron-Mobility Transistor and Its RF Power Efficiency Optimization with Source-Bridged Field-Plate Structure. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 5860-5867.	0.9	12
122	Single-Step Direct Hydrothermal Growth of NiMoO ₄ Nanostructured Thin Film on Stainless Steel for Supercapacitor Electrodes. <i>Nanomaterials</i> , 2018, 8, 563.	1.9	12
123	Fabrication of Robust Hydrogen Evolution Reaction Electrocatalyst Using Ag ₂ Se by Vacuum Evaporation. <i>Nanomaterials</i> , 2019, 9, 1460.	1.9	12
124	Eutectoid WxC embedded WS ₂ nanosheets as a hybrid composite anode for lithium-ion batteries. <i>Ceramics International</i> , 2021, 47, 18646-18655.	2.3	12
125	Facile Synthesis of Triphenylamine Based Hyperbranched Polymer for Organic Field Effect Transistors. <i>Nanomaterials</i> , 2019, 9, 1787.	1.9	11
126	Experimental and theoretical insights to demonstrate the hydrogen evolution activity of layered platinum dichalcogenides electrocatalysts. <i>Journal of Materials Research and Technology</i> , 2021, 12, 385-398.	2.6	11

#	ARTICLE	IF	CITATIONS
127	Fabrication and Characterization of ZnO Nanorods on Multiple Substrates. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 8375-8380.	0.9	10
128	Synthesis of ZnO nanorods using different precursor solutions and their two terminal device characterization. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 5724-5734.	1.1	10
129	Transition Between ZnO Nanorods and ZnO Nanotubes with Their Antithetical Properties. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 10772-10776.	0.9	10
130	A Rapid One-Pot Synthesis of Novel High-Purity Methacrylic Phosphonic Acid (PA)-Based Polyhedral Oligomeric Silsesquioxane (POSS) Frameworks via Thiol-Ene Click Reaction. <i>Polymers</i> , 2017, 9, 192.	2.0	10
131	Transient Current Response for ZnO Nanorod-Based Doubly Transparent UV Sensor Fabricated on Flexible Substrate. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018, 12, 1800001.	1.2	10
132	Physical properties evaluation of nebulized spray pyrolysis prepared Nd doped ZnO thin films for opto-electronic applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 7257-7267.	1.1	10
133	Organic nanocomposite Band-Aid for chronic wound healing: a novel honey-based nanofibrous scaffold. <i>Applied Nanoscience (Switzerland)</i> , 2020, 10, 1639-1652.	1.6	10
134	Nanostructured transition metal sulfide/selenide anodes for high-performance sodium-ion batteries. , 2020, , 437-464.		10
135	MoO ₃ @MoS ₂ Core-Shell Structured Hybrid Anode Materials for Lithium-Ion Batteries. <i>Nanomaterials</i> , 2022, 12, 2008.	1.9	10
136	Ball-milling route to design hierarchical nanohybrid cobalt oxide structures with cellulose nanocrystals interface for supercapacitors. <i>International Journal of Energy Research</i> , 2022, 46, 8398-8412.	2.2	9
137	High-Power Microwave-Assisted Ga Doping, an Effective Method to Tailor n-ZnO/p-Si Heterostructure Optoelectronic Characteristics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700763.	0.8	7
138	NH ₄ OH-Oriented and pH-Dependent Growth of ZnO Nanostructures via Microwave-Assisted Growth Method. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 2125-2127.	0.9	7
139	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.	2.6	7
140	Structural and Mechanical Characterization of Platinum Thin Films Prepared Electrochemically on ITO/Glass Substrate. <i>Metals and Materials International</i> , 2021, 27, 1554-1564.	1.8	7
141	Ultrasonically decorated zinc cobaltate on nanocellulose interface for supercapacitors. <i>Surfaces and Interfaces</i> , 2022, 30, 101915.	1.5	7
142	Fabrication of High-Performance Solar Cells and X-ray Detectors Using MoX ₂ @CNT Nanocomposite-Tuned Perovskite Layers. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 33626-33640.	4.0	7
143	Al ₂ O ₃ -incorporated proton-conducting solid polymer electrolytes for electrochemical devices: a proficient method to achieve high electrochemical performance. <i>Ionics</i> , 2019, 25, 5117-5129.	1.2	6
144	Fabrication and characterization of CuO/CdS heterostructure for optoelectronic applications. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 96, 178-187.	1.1	6

#	ARTICLE	IF	CITATIONS
145	Physical and electrical propertiesâ€™ evaluation of SnS:Cu thin films. <i>Surface Engineering</i> , 2021, 37, 137-147.	1.1	6
146	Hierarchical Mo ₂ C@CNT Hybrid Structure Formation for the Improved Lithium-Ion Battery Storage Performance. <i>Nanomaterials</i> , 2021, 11, 2195.	1.9	6
147	Effects of a recessed camel-gate head structure on normally-off AlGa _N /Ga _N HEMTs. <i>Journal of the Korean Physical Society</i> , 2013, 62, 787-793.	0.3	5
148	Maskless patterned growth of ZnO nanorod arrays using tip based electrolithography. <i>Materials Science in Semiconductor Processing</i> , 2018, 77, 24-30.	1.9	5
149	Growth Condition-Oriented Defect Engineering for Changes in Auâ€™ZnO Contact Behavior from Schottky to Ohmic and Vice Versa. <i>Nanomaterials</i> , 2018, 8, 980.	1.9	5
150	High-Speed Growth of ZnO Nanorods in Preheating Condition Using Microwave-Assisted Growth Method. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 2041-2044.	0.9	5
151	DC Characteristics of AlGa _N /Ga _N High-Electron Mobility Transistor with a Bottom Plate Connected to Source-Bridged Field Plate Structure. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 2319-2322.	0.9	5
152	Proton transport and dielectric properties of high molecular weight polyvinylpyrrolidone (PVPK90) based solid polymer electrolytes for portable electrochemical devices. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 11735-11747.	1.1	5
153	Operational Characteristics of Various AlGa _N /Ga _N High Electron Mobility Transistor Structures Concerning Self-Heating Effect. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 6016-6022.	0.9	5
154	A one-pot chemical route to prepare poly 4, 4â€™-diaminodiphenyl sulfone-zirconium dioxide/cerium dioxide hybrid nanocomposites for improved capacitance properties. <i>Materials Letters</i> , 2019, 249, 5-8.	1.3	5
155	Benzo[1, 2-b: 4, 5-b']dithiophene-based copolymers as panchromatic light sensors in organic photodiodes application. <i>Journal of Materials Research and Technology</i> , 2020, 9, 15632-15637.	2.6	5
156	Bifunctional iron molybdate as highly effective heterogeneous electro-Fenton catalyst and Li-ion battery anode. <i>Chemosphere</i> , 2022, 286, 131846.	4.2	5
157	Fullerene-free, MoTe ₂ atomic layer blended bulk heterojunctions for improved organic solar cell and photodetector performance. <i>Journal of Materials Research and Technology</i> , 2022, 17, 2875-2887.	2.6	5
158	High speed switching in quantum Dot/Ti-TiO _x nonvolatile memory device. <i>Electronic Materials Letters</i> , 2016, 12, 323-327.	1.0	4
159	Electric Field Induced Pattern Formation on PMMA and ITO Layers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700811.	0.8	4
160	Investigation on nebulizer spray deposited Gd-doped PbS thin films for photo sensing applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 18858-18865.	1.1	4
161	Combustible Gas Classification Modeling using Support Vector Machine and Pairing Plot Scheme. <i>Sensors</i> , 2019, 19, 5018.	2.1	4
162	Decoration of X ₂ C nanoparticles on CdS nanostructures for highly efficient photocatalytic wastewater treatment under visible light. <i>Applied Surface Science</i> , 2022, 583, 152533.	3.1	4

#	ARTICLE	IF	CITATIONS
163	Ultra-high supercapacitance in cobalt oxide nanorod film grown by oblique angle deposition technique. <i>Current Applied Physics</i> , 2018, 18, 1399-1402.	1.1	3
164	Highly porous, hierarchical peanut-like Eucalyptus binary metal oxide nanostructures for the high-efficiency detoxification of organic dyes from wastewater. <i>Ceramics International</i> , 2022, 48, 1057-1067.	2.3	3
165	Potential core-shell anode material for rechargeable lithium-ion batteries: Encapsulation of titanium oxide nanostructure in conductive polymer. <i>Journal of Alloys and Compounds</i> , 2021, 882, 160715.	2.8	3
166	Improvement in Strain Sensor Stability by Adapting the Metal Contact Layer. <i>Sensors</i> , 2022, 22, 630.	2.1	3
167	Water mediated electrochemical conversion of PMMA and other organic residues into graphene and carbon materials. <i>Ceramics International</i> , 2022, 48, 28906-28917.	2.3	3
168	Optoelectronic and DFT investigation of thienylenevinylene based materials for thin film transistors. <i>Journal of Molecular Liquids</i> , 2022, 360, 119462.	2.3	3
169	Direct Observation of Thermally Generated Electron-Hole Pairs in ZnO Nanorods With Surface Acoustic Wave. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 4141-4144.	0.9	2
170	Breakdown Voltage Enhancement in AlGaIn/GaN High-Electron Mobility Transistor by Optimizing Gate Field-Plate Structure. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 2298-2301.	0.9	2
171	Highly Active Mo ₂ C@WS ₂ Hybrid Electrode for Enhanced Hydrogen Evolution Reaction. <i>Catalysts</i> , 2021, 11, 1060.	1.6	2
172	Dilute Polymerization of Aniline on PDMS Substrate via Surface Modification Using (3-Aminopropyl)Triethoxysilane for Stretchable Strain Sensor. <i>Sensors</i> , 2022, 22, 2741.	2.1	2
173	Nuclear-induced dephasing and signatures of hyperfine effects in isotopically purified C^{13} graphene. <i>Physical Review B</i> , 2022, 105, .	1.1	2
174	Characteristics of GaAs varactor diode with hyperabrupt doping profile. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 612-616.	0.8	1
175	CdSe quantum dot/AlO _x based non-volatile resistive memory. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 3488-3492.	1.1	1
176	Bio-inspired proton conducting phytigel derived zwitterionic complex membranes for fuel cells. <i>International Journal of Energy Research</i> , 2020, 45, 17120.	2.2	1
177	Effects of Seed Layer Coating and Oxygen Plasma Treatment on the Growth of ZnO Nanorods for UV Photodetector Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2020, 20, 4340-4343.	0.9	1
178	Van der Waals Heteroepitaxy of Te Crystallites/2H-MoTe ₂ Atomically Thin Films on GaAs Substrates by Using Metal-Organic Chemical-Vapor Deposition. <i>Journal of the Korean Physical Society</i> , 2020, 76, 167-170.	0.3	0