Nasir Mahmood

List of Publications by Year
in descending order

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189 papers	14,865 citations	20817 60 h-index	20358 116 g-index
189 all docs	189 docs citations	189 times ranked	17501 citing authors

#	Article	IF	Citations
1	Electrocatalysts for Hydrogen Evolution in Alkaline Electrolytes: Mechanisms, Challenges, and Prospective Solutions. Advanced Science, 2018, 5, 1700464.	11.2	1,022
2	Synthesis of Phosphorusâ€Doped Graphene and its Multifunctional Applications for Oxygen Reduction Reaction and Lithium Ion Batteries. Advanced Materials, 2013, 25, 4932-4937.	21.0	915
3	Liquid metals: fundamentals and applications in chemistry. Chemical Society Reviews, 2018, 47, 4073-4111.	38.1	763
4	Facile Synthesis of Fe₃O₄/GCs Composites and Their Enhanced Microwave Absorption Properties. ACS Applied Materials & Interfaces, 2016, 8, 6101-6109.	8.0	518
5	Engineering Cobalt Defects in Cobalt Oxide for Highly Efficient Electrocatalytic Oxygen Evolution. ACS Catalysis, 2018, 8, 3803-3811.	11.2	430
6	Graphene-based nanocomposites for energy storage and conversion in lithium batteries, supercapacitors and fuel cells. Journal of Materials Chemistry A, 2014, 2, 15-32.	10.3	427
7	Nanostructured Anode Materials for Lithium Ion Batteries: Progress, Challenge and Perspective. Advanced Energy Materials, 2016, 6, 1600374.	19.5	383
8	Multifunctional g-C₃N₄ Nanofibers: A Template-Free Fabrication and Enhanced Optical, Electrochemical, and Photocatalyst Properties. ACS Applied Materials & Interfaces, 2014, 6, 1258-1265.	8.0	360
9	Nickel Sulfide/Nitrogenâ€Doped Graphene Composites: Phaseâ€Controlled Synthesis and High Performance Anode Materials for Lithium Ion Batteries. Small, 2013, 9, 1321-1328.	10.0	297
10	Microporous bamboo biochar for lithium-sulfur batteries. Nano Research, 2015, 8, 129-139.	10.4	284
11	Heterostructured Nanorings of Feâ€'Fe₃O₄@C Hybrid with Enhanced Microwave Absorption Performance. ACS Applied Materials & Interfaces, 2018, 10, 9369-9378.	8.0	244
12	Tubular graphitic-C3N4: a prospective material for energy storage and green photocatalysis. Journal of Materials Chemistry A, 2013, 1, 13949.	10.3	238
13	Graphene and its composites with nanoparticles for electrochemical energy applications. Nano Today, 2014, 9, 668-683.	11.9	230
14	Electrocatalytic hydrogen evolution under neutral pH conditions: current understandings, recent advances, and future prospects. Energy and Environmental Science, 2020, 13, 3185-3206.	30.8	225
15	Multifunctional Co₃S₄/Graphene Composites for Lithium Ion Batteries and Oxygen Reduction Reaction. Chemistry - A European Journal, 2013, 19, 5183-5190.	3.3	219
16	A 3D Trilayered CNT/MoSe₂/C Heterostructure with an Expanded MoSe₂ Interlayer Spacing for an Efficient Sodium Storage. Advanced Energy Materials, 2019, 9, 1900567.	19.5	218
17	Oxygen-doped nanoporous carbon nitride via water-based homogeneous supramolecular assembly for photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2018, 221, 9-16.	20.2	217
18	High-Valence-State NiO/Co₃O₄ Nanoparticles on Nitrogen-Doped Carbon for Oxygen Evolution at Low Overpotential. ACS Energy Letters, 2017, 2, 2177-2182.	17.4	200

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19	Hybrid of Co₃Sn₂@Co Nanoparticles and Nitrogen-Doped Graphene as a Lithium Ion Battery Anode. ACS Nano, 2013, 7, 10307-10318.	14.6	194
20	Highly active two dimensional Î±-MoO_{3â^'x} for the electrocatalytic hydrogen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 24223-24231.	10.3	166
21	Plasma-induced FeSiAl@Al2O3@SiO2 coreâ€“shell structure for exceptional microwave absorption and anti-oxidation at high temperature. Chemical Engineering Journal, 2020, 384, 123371.	12.7	161
22	Interface chemistry of two-dimensional heterostructures â€“ fundamentals to applications. Chemical Society Reviews, 2021, 50, 4684-4729.	38.1	152
23	Synthesis of Novel ZnV₂O₄ Hierarchical Nanospheres and Their Applications as Electrochemical Supercapacitor and Hydrogen Storage Material. ACS Applied Materials & Interfaces, 2014, 6, 13635-13641.	8.0	150
24	High-Temperature Oxidation-Resistant ZrN_{0.4}B_{0.6}/SiC Nanohybrid for Enhanced Microwave Absorption. ACS Applied Materials & Interfaces, 2019, 11, 15869-15880.	8.0	150
25	Electrode Nanostructures in Lithiumâ€Based Batteries. Advanced Science, 2014, 1, 1400012.	11.2	148
26	Template free synthesis of CuS nanosheet-based hierarchical microspheres: an efficient natural light driven photocatalyst. CrystEngComm, 2014, 16, 5290.	2.6	147
27	3D Vertically Aligned and Interconnected Porous Carbon Nanosheets as Sulfur Immobilizers for High Performance Lithiumâ€Sulfur Batteries. Advanced Energy Materials, 2016, 6, 1502518.	19.5	138
28	Ultra-small Co/CNTs nanohybrid from metal organic framework with highly efficient microwave absorption. Composites Part B: Engineering, 2018, 152, 316-323.	12.0	133
29	Liquid metal-based synthesis of high performance monolayer SnS piezoelectric nanogenerators. Nature Communications, 2020, 11, 3449.	12.8	128
30	Chlorine-doped carbonated cobalt hydroxide for supercapacitors with enormously high pseudocapacitive performance and energy density. Nano Energy, 2015, 11, 267-276.	16.0	121
31	Bifunctional catalysts of Co3O4@GCN tubular nanostructured (TNS) hybrids for oxygen and hydrogen evolution reactions. Nano Research, 2015, 8, 3725-3736.	10.4	117
32	Hybrid silica-carbon bilayers anchoring on FeSiAl surface with bifunctions of enhanced anti-corrosion and microwave absorption. Carbon, 2021, 173, 185-193.	10.3	114
33	Biological entities as chemical reactors for synthesis of nanomaterials: Progress, challenges and future perspective. Materials Today Chemistry, 2018, 8, 13-28.	3.5	112
34	Selfâ€Healing Materials from Vâ€shaped and Hâ€Shaped Supramolecular Architectures. Angewandte Chemie - International Edition, 2015, 54, 10188-10192.	13.8	110
35	Atomically thin two-dimensional metal oxide nanosheets and their heterostructures for energy storage. Energy Storage Materials, 2019, 16, 455-480.	18.0	109
36	Unveiling Property of Hydrolysis-Derived DMAPbI3 for Perovskite Devices: Composition Engineering, Defect Mitigation, and Stability Optimization. IScience, 2019, 15, 165-172.	4.1	107

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37	Atomic-Scale Layer-by-Layer Deposition of FeSiAl@ZnO@Al2O3 Hybrid with Threshold Anti-Corrosion and Ultra-High Microwave Absorption Properties in Low-Frequency Bands. Nano-Micro Letters, 2021, 13, 161.	27.0	103
38	Porous Eleocharis@MnPE Layered Hybrid for Synergistic Adsorption and Catalytic Biodegradation of Toxic Azo Dyes from Industrial Wastewater. Environmental Science & Technology, 2019, 53, 2161-2170.	10.0	102
39	CoP nanoparticles embedded in P and N co-doped carbon as efficient bifunctional electrocatalyst for water splitting. Journal of Energy Chemistry, 2017, 26, 1223-1230.	12.9	98
40	Polarisation insensitive multifunctional metasurfaces based on all-dielectric nanowaveguides. Nanoscale, 2018, 10, 18323-18330.	5.6	98
41	A Dual Protection System for Heterostructured 3D CNT/CoSe₂/C as High Areal Capacity Anode for Sodium Storage. Advanced Science, 2020, 7, 1902907.	11.2	97
42	Large scale production of novel g-C3N4 micro strings with high surface area and versatile photodegradation ability. CrystEngComm, 2014, 16, 1825.	2.6	96
43	Iron phosphide encapsulated in P-doped graphitic carbon as efficient and stable electrocatalyst for hydrogen and oxygen evolution reactions. Nanoscale, 2018, 10, 21327-21334.	5.6	91
44	Polyamide 6/Multiwalled Carbon Nanotubes Nanocomposites with Modified Morphology and Thermal Properties. Polymers, 2013, 5, 1380-1391.	4.5	88
45	Efficient water oxidation through strongly coupled graphitic C₃N₄ coated cobalt hydroxide nanowires. Journal of Materials Chemistry A, 2016, 4, 12940-12946.	10.3	88
46	Effects of porous carrier size on biofilm development, microbial distribution and nitrogen removal in microaerobic bioreactors. Bioresource Technology, 2017, 234, 360-369.	9.6	87
47	Fe₃O₄ Nanoparticles Coated with EDTA and Ag Nanoparticles for the Catalytic Reduction of Organic Dyes from Wastewater. ACS Applied Nano Materials, 2019, 2, 5310-5319.	5.0	83
48	Hierarchical Heteroaggregation of Binary Metal-Organic Gels with Tunable Porosity and Mixed Valence Metal Sites for Removal of Dyes in Water. Scientific Reports, 2015, 5, 10556.	3.3	82
49	One Dimensional Graphitic Carbon Nitrides as Effective Metal-Free Oxygen Reduction Catalysts. Scientific Reports, 2015, 5, 12389.	3.3	81
50	Fabrication of zero to three dimensional nanostructured molybdenum sulfides and their electrochemical and photocatalytic applications. Nanoscale, 2016, 8, 18250-18269.	5.6	79
51	Fe3C/helical carbon nanotube hybrid: Facile synthesis and spin-induced enhancement in microwave-absorbing properties. Composites Part B: Engineering, 2016, 107, 51-58.	12.0	76
52	Bioinspired synthesis of zinc oxide nano-flowers: A surface enhanced antibacterial and harvesting efficiency. Materials Science and Engineering C, 2021, 119, 111280.	7.3	75
53	Coreâ€“Shell FeSe₂/C Nanostructures Embedded in a Carbon Framework as a Free Standing Anode for a Sodium Ion Battery. Small, 2020, 16, e2002200.	10.0	72
54	Ordered intracrystalline pores in planar molybdenum oxide for enhanced alkaline hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 257-268.	10.3	70

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55	The synergistic effect between WO₃ and g-C₃N₄ towards efficient visible-light-driven photocatalytic performance. New Journal of Chemistry, 2014, 38, 5462-5469.	2.8	69
56	Synthesis of silver nanoparticles using Fagonia cretica and their antimicrobial activities. Nanoscale Advances, 2019, 1, 1707-1713.	4.6	68
57	A brief review for fluorinated carbon: synthesis, properties and applications. Nanotechnology Reviews, 2019, 8, 573-586.	5.8	67
58	Liquidâ€Metal Synthesized Ultrathin SnS Layers for Highâ€Performance Broadband Photodetectors. Advanced Materials, 2020, 32, e2004247.	21.0	66
59	Synthesis, properties and novel electrocatalytic applications of the 2D-borophene Xenes. Progress in Solid State Chemistry, 2020, 59, 100283.	7.2	65
60	Polyamide-6-based composites reinforced with pristine or functionalized multi-walled carbon nanotubes produced using melt extrusion technique. Journal of Composite Materials, 2014, 48, 1197-1207.	2.4	64
61	3D Hollow Quasi-Graphite Capsules/Polyaniline Hybrid with a High Performance for Room-Temperature Ammonia Gas Sensors. ACS Sensors, 2019, 4, 2343-2350.	7.8	64
62	Thermal and mechanical properties of carbon nanotube/epoxy nanocomposites reinforced with pristine and functionalized multiwalled carbon nanotubes. Polymer Composites, 2015, 36, 1891-1898.	4.6	60
63	Synthesis of two-dimensional hematite and iron phosphide for hydrogen evolution. Journal of Materials Chemistry A, 2020, 8, 2789-2797.	10.3	60
64	Comprehensive survey and taxonomies of false data injection attacks in smart grids: attack models, targets, and impacts. Renewable and Sustainable Energy Reviews, 2022, 163, 112423.	16.4	58
65	Recent Progress, Challenges, and Prospects in Two-Dimensional Photo-Catalyst Materials and Environmental Remediation. Nano-Micro Letters, 2020, 12, 167.	27.0	57
66	Remarkable improvement in microwave absorption by cloaking a micro-scaled tetrapod hollow with helical carbon nanofibers. Physical Chemistry Chemical Physics, 2015, 17, 3024-3031.	2.8	54
67	Synergic Adsorptionâ€“Biodegradation by an Advanced Carrier for Enhanced Removal of High-Strength Nitrogen and Refractory Organics. ACS Applied Materials & Interfaces, 2017, 9, 13188-13200.	8.0	54
68	In Vivo and In Vitro Monitoring of Amyloid Aggregation via BSA@FGQDs Multimodal Probe. ACS Sensors, 2019, 4, 200-210.	7.8	54
69	An Upgraded Lithium Ion Battery Based on a Polymeric Separator Incorporated with Anode Active Materials. Advanced Energy Materials, 2019, 9, 1803627.	19.5	53
70	Bifunctional carbon-encapsulated FeSiAl hybrid flakes for enhanced microwave absorption properties and analysis of corrosion resistance. Journal of Alloys and Compounds, 2020, 828, 154079.	5.5	53
71	The role of nitrogen in transition-metal nitrides in electrochemical water splitting. Chem Catalysis, 2021, 1, 802-854.	6.1	53
72	Facile Synthesis of Three-Dimensional Sandwiched MnO₂@GCs@MnO₂ Hybrid Nanostructured Electrode for Electrochemical Capacitors. ACS Applied Materials & Interfaces, 2017, 9, 18872-18882.	8.0	52

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73	Bi₂O₃ monolayers from elemental liquid bismuth. Nanoscale, 2018, 10, 15615-15623.	5.6	52
74	Control over large-volume changes of lithium battery anodes via activeâ€“inactive metal alloy embedded in porous carbon. Nano Energy, 2015, 15, 755-765.	16.0	51
75	Enhanced Optical Performance of BaMgAl₁₀O₁₇:Eu²⁺ Phosphor by a Novel Method of Carbon Coating. Journal of Physical Chemistry C, 2016, 120, 2355-2361.	3.1	51
76	2D Layered Graphitic Carbon Nitride Sandwiched with Reduced Graphene Oxide as Nanoarchitectured Anode for Highly Stable Lithium-ion Battery. Electrochimica Acta, 2017, 237, 69-77.	5.2	51
77	Gas-Induced Formation of Cu Nanoparticle as Catalyst for High-Purity Straight and Helical Carbon Nanofibers. ACS Nano, 2012, 6, 8611-8619.	14.6	50
78	Photosensitization of TiO2 nanofibers by Ag2S with the synergistic effect of excess surface Ti3+ states for enhanced photocatalytic activity under simulated sunlight. Scientific Reports, 2017, 7, 255.	3.3	50
79	Cd-doping a facile approach for better thermoelectric transport properties of BiCuSeO oxyselenides. RSC Advances, 2016, 6, 33789-33797.	3.6	48
80	Recent advances in hybrid wet scrubbing techniques for NOx and SO2 removal: State of the art and future research. Chemosphere, 2021, 273, 129695.	8.2	45
81	High Capacity Retention Anode Material for Lithium Ion Battery. Electrochimica Acta, 2016, 211, 156-163.	5.2	44
82	Maximum piezoelectricity in a few unit-cell thick planar ZnO â€“ A liquid metal-based synthesis approach. Materials Today, 2021, 44, 69-77.	14.2	44
83	Graphene decorated polymeric flexible materials for lightweight high areal energy lithium-ion batteries. Applied Materials Today, 2019, 17, 123-129.	4.3	43
84	Preparation and microwave-absorbing property of BaFe₁₂O₁₉ nanoparticles and BaFe₁₂O₁₉/Fe₃C/CNTs composites. RSC Advances, 2015, 5, 91665-91669.	3.6	42
85	A mechanistic study of electrode materials for rechargeable batteries beyond lithium ions byin situtransmission electron microscopy. Energy and Environmental Science, 2021, 14, 2670-2707.	30.8	42
86	Non-isothermal oxidation kinetics of FeSiAl alloy powder for microwave absorption at high temperature. Composites Part B: Engineering, 2018, 155, 282-287.	12.0	41
87	A Visibleâ€Blind Photodetector and Artificial Optoelectronic Synapse Using Liquidâ€Metal Exfoliated ZnO Nanosheets. Advanced Optical Materials, 2021, 9, 2100449.	7.3	41
88	Preparation of high purity helical carbon nanofibers by the catalytic decomposition of acetylene and their growth mechanism. Carbon, 2010, 48, 4535-4541.	10.3	40
89	Pristine organo-imido polyoxometalates as an anode for lithium ion batteries. RSC Advances, 2014, 4, 7374.	3.6	40
90	Synthesis of high-purity CuO nanoleaves and analysis of their ethanol gas sensing properties. RSC Advances, 2015, 5, 34788-34794.	3.6	39

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91	Improved thermoelectric performance of BiCuSeO by Ag substitution at Cu site. Journal of Alloys and Compounds, 2017, 691, 572-577.	5.5	38
92	A review of helical carbon materials structure, synthesis and applications. Rare Metals, 2021, 40, 3-19.	7.1	38
93	Biocompatibility of iron carbide and detection of metals ions signaling proteomic analysis via HPLC/ESI-Orbitrap. Nano Research, 2017, 10, 1912-1923.	10.4	37
94	Self-tunable ultrathin carbon nanocups as the electrode material of sodium-ion batteries with unprecedented capacity and stability. Chemical Engineering Journal, 2019, 364, 578-588.	12.7	37
95	Sensing Applications of Atomically Thin Group IV Carbon Siblings Xenes: Progress, Challenges, and Prospects. Advanced Functional Materials, 2021, 31, 2005957.	14.9	37
96	Fluorinated graphite nanosheets for ultrahigh-capacity lithium primary batteries. Rare Metals, 2021, 40, 1708-1718.	7.1	35
97	Rationally designed La and Se co-doped bismuth ferrites with controlled bandgap for visible light photocatalysis. RSC Advances, 2019, 9, 17148-17156.	3.6	33
98	Raman and XPS depth profiling technique to investigate the corrosion behavior of FeSiAl alloy in salt spray environment. Journal of Alloys and Compounds, 2020, 834, 155075.	5.5	33
99	Phytotoxic Evaluation of Phytosynthesized Silver Nanoparticles on Lettuce. Coatings, 2021, 11, 225.	2.6	33
100	Polybenzimidazole functionalized electrolyte with Liâ€wetting and selfâ€fluorination functionalities for practical Li metal batteries. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	17.3	33
101	SnS₂/Graphene Composites: Excellent Anode Materials for Lithium Ion Battery and Photolysis Catalysts. Science of Advanced Materials, 2013, 5, 1667-1675.	0.7	33
102	Green-maturation of Cobalt-Oxide nano-sponges for reinforced bacterial apoptosis. Colloids and Interface Science Communications, 2021, 45, 100531.	4.1	32
103	Defect-Enhanced Electromagnetic Wave Absorption Property of Hierarchical Graphite Capsules@Helical Carbon Nanotube Hybrid Nanocomposites. ACS Applied Materials & Interfaces, 2021, 13, 28710-28720.	8.0	31
104	Semiconductor-to-metallic flipping in a ZnFe 2 O 4 â€“graphene based smart nano-system: Temperature/microwave magneto-dielectric spectroscopy. Materials Characterization, 2015, 99, 254-265.	4.4	30
105	Enhanced thermoelectric efficiency of Cu2âˆ'Seâ€“Cu2S composite by incorporating Cu2S nanoparticles. Ceramics International, 2016, 42, 8395-8401.	4.8	30
106	Exfoliation Behavior of van der Waals Strings: Case Study of Bi₂S₃. ACS Applied Materials & Interfaces, 2018, 10, 42603-42611.	8.0	30
107	Carbon Fibers Embedded With Iron Selenide (Fe3Se4) as Anode for High-Performance Sodium and Potassium Ion Batteries. Frontiers in Chemistry, 2020, 8, 408.	3.6	30
108	Large-scale preparation of 2D VSe2 through a defect-engineering approach for efficient hydrogen evolution reaction. Chemical Engineering Journal, 2021, 411, 128494.	12.7	30

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109	Mixed-dimensional heterostructures of hydrophobic/hydrophilic graphene foam for tunable hydrogen evolution reaction. Chemosphere, 2020, 245, 125607.	8.2	29
110	Physiological and anti-oxidative response of biologically and chemically synthesized iron oxide: Zea mays a case study. Heliyon, 2020, 6, e04595.	3.2	28
111	Vulnerability and Impact Analysis of the IEC 61850 GOOSE Protocol in the Smart Grid. Sensors, 2021, 21, 1554.	3.8	28
112	Foldable and scrollable graphene paper with tuned interlayer spacing as high areal capacity anodes for sodium-ion batteries. Energy Storage Materials, 2021, 41, 395-403.	18.0	28
113	Role of anions on structure and pseudocapacitive performance of metal double hydroxides decorated with nitrogen-doped graphene. Science China Materials, 2015, 58, 114-125.	6.3	27
114	Vaporâ€“Dissociationâ€“Solid Growth of Three-Dimensional Graphite-like Capsules with Delicate Morphology and Atomic-level Thickness Control. Crystal Growth and Design, 2016, 16, 5040-5048.	3.0	27
115	Evolution of 2D tin oxides on the surface of molten tin. Chemical Communications, 2018, 54, 2102-2105.	4.1	27
116	Twoâ€Step Synthesis of Largeâ€Area 2D Bi₂S₃ Nanosheets Featuring High Inâ€Plane Anisotropy. Advanced Materials Interfaces, 2020, 7, 2001131.	3.7	27
117	Inorganic/organic bilayer of silica/acrylic polyurethane decorating FeSiAl for enhanced anti-corrosive microwave absorption. Applied Surface Science, 2021, 567, 150829.	6.1	27
118	Superior Magnetoresistance Performance of Hybrid Graphene Foam/Metal Sulfide Nanocrystal Devices. ACS Applied Materials & Interfaces, 2019, 11, 19397-19403.	8.0	26
119	A novel strategy to motivate the luminescence efficiency of a phosphor: drilling nanoholes on the surface. Chemical Communications, 2018, 54, 3480-3483.	4.1	25
120	Oxidation behaviour of plasma-sprayed ZrB2-SiC coatings. Ceramics International, 2019, 45, 2385-2392.	4.8	25
121	Bifunctional water-electrolysis-catalysts meeting band-diagram analysis: case study of â€œFePâ€• electrodes. Journal of Materials Chemistry A, 2020, 8, 20021-20029.	10.3	25
122	Unlocking the potential of amorphous red phosphorus films as a long-term stable negative electrode for lithium batteries. Journal of Materials Chemistry A, 2017, 5, 1925-1929.	10.3	24
123	High-k 2D Sb₂O₃ Made Using a Substrate-Independent and Low-Temperature Liquid-Metal-Based Process. ACS Nano, 2021, 15, 16067-16075.	14.6	24
124	Synthesis of Loureirin B-Loaded Nanoliposomes for Pharmacokinetics in Rat Plasma. ACS Omega, 2019, 4, 6914-6922.	3.5	23
125	Ultrasensitive WSe₂ field-effect transistor-based biosensor for label-free detection of cancer in point-of-care applications. 2D Materials, 2021, 8, 045005.	4.4	23
126	An Efficient Route to Polymeric Electrolyte Membranes with Interparticle Chain Microstructure Toward Highâ€Temperature Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2017, 4, 1601236.	3.7	22

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127	Symmetrical growth of carbon nanotube arrays on FeSiAl micro-flake for enhancement of lithium-ion battery capacity. Carbon, 2022, 189, 93-103.	10.3	22
128	Large-scale synthesis of fluorine-free carbonyl iron-organic silicon hydrophobic absorbers with long term corrosion protection property. Nano Research, 2022, 15, 9479-9491.	10.4	22
129	Plasmonic metal-organic framework nanocomposites enabled by degenerately doped molybdenum oxides. Journal of Colloid and Interface Science, 2021, 588, 305-314.	9.4	21
130	Controllable synthesis of carbon coils and growth mechanism for twinning double-helix catalyzed by Ni nanoparticle. Composites Part B: Engineering, 2014, 61, 350-357.	12.0	20
131	Quantitative proteomic analysis of HeLa cells in response to biocompatible Fe₂C@C nanoparticles: ¹⁶O/¹⁸O-labelling & HPLC-ESI-orbit-trap profiling approach. Toxicology Research, 2018, 7, 84-92.	2.1	20
132	Direct observation of Eu atoms in AlN lattice and the firstâ€principles simulations. Journal of the American Ceramic Society, 2019, 102, 310-319.	3.8	20
133	Achieving ultra-low frequency microwave absorbing properties based on anti-corrosive silica-pinned flake FeSiAl hybrid with full L band absorption. Journal of Alloys and Compounds, 2021, 888, 161574.	5.5	20
134	Air plasma-induced carbon fluoride enabling active C F bonds for double-high energy/power densities of Li/CFx primary battery. Journal of Alloys and Compounds, 2022, 905, 164151.	5.5	20
135	Synthesis, characterization and optical properties of in situ ZnFe2O4 functionalized rGO nano hybrids through modified solvothermal approach. Optical Materials, 2015, 45, 69-75.	3.6	19
136	Graphene-Decorated Boronâ€“Carbonâ€“Nitride-Based Metal-Free Catalysts for an Enhanced Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2021, 4, 3861-3868.	5.1	19
137	Recent development in graphdiyne and its derivative materials for novel biomedical applications. Journal of Materials Chemistry B, 2021, 9, 9461-9484.	5.8	19
138	Catalytic growth of multi-walled carbon nanotubes using NiFe₂O₄ nanoparticles and incorporation into epoxy matrix for enhanced mechanical properties. Journal of Polymer Engineering, 2016, 36, 53-64.	1.4	18
139	Iron-doped zinc oxide for photocatalyzed degradation of humic acid from municipal wastewater. Applied Materials Today, 2021, 23, 101047.	4.3	18
140	Recent development in emerging phosphorene based novel materials: Progress, challenges, prospects and their fascinating sensing applications. Progress in Solid State Chemistry, 2022, 65, 100336.	7.2	18
141	Pronounced effect of ZnTe nanoinclusions on thermoelectric properties of Cu2â”x Se chalcogenides. Science China Materials, 2016, 59, 135-143.	6.3	17
142	Visualization of battery materials and their interfaces/interphases using cryogenic electron microscopy. Materials Today, 2022, 58, 238-274.	14.2	17
143	Nitrogen-Doped Oxygenated Molybdenum Phosphide as an Efficient Electrocatalyst for Hydrogen Evolution in Alkaline Media. Frontiers in Chemistry, 2020, 8, 733.	3.6	16
144	Multiplexing surface anchored functionalized iron carbide nanoparticle: A low molecular weight proteome responsive nano-tracer. Colloids and Surfaces B: Biointerfaces, 2021, 203, 111746.	5.0	16

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145	Thermally activated epoxy-functionalized carbon as an electrocatalyst for efficient NOx reduction. Carbon, 2021, 182, 516-524.	10.3	16
146	Synthesis and growth mechanism of various SiO 2 nanostructures from straight to helical morphologies. Composites Part B: Engineering, 2018, 149, 92-98.	12.0	15
147	Large magnetotransport properties in mixed-dimensional van der Waals heterostructures of graphene foam. Carbon, 2020, 159, 648-655.	10.3	15
148	A review for modified Li composite anode: Principle, preparation and challenge. Nanotechnology Reviews, 2020, 9, 1610-1624.	5.8	15
149	Hetero-metallic metal-organic frameworks for room-temperature NO2 sensing. Journal of Colloid and Interface Science, 2022, 610, 304-312.	9.4	15
150	Strain-regulated sensing properties of Î±-Fe2O3 nano-cylinders with atomic carbon layers for ethanol detection. Journal of Materials Science and Technology, 2021, 68, 132-139.	10.7	14
151	Highly accurate and label-free discrimination of single cancer cell using a plasmonic oxide-based nanoprobe. Biosensors and Bioelectronics, 2022, 198, 113814.	10.1	14
152	Electrical discharge approach for large-scale and high-thermostability FeCoNi Kovar alloy microwave absorbers covering the low-frequency bands. Journal of Alloys and Compounds, 2022, 907, 164509.	5.5	14
153	Investigation of electrical properties of pressureless sintered ZrB2-based ceramics. Ceramics International, 2019, 45, 7717-7722.	4.8	13
154	Synthesis of functional hydrochar from olive waste for simultaneous removal of azo and non-azo dyes from water. Chemical Engineering Journal Advances, 2022, 9, 100233.	5.2	13
155	Improved Blueâ€Emitting AlN:Eu²⁺ Phosphors by Alloying with GaN. Journal of the American Ceramic Society, 2015, 98, 3897-3904.	3.8	12
156	Solid waste for energy storage material as electrode of supercapacitors. Materials Letters, 2016, 181, 191-195.	2.6	12
157	Mechanistic study of graphitic carbon layer and nanosphere formation on the surface of T-ZnO. Inorganic Chemistry Frontiers, 2017, 4, 978-985.	6.0	12
158	Highâ€performance infrared emissivity of microâ€arc oxidation coatings formed on titanium alloy for aerospace applications. International Journal of Applied Ceramic Technology, 2018, 15, 579-591.	2.1	12
159	Carbon-decorated LiMn2O4 nanorods with enhanced performance for supercapacitors. Journal of Alloys and Compounds, 2019, 805, 624-630.	5.5	12
160	Synthesis of monolayer carbon-coated TiO2 as visible-light-responsive photocatalysts. Applied Materials Today, 2022, 27, 101498.	4.3	12
161	Enhancement in photoluminescence performance of carbon-decorated T-ZnO. Nanotechnology, 2015, 26, 125705.	2.6	11
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