

# Balamurugan Jayaraman

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8858988/publications.pdf>

Version: 2024-02-01

140  
papers

10,016  
citations

15495

65  
h-index

40954

93  
g-index

140  
all docs

140  
docs citations

140  
times ranked

9185  
citing authors

#	ARTICLE	IF	CITATIONS
1	OD to 3D carbon-based networks combined with pseudocapacitive electrode material for high energy density supercapacitor: A review. <i>Chemical Engineering Journal</i> , 2021, 403, 126352.	6.6	755
2	Hierarchical Ni <sub>2</sub> MoS <sub>4</sub> and Ni <sub>2</sub> FeS <sub>4</sub> Nanosheets with Ultrahigh Energy Density for Flexible All Solid-State Supercapacitors. <i>Advanced Functional Materials</i> , 2018, 28, 1803287.	7.8	223
3	Flexible Solid-State Asymmetric Supercapacitors Based on Nitrogen-Doped Graphene Encapsulated Ternary Metal-Nitrides with Ultralong Cycle Life. <i>Advanced Functional Materials</i> , 2018, 28, 1804663.	7.8	212
4	Hierarchical Zn-Co-S Nanowires as Advanced Electrodes for All Solid State Asymmetric Supercapacitors. <i>Advanced Energy Materials</i> , 2018, 8, 1702014.	10.2	199
5	Nitrogen-doped graphene encapsulated FeCoMoS nanoparticles as advanced trifunctional catalyst for water splitting devices and zinc-air batteries. <i>Applied Catalysis B: Environmental</i> , 2020, 279, 119381.	10.8	177
6	Ternary graphene-carbon nanofibers-carbon nanotubes structure for hybrid supercapacitor. <i>Chemical Engineering Journal</i> , 2020, 380, 122543.	6.6	157
7	Effective seed-assisted synthesis of gold nanoparticles anchored nitrogen-doped graphene for electrochemical detection of glucose and dopamine. <i>Biosensors and Bioelectronics</i> , 2016, 81, 259-267.	5.3	152
8	All ternary metal selenide nanostructures for high energy flexible charge storage devices. <i>Nano Energy</i> , 2019, 65, 103999.	8.2	152
9	Sustainable Synthesis of Co@NC Core Shell Nanostructures from Metal Organic Frameworks via Mechanochemical Coordination Self-Assembly: An Efficient Electrocatalyst for Oxygen Reduction Reaction. <i>Small</i> , 2018, 14, e1800441.	5.2	150
10	Facile fabrication of Co <sub>2</sub> Cu <sub>4</sub> nanoparticle anchored N-doped graphene for high-performance asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17560-17571.	5.2	147
11	Boosting the Energy Density of Flexible Solid-State Supercapacitors via Both Ternary Ni <sub>2</sub> Se <sub>4</sub> and NiFe <sub>2</sub> Se <sub>4</sub> Nanosheet Arrays. <i>Chemistry of Materials</i> , 2019, 31, 4490-4504.	3.2	138
12	Zinc-nickel-cobalt oxide@NiMoO <sub>4</sub> core-shell nanowire/nanosheet arrays for solid state asymmetric supercapacitors. <i>Chemical Engineering Journal</i> , 2020, 384, 123357.	6.6	133
13	Recent advances in two-dimensional transition metal dichalcogenides-graphene heterostructured materials for electrochemical applications. <i>Progress in Materials Science</i> , 2018, 96, 51-85.	16.0	132
14	Carbon dot stabilized copper sulphide nanoparticles decorated graphene oxide hydrogel for high performance asymmetric supercapacitor. <i>Carbon</i> , 2017, 122, 247-257.	5.4	130
15	Fabrication of nitrogen and sulfur co-doped graphene nanoribbons with porous architecture for high-performance supercapacitors. <i>Chemical Engineering Journal</i> , 2017, 312, 180-190.	6.6	130
16	Kirkendall Growth and Ostwald Ripening Induced Hierarchical Morphology of Ni-Co LDH/MMoS <sub>x</sub> (M = Co, Ni, and Zn) Heteronanostructures as Advanced Electrode Materials for Asymmetric Solid-State Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 11555-11567.	4.0	129
17	Metal-organic framework derived hierarchical copper cobalt sulfide nanosheet arrays for high-performance solid-state asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 8620-8632.	5.2	129
18	Facile synthesis of 3D hierarchical N-doped graphene nanosheet/cobalt encapsulated carbon nanotubes for high energy density asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9555-9565.	5.2	119

#	ARTICLE	IF	CITATIONS
19	Facile synthesis of vanadium nitride/nitrogen-doped graphene composite as stable high performance anode materials for supercapacitors. <i>Journal of Power Sources</i> , 2016, 308, 149-157.	4.0	117
20	Hierarchical design of Cu <sub>1-x</sub> Ni <sub>x</sub> S nanosheets for high-performance asymmetric solid-state supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 19760-19772.	5.2	116
21	Hierarchical 3D Zn <sup>2+</sup> /Ni <sup>2+</sup> /P nanosheet arrays as an advanced electrode for high-performance all-solid-state asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8669-8681.	5.2	116
22	Hierarchical nanohoneycomb-like CoMoO <sub>4</sub> •MnO <sub>2</sub> core-shell and Fe <sub>2</sub> O <sub>3</sub> nanosheet arrays on 3D graphene foam with excellent supercapacitive performance. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7182-7193.	5.2	116
23	High-energy asymmetric supercapacitors based on free-standing hierarchical Co <sup>2+</sup> /Mo <sup>6+</sup> /S nanosheets with enhanced cycling stability. <i>Nanoscale</i> , 2017, 9, 13747-13759.	2.8	113
24	Pt nanodots monolayer modified mesoporous Cu@Cu <sub>2</sub> O nanowires for improved overall water splitting reactivity. <i>Nano Energy</i> , 2019, 59, 216-228.	8.2	107
25	An advanced sandwich-type architecture of MnCo <sub>2</sub> O <sub>4</sub> @Ni <sup>2+</sup> /C/MnO <sub>2</sub> as an efficient electrode material for a high-energy density hybrid asymmetric solid-state supercapacitor. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24509-24522.	5.2	102
26	Hierarchical 3D Cobalt-Doped Fe <sub>3</sub> O <sub>4</sub> Nanospheres@NG Hybrid as an Advanced Anode Material for High-Performance Asymmetric Supercapacitors. <i>Small</i> , 2017, 13, 1701275.	5.2	100
27	Recent advances in MXene-based nanocomposites for electrochemical energy storage applications. <i>Progress in Materials Science</i> , 2021, 117, 100733.	16.0	97
28	Hybridized bimetallic phosphides of Ni <sup>2+</sup> /Mo, Co <sup>2+</sup> /Mo, and Co <sup>2+</sup> /Ni in a single ultrathin-3D-nanosheets for efficient HER and OER in alkaline media. <i>Composites Part B: Engineering</i> , 2022, 239, 109992.	5.9	96
29	Highly efficient electrocatalyst of N-doped graphene-encapsulated cobalt-iron carbides towards oxygen reduction reaction. <i>Carbon</i> , 2018, 137, 358-367.	5.4	95
30	A novel hierarchical 3D N-Co-CNT@NG nanocomposite electrode for non-enzymatic glucose and hydrogen peroxide sensing applications. <i>Biosensors and Bioelectronics</i> , 2017, 89, 970-977.	5.3	93
31	Nitrogen-Doped Graphene Nanosheets with FeN Core-Shell Nanoparticles as High-Performance Counter Electrode Materials for Dye-Sensitized Solar Cells. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500348.	1.9	92
32	Facile synthesis of novel sulfonated polyaniline functionalized graphene using m-aminobenzene sulfonic acid for asymmetric supercapacitor application. <i>Chemical Engineering Journal</i> , 2017, 308, 1174-1184.	6.6	92
33	Effects of various surfactants on the dispersion stability and electrical conductivity of surface modified graphene. <i>Journal of Alloys and Compounds</i> , 2013, 562, 134-142.	2.8	91
34	g-C <sub>3</sub> N <sub>4</sub> templated synthesis of the Fe <sub>3</sub> C@NSC electrocatalyst enriched with Fe <sup>2+</sup> active sites for efficient oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 16920-16936.	5.2	91
35	Novel core-shell CuMo-oxynitride@N-doped graphene nanohybrid as multifunctional catalysts for rechargeable zinc-air batteries and water splitting. <i>Nano Energy</i> , 2021, 85, 105987.	8.2	89
36	Fe and P Doped 1T-Phase Enriched WS <sub>2</sub> 3D-Dendritic Nanostructures for Efficient Overall Water Splitting. <i>Applied Catalysis B: Environmental</i> , 2021, 286, 119897.	10.8	88

#	ARTICLE	IF	CITATIONS
37	Novel PAAm/Laponite clay nanocomposite hydrogels with improved cationic dye adsorption behavior. <i>Composites Part B: Engineering</i> , 2008, 39, 756-763.	5.9	87
38	Enhanced Electrochemical and Photocatalytic Performance of Core-Shell CuS@Carbon Quantum Dots@Carbon Hollow Nanospheres. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 2459-2468.	4.0	87
39	Uniformly Controlled Treble Boundary Using Enriched Adsorption Sites and Accelerated Catalyst Cathode for Robust Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	87
40	Preparation and properties of reduced graphene oxide/polyacrylonitrile nanocomposites using polyvinyl phenol. <i>Composites Part B: Engineering</i> , 2015, 80, 238-245.	5.9	86
41	Emerging core-shell nanostructured catalysts of transition metal encapsulated by two-dimensional carbon materials for electrochemical applications. <i>Nano Today</i> , 2018, 22, 100-131.	6.2	86
42	Facile Method for the Preparation of Water Dispersible Graphene using Sulfonated Poly(ether-ether-ketone) and Its Application as Energy Storage Materials. <i>Langmuir</i> , 2012, 28, 9825-9833.	1.6	85
43	Hierarchical Manganese-Nickel Sulfide Nanosheet Arrays as an Advanced Electrode for All-Solid-State Asymmetric Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 21505-21514.	4.0	85
44	Enhancement of physical, mechanical, and gas barrier properties in noncovalently functionalized graphene oxide/poly(vinylidene fluoride) composites. <i>Carbon</i> , 2015, 81, 329-338.	5.4	84
45	In situ synthesis of graphene-encapsulated gold nanoparticle hybrid electrodes for non-enzymatic glucose sensing. <i>Carbon</i> , 2016, 98, 90-98.	5.4	84
46	Novel porous gold-palladium nanoalloy network-supported graphene as an advanced catalyst for non-enzymatic hydrogen peroxide sensing. <i>Biosensors and Bioelectronics</i> , 2016, 85, 669-678.	5.3	82
47	Preparation of reduced graphene oxide-NiFe <sub>2</sub> O <sub>4</sub> nanocomposites for the electrocatalytic oxidation of hydrazine. <i>Composites Part B: Engineering</i> , 2015, 79, 649-659.	5.9	81
48	Green synthesis of glucose-reduced graphene oxide supported Ag-Cu <sub>2</sub> O nanocomposites for the enhanced visible-light photocatalytic activity. <i>Composites Part B: Engineering</i> , 2018, 138, 35-44.	5.9	80
49	Novel route to synthesis of N-doped graphene/Cu-Ni oxide composite for high electrochemical performance. <i>Carbon</i> , 2015, 94, 962-970.	5.4	79
50	Fabrication of 3D graphene-CNTs/MoO <sub>3</sub> hybrid film as an advance electrode material for asymmetric supercapacitor with excellent energy density and cycling life. <i>Chemical Engineering Journal</i> , 2018, 352, 268-276.	6.6	79
51	Hexylamine functionalized reduced graphene oxide/polyurethane nanocomposite-coated nylon for enhanced hydrogen gas barrier film. <i>Journal of Membrane Science</i> , 2016, 500, 106-114.	4.1	77
52	3D hierarchical CoO@MnO <sub>2</sub> core-shell nanohybrid for high-energy solid state asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 397-408.	5.2	75
53	Nitrogen-Doped Graphene-Encapsulated Nickel Cobalt Nitride as a Highly Sensitive and Selective Electrode for Glucose and Hydrogen Peroxide Sensing Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 35847-35858.	4.0	75
54	Nitrogen-doped graphene encapsulated cobalt iron sulfide as an advanced electrode for high-performance asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3941-3952.	5.2	74

#	ARTICLE	IF	CITATIONS
55	Highly reversible water splitting cell building from hierarchical 3D nickel manganese oxyphosphide nanosheets. <i>Nano Energy</i> , 2020, 69, 104432.	8.2	74
56	Facile synthesis of CuCo <sub>2</sub> O <sub>4</sub> composite octahedrons for high performance supercapacitor application. <i>Composites Part B: Engineering</i> , 2018, 150, 269-276.	5.9	72
57	Nanostructured CeO <sub>2</sub> /Ni-LDH composite for energy storage in asymmetric supercapacitor and as methanol oxidation electrocatalyst. <i>Chemical Engineering Journal</i> , 2021, 417, 128019.	6.6	72
58	3D nickel molybdenum oxyselenide (Ni <sub>1-x</sub> MoxOSe) nanoarchitectures as advanced multifunctional catalyst for Zn-air batteries and water splitting. <i>Applied Catalysis B: Environmental</i> , 2021, 286, 119909.	10.8	72
59	Swelling behavior of polyacrylamide/laponite clay nanocomposite hydrogels: pH-sensitive property. <i>Composites Part B: Engineering</i> , 2009, 40, 275-283.	5.9	71
60	Preparation and enhanced mechanical properties of non-covalently-functionalized graphene oxide/cellulose acetate nanocomposites. <i>Composites Part B: Engineering</i> , 2016, 90, 223-231.	5.9	71
61	CuAg@Ag Core-Shell Nanostructure Encapsulated by N-Doped Graphene as a High-Performance Catalyst for Oxygen Reduction Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 4672-4681.	4.0	71
62	Constructing MoP <sub>x</sub> @MnPy Heteronanoparticle-Supported Mesoporous N,P-Codoped Graphene for Boosting Oxygen Reduction and Oxygen Evolution Reaction. <i>Chemistry of Materials</i> , 2019, 31, 2892-2904.	3.2	71
63	A novel sensitive sensor for serotonin based on high-quality of AuAg nanoalloy encapsulated graphene electrocatalyst. <i>Biosensors and Bioelectronics</i> , 2017, 96, 186-193.	5.3	70
64	Effects of the addition of boric acid on the physical properties of MXene/polyvinyl alcohol (PVA) nanocomposite. <i>Composites Part B: Engineering</i> , 2020, 199, 108205.	5.9	69
65	Hierarchical Heterostructures of Ultrasmall Fe <sub>2</sub> O <sub>3</sub> -Encapsulated MoS <sub>2</sub> /N-Graphene as an Effective Catalyst for Oxygen Reduction Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 24523-24532.	4.0	68
66	Porous Hollow-Structured LaNiO <sub>3</sub> Stabilized N-Codoped Graphene as an Active Electrocatalyst for Oxygen Reduction Reaction. <i>Small</i> , 2017, 13, 1701884.	5.2	66
67	Hierarchical material of carbon nanotubes grown on carbon nanofibers for high performance electrochemical capacitor. <i>Chemical Engineering Journal</i> , 2018, 345, 39-47.	6.6	66
68	Effects of covalent surface modifications on the electrical and electrochemical properties of graphene using sodium 4-aminoazobenzene-4-sulfonate. <i>Carbon</i> , 2013, 54, 310-322.	5.4	65
69	Novel polyaniline/manganese hexacyanoferrate nanoparticles on carbon fiber as binder-free electrode for flexible supercapacitors. <i>Composites Part B: Engineering</i> , 2018, 143, 141-147.	5.9	65
70	High-energy solid-state asymmetric supercapacitor based on nickel vanadium oxide/NG and iron vanadium oxide/NG electrodes. <i>Applied Catalysis B: Environmental</i> , 2018, 239, 290-299.	10.8	65
71	Graphitic carbon nitride modified graphene/Ni Al layered double hydroxide and 3D functionalized graphene for solid-state asymmetric supercapacitors. <i>Chemical Engineering Journal</i> , 2018, 353, 824-838.	6.6	59
72	Highly Active and Durable Core-Shell fct-PdFe@Pd Nanoparticles Encapsulated NG as an Efficient Catalyst for Oxygen Reduction Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 18734-18745.	4.0	58

#	ARTICLE	IF	CITATIONS
73	Advanced Cu <sub>0.5</sub> Co <sub>0.5</sub> Se <sub>2</sub> nanosheets and MXene electrodes for high-performance asymmetric supercapacitors. <i>Chemical Engineering Journal</i> , 2020, 385, 123455.	6.6	55
74	A hierarchical 2D Ni@MoS <sub>2</sub> nanosheet@nitrogen doped graphene hybrid as a Pt-free cathode for high-performance dye sensitized solar cells and fuel cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 17896-17908.	5.2	54
75	Hierarchical 3D Oxygenated Cobalt Vanadium Selenide Nanosheets as Advanced Electrode for Flexible Zinc-Cobalt and Zinc-Air Batteries. <i>Small</i> , 2020, 16, e2004661.	5.2	54
76	A spinel MnCo <sub>2</sub> O <sub>4</sub> /NG 2D/2D hybrid nanoarchitectures as advanced electrode material for high performance hybrid supercapacitors. <i>Journal of Alloys and Compounds</i> , 2019, 771, 810-820.	2.8	52
77	Hierarchical 3D Oxygenated Cobalt Molybdenum Selenide Nanosheets as Robust Trifunctional Catalyst for Water Splitting and Zinc-Air Batteries. <i>Small</i> , 2020, 16, e2000797.	5.2	52
78	Facile synthesis of porous CuCo <sub>2</sub> O <sub>4</sub> composite sheets and their supercapacitive performance. <i>Composites Part B: Engineering</i> , 2018, 150, 234-241.	5.9	51
79	Noncovalent functionalization of reduced graphene oxide with pluronic F127 and its nanocomposites with gum arabic. <i>Composites Part B: Engineering</i> , 2017, 128, 155-163.	5.9	50
80	Fabrication of Co-Ni-Zn ternary Oxide@NiWO <sub>4</sub> core-shell nanowire arrays and Fe <sub>2</sub> O <sub>3</sub> -CNTs@GF for ultra-high-performance asymmetric supercapacitor. <i>Composites Part B: Engineering</i> , 2019, 176, 107223.	5.9	49
81	Hierarchical design of Cu-Ni(OH) <sub>2</sub> /Cu-MnxOy core/shell nanosheet arrays for ultra-high performance of asymmetric supercapacitor. <i>Chemical Engineering Journal</i> , 2019, 369, 705-715.	6.6	49
82	Zn@Ni <sub>7</sub> S <sub>6</sub> Nanosheet Arrays Wrapped with Nanopetals of Ni(OH) <sub>2</sub> as a Novel Core-Shell Electrode Material for Asymmetric Supercapacitors with High Energy Density and Cycling Stability Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 47377-47388.	4.0	49
83	Hierarchical Flowerlike Highly Synergistic Three-Dimensional Iron Tungsten Oxide Nanostructure-Anchored Nitrogen-Doped Graphene as an Efficient and Durable Electrocatalyst for Oxygen Reduction Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 32220-32232.	4.0	48
84	Facile fabrication of FeN nanoparticles/nitrogen-doped graphene core-shell hybrid and its use as a platform for NADH detection in human blood serum. <i>Biosensors and Bioelectronics</i> , 2016, 83, 68-76.	5.3	47
85	Strongly stabilized integrated bimetallic oxide of Fe <sub>2</sub> O <sub>3</sub> -MoO <sub>3</sub> Nano-crystal entrapped N-doped graphene as a superior oxygen reduction reaction electrocatalyst. <i>Chemical Engineering Journal</i> , 2021, 410, 128358.	6.6	47
86	Enhanced electrocatalytic performance of an ultrafine AuPt nanoalloy framework embedded in graphene towards epinephrine sensing. <i>Biosensors and Bioelectronics</i> , 2017, 89, 750-757.	5.3	46
87	Metal organic framework-derived cobalt telluride-carbon porous structured composites for high-performance supercapacitor. <i>Composites Part B: Engineering</i> , 2021, 211, 108624.	5.9	45
88	Surfactant-free synthesis of NiPd nanoalloy/graphene bifunctional nanocomposite for fuel cell. <i>Composites Part B: Engineering</i> , 2017, 114, 319-327.	5.9	44
89	Rational design of ultrathin 2D tin nickel selenide nanosheets for high-performance flexible supercapacitors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24462-24476.	5.2	44
90	Activated CuNi@Ni Core@shell structures via oxygen and nitrogen dual coordination assembled on 3D CNTs-graphene hybrid for high-performance water splitting. <i>Applied Catalysis B: Environmental</i> , 2021, 294, 120263.	10.8	44

#	ARTICLE	IF	CITATIONS
91	Freestanding $1T\text{-Mn}_x\text{Mo}_2\text{S}_4$ and $\text{MoFe}_2\text{S}_4$ Ultrathin Nanosheet-Structured Electrodes for Highly Efficient Flexible Solid-State Asymmetric Supercapacitors. <i>Small</i> , 2020, 16, 2001691.	5.2	43
92	Tunable construction of $\text{Fe}_x\text{Co}_3\text{-xSe}_4$ nanostructures as advanced electrode for boosting capacity and energy density. <i>Chemical Engineering Journal</i> , 2020, 390, 124557.	6.6	43
93	Novel cobalt-doped molybdenum oxynitride quantum dot@N-doped carbon nanosheets with abundant oxygen vacancies for long-life rechargeable zinc-air batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9092-9104.	5.2	41
94	Effect of high molecular weight polyethyleneimine functionalized graphene oxide coated polyethylene terephthalate film on the hydrogen gas barrier properties. <i>Composites Part B: Engineering</i> , 2016, 106, 316-323.	5.9	40
95	Enhanced hydrogen gas barrier performance of diaminoalkane functionalized stitched graphene oxide/polyurethane composites. <i>Composites Part B: Engineering</i> , 2017, 117, 101-110.	5.9	40
96	Effects of hybrid carbon fillers of polymer composite bipolar plates on the performance of direct methanol fuel cells. <i>Composites Part B: Engineering</i> , 2013, 51, 98-105.	5.9	39
97	Core cation tuned $\text{M}_x\text{Co}_3\text{-xS}_4$ @ $\text{NiMoS}_4$ [M=Ni, Mn, Zn] core-shell nanomaterials as advanced all solid-state asymmetric supercapacitor electrodes. <i>Chemical Engineering Journal</i> , 2021, 405, 127046.	6.6	39
98	Highly efficient adsorbent based on novel cotton flower-like porous boron nitride for organic pollutant removal. <i>Composites Part B: Engineering</i> , 2017, 123, 45-54.	5.9	38
99	Effects of grafting methods for functionalization of graphene oxide by dodecylamine on the physical properties of its polyurethane nanocomposites. <i>Journal of Membrane Science</i> , 2017, 540, 108-119.	4.1	38
100	Dual-functional $\text{Co}_{5.47}\text{N}/\text{Fe}_3\text{N}$ heterostructure interconnected 3D N-doped carbon nanotube-graphene hybrids for accelerating polysulfide conversion in Li-S batteries. <i>Chemical Engineering Journal</i> , 2022, 427, 131774.	6.6	38
101	Synthesis of water soluble sulfonated polyaniline and determination of crystal structure. <i>Journal of Applied Polymer Science</i> , 2010, 117, 2025-2035.	1.3	37
102	Carbon Nanofibers as Potential Catalyst Support for Fuel Cell Cathodes: A Review. <i>Energy &amp; Fuels</i> , 2021, 35, 11761-11799.	2.5	37
103	Electrochemical synthesis of palladium (Pd) nanorods: An efficient electrocatalyst for methanol and hydrazine electro-oxidation. <i>Composites Part B: Engineering</i> , 2018, 144, 11-18.	5.9	36
104	Hierarchical porous framework of ultrasmall PtPd alloy-integrated graphene as active and stable catalyst for ethanol oxidation. <i>Composites Part B: Engineering</i> , 2018, 143, 96-104.	5.9	36
105	Worm-like gold nanowires assembled carbon nanofibers-CVD graphene hybrid as sensitive and selective sensor for nitrite detection. <i>Journal of Colloid and Interface Science</i> , 2021, 583, 425-434.	5.0	36
106	Fabrication of hierarchical $\text{ZnNiCoS}$ nanowire arrays and graphitic carbon nitride/graphene for solid-state asymmetric supercapacitors. <i>Applied Surface Science</i> , 2021, 542, 148564.	3.1	35
107	Modulating heterointerfaces of tungsten incorporated $\text{CoSe}/\text{Co}_3\text{O}_4$ as a highly efficient electrocatalyst for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3782-3792.	5.2	35
108	Cu-Au nanocrystals functionalized carbon nanotube arrays vertically grown on carbon spheres for highly sensitive detecting cancer biomarker. <i>Biosensors and Bioelectronics</i> , 2018, 119, 134-140.	5.3	34

#	ARTICLE	IF	CITATIONS
109	Ni-nanoclusters hybridized 1Tâ€“Mnâ€“VTe <sub>2</sub> mesoporous nanosheets for ultra-low potential water splitting. <i>Applied Catalysis B: Environmental</i> , 2022, 301, 120780.	10.8	32
110	Effects of the composition of reduced graphene oxide/carbon nanofiber nanocomposite on charge storage behaviors. <i>Composites Part B: Engineering</i> , 2019, 178, 107500.	5.9	30
111	Hierarchical Cu@Cu <sub>2</sub> O nanowires arrays-coated gold nanodots as a highly sensitive self-supported electrocatalyst for L-cysteine oxidation. <i>Biosensors and Bioelectronics</i> , 2019, 139, 111327.	5.3	30
112	Hierarchical 3D structured nanoporous Co <sub>9</sub> S <sub>8</sub> @Ni <sub>x</sub> :Mo <sub>y</sub> â€“Se coreâ€“shell nanowire array electrodes for high-performance asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2021, 9, 27503-27517.	5.2	30
113	Preparation of modified graphene oxide/polyethyleneimine film with enhanced hydrogen barrier properties by reactive layer-by-layer self-assembly. <i>Composites Part B: Engineering</i> , 2019, 166, 663-672.	5.9	28
114	Facile synthesis of N-doped graphene supported porous cobalt molybdenum oxynitride nanodendrites for the oxygen reduction reaction. <i>Nanoscale</i> , 2019, 11, 1205-1216.	2.8	27
115	Recent progress on single atom/sub-nano electrocatalysts for energy applications. <i>Progress in Materials Science</i> , 2021, 115, 100711.	16.0	27
116	All-solid-state asymmetric supercapacitor with MWCNT-based hollow NiCo <sub>2</sub> O <sub>4</sub> positive electrode and porous Cu <sub>2</sub> WS <sub>4</sub> negative electrode. <i>Chemical Engineering Journal</i> , 2021, 415, 128188.	6.6	27
117	Growth of carbon nanotubes over transition metal loaded on Co-SBA-15 and its application for high performance dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 5070.	5.2	26
118	Bifunctional Catalyst Derived from Sulfur-Doped VMoO <sub>x</sub> Nanolayer Shelled Co Nanosheets for Efficient Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 42944-42956.	4.0	26
119	Single (Ni, Fe) atoms and ultrasmall Core@shell Ni@Fe nanostructures Dual-implanted CNTs-Graphene nanonetworks for robust Zn- and Al-Air batteries. <i>Chemical Engineering Journal</i> , 2022, 440, 135781.	6.6	24
120	Facile synthesis of 4,4â€“diaminostilbene-2,2â€“disulfonic-acid-grafted reduced graphene oxide and its application as a high-performance asymmetric supercapacitor. <i>Chemical Engineering Journal</i> , 2018, 333, 170-184.	6.6	23
121	Facile and controlled growth of SWCNT on well-dispersed Ni-SBA-15 for an efficient electro-catalytic oxidation of ascorbic acid, dopamine and uric acid. <i>Journal of Molecular Catalysis A</i> , 2013, 372, 13-22.	4.8	22
122	Development of hierarchically structured nanosheet arrays of CuMnO <sub>2</sub> -Mn <sub>x</sub> O <sub>y</sub> @graphene foam as a nanohybrid electrode material for high-performance asymmetric supercapacitor. <i>Journal of Alloys and Compounds</i> , 2021, 858, 158343.	2.8	21
123	Effective Synthesis of Well-Graphitized Carbon Nanotubes on Bimetallic SBA-15 Template for Use as Counter Electrode in Dye-Sensitized Solar Cells. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 384-393.	1.8	20
124	Hierarchical CoS@MoS <sub>2</sub> core-shell nanowire arrays as free-standing electrodes for high-performance asymmetric supercapacitors. <i>Journal of Alloys and Compounds</i> , 2020, 825, 154085.	2.8	19
125	Mesoporous layered spinel zinc manganese oxide nanocrystals stabilized nitrogen-doped graphene as an effective catalyst for oxygen reduction reaction. <i>Journal of Colloid and Interface Science</i> , 2019, 545, 43-53.	5.0	18
126	Single platinum atoms implanted 2D lateral anion-intercalated metal hydroxides of Ni <sub>2</sub> (OH) <sub>2</sub> (NO <sub>3</sub> ) <sub>2</sub> as efficient catalyst for high-yield water splitting. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121684.	10.8	18

#	ARTICLE	IF	CITATIONS
127	Efficient energy storage performance of in situ grown Co <sub>3</sub> V <sub>2</sub> O <sub>8</sub> -RGO composite nanostructure for high performance asymmetric Co <sub>3</sub> V <sub>2</sub> O <sub>8</sub> -RGO//RGO supercapacitors and consequence of magnetic field induced enhanced capacity. <i>Composites Part B: Engineering</i> , 2021, 227, 109384.	5.9	17
128	Pragmatically designed tetragonal copper ferrite super-architectures as advanced multifunctional electrodes for solid-state supercapacitors and overall water splitting. <i>Chemical Engineering Journal</i> , 2021, 415, 127779.	6.6	16
129	Recent engineering advances in nanocatalysts for NH <sub>3</sub> -to-H <sub>2</sub> conversion technologies. <i>Nano Energy</i> , 2022, 94, 106929.	8.2	15
130	Facile fabrication of highly durable Pt NPs/3D graphene hierarchical nanostructure for proton exchange membrane fuel cells. <i>Carbon</i> , 2016, 109, 805-812.	5.4	14
131	Facile fabrication of dye-sensitized solar cells utilizing carbon nanotubes grown over 2D hexagonal bimetallic ordered mesoporous materials. <i>Journal of Power Sources</i> , 2013, 225, 364-373.	4.0	13
132	Effective synthesis of carbon nanotubes of high purity over Cr@Ni@SBA-15 and its application in high performance dye-sensitized solar cells. <i>RSC Advances</i> , 2013, 3, 4321.	1.7	11
133	Cobalt-doped cerium oxide nanocrystals shelled 1D SnO <sub>2</sub> structures for highly sensitive and selective xanthine detection in biofluids. <i>Journal of Colloid and Interface Science</i> , 2021, 600, 299-309.	5.0	11
134	Freestanding Binder-Free Electrodes with Nanodisk-Needle-like MnCuCo-LTH and Mn <sub>1</sub> Fe <sub>2</sub> S <sub>2</sub> Porous Microthorns for High-Performance Quasi-Solid-State Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 12523-12537.	4.0	10
135	Facile synthesis of high quality multi-walled carbon nanotubes on novel 3D KIT-6: application in high performance dye-sensitized solar cells. <i>Nanoscale</i> , 2015, 7, 679-689.	2.8	9
136	Growth of well graphitized MWCNTs over novel 3D cubic bimetallic KIT-6 towards the development of an efficient counter electrode for dye-sensitized solar cells. <i>Organic Electronics</i> , 2013, 14, 1833-1843.	1.4	8
137	Recent Advances on Metal Organic Framework@Derived Catalysts for Electrochemical Oxygen Reduction Reaction. <i>ACS Symposium Series</i> , 2020, , 231-278.	0.5	6
138	Recent Advances in Metal Alloy-Graphene Hybrids for Biosensors. , 2018, , 57-84.		0
139	Polymer nanocomposites for energy-related applications. , 2021, , 215-248.		0
140	Transition metal nanoparticles as electrocatalysts for ORR, OER, and HER. , 2022, , 49-83.		0