

# Hongwei Zhu

## List of Publications by Year in descending order

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364  
papers

29,782  
citations

4370

86  
h-index

5806

161  
g-index

370  
all docs

370  
docs citations

370  
times ranked

32413  
citing authors

#	ARTICLE	IF	CITATIONS
1	Carbon Nanotube Sponges. <i>Advanced Materials</i> , 2010, 22, 617-621.	11.1	1,380
2	Graphene $\text{-On-Si}$ Silicon Schottky Junction Solar Cells. <i>Advanced Materials</i> , 2010, 22, 2743-2748.	11.1	1,042
3	Wearable and Highly Sensitive Graphene Strain Sensors for Human Motion Monitoring. <i>Advanced Functional Materials</i> , 2014, 24, 4666-4670.	7.8	923
4	Hydrothermal Synthesis and Pseudocapacitance Properties of MnO <sub>2</sub> Nanostructures. <i>Journal of Physical Chemistry B</i> , 2005, 109, 20207-20214.	1.2	903
5	Adsorption of methylene blue from aqueous solution by graphene. <i>Colloids and Surfaces B: Biointerfaces</i> , 2012, 90, 197-203.	2.5	635
6	Selective Ion Penetration of Graphene Oxide Membranes. <i>ACS Nano</i> , 2013, 7, 428-437.	7.3	635
7	Two-dimensional MoS <sub>2</sub> : Properties, preparation, and applications. <i>Journal of Materiomics</i> , 2015, 1, 33-44.	2.8	597
8	Recent advances in wearable tactile sensors: Materials, sensing mechanisms, and device performance. <i>Materials Science and Engineering Reports</i> , 2017, 115, 1-37.	14.8	557
9	Recent Developments in Graphene $\text{-Based}$ Membranes: Structure, Mass $\text{-Transport}$ Mechanism and Potential Applications. <i>Advanced Materials</i> , 2016, 28, 2287-2310.	11.1	540
10	Stretchable and highly sensitive graphene-on-polymer strain sensors. <i>Scientific Reports</i> , 2012, 2, 870.	1.6	517
11	Graphene and related two-dimensional materials: Structure-property relationships for electronics and optoelectronics. <i>Applied Physics Reviews</i> , 2017, 4, .	5.5	476
12	Hydrogen Uptake in Boron Nitride Nanotubes at Room Temperature. <i>Journal of the American Chemical Society</i> , 2002, 124, 7672-7673.	6.6	424
13	Role of Interfacial Oxide in High-Efficiency Graphene $\text{-Si}$ Silicon Schottky Barrier Solar Cells. <i>Nano Letters</i> , 2015, 15, 2104-2110.	4.5	404
14	High Detectivity Graphene $\text{-Si}$ Silicon Heterojunction Photodetector. <i>Small</i> , 2016, 12, 595-601.	5.2	370
15	Engineering graphene and TMDs based van der Waals heterostructures for photovoltaic and photoelectrochemical solar energy conversion. <i>Chemical Society Reviews</i> , 2018, 47, 4981-5037.	18.7	344
16	Highly Sensitive, Wearable, Durable Strain Sensors and Stretchable Conductors Using Graphene/Silicon Rubber Composites. <i>Advanced Functional Materials</i> , 2016, 26, 7614-7625.	7.8	339
17	Nanostructured MnO <sub>2</sub> : Hydrothermal synthesis and electrochemical properties as a supercapacitor electrode material. <i>Journal of Power Sources</i> , 2006, 159, 361-364.	4.0	336
18	Selective Trans-Membrane Transport of Alkali and Alkaline Earth Cations through Graphene Oxide Membranes Based on Cation $\text{-}$ Interactions. <i>ACS Nano</i> , 2014, 8, 850-859.	7.3	333

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19	Graphene Reinforced Carbon Nanotube Networks for Wearable Strain Sensors. <i>Advanced Functional Materials</i> , 2016, 26, 2078-2084.	7.8	328
20	Large-Area Ultrathin Graphene Films by Single-Step Marangoni Self-Assembly for Highly Sensitive Strain Sensing Application. <i>Advanced Functional Materials</i> , 2016, 26, 1322-1329.	7.8	326
21	Recent advances in transition-metal-sulfide-based bifunctional electrocatalysts for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 5320-5363.	5.2	322
22	Applications of carbon materials in photovoltaic solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2009, 93, 1461-1470.	3.0	318
23	The physics and chemistry of graphene-on-surfaces. <i>Chemical Society Reviews</i> , 2017, 46, 4417-4449.	18.7	309
24	Colloidal Antireflection Coating Improves Graphene-Silicon Solar Cells. <i>Nano Letters</i> , 2013, 13, 1776-1781.	4.5	303
25	Core-Double-Shell, Carbon Nanotube@Polypyrrole@MnO <sub>2</sub> Sponge as Freestanding, Compressible Supercapacitor Electrode. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 5228-5234.	4.0	298
26	Recyclable carbon nanotube sponges for oil absorption. <i>Acta Materialia</i> , 2011, 59, 4798-4804.	3.8	276
27	Adsorption of fluoride from aqueous solution by graphene. <i>Journal of Colloid and Interface Science</i> , 2011, 363, 348-354.	5.0	271
28	A Wearable and Highly Sensitive Graphene Strain Sensor for Precise Home-Based Pulse Wave Monitoring. <i>ACS Sensors</i> , 2017, 2, 967-974.	4.0	260
29	Tactile Sensing System Based on Arrays of Graphene Woven Microfabrics: Electromechanical Behavior and Electronic Skin Application. <i>ACS Nano</i> , 2015, 9, 10867-10875.	7.3	258
30	Structural engineering of gold thin films with channel cracks for ultrasensitive strain sensing. <i>Materials Horizons</i> , 2016, 3, 248-255.	6.4	249
31	Tribological properties of oleic acid-modified graphene as lubricant oil additives. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 205303.	1.3	232
32	Achieving High Efficiency Silicon-Carbon Nanotube Heterojunction Solar Cells by Acid Doping. <i>Nano Letters</i> , 2011, 11, 1901-1905.	4.5	230
33	Recent advances in friction and lubrication of graphene and other 2D materials: Mechanisms and applications. <i>Friction</i> , 2019, 7, 199-216.	3.4	227
34	Soft, Highly Conductive Nanotube Sponges and Composites with Controlled Compressibility. <i>ACS Nano</i> , 2010, 4, 2320-2326.	7.3	219
35	Graphene/Silicon Nanowire Schottky Junction for Enhanced Light Harvesting. <i>ACS Applied Materials &amp; Interfaces</i> , 2011, 3, 721-725.	4.0	214
36	Superstretchable Spring-Like Carbon Nanotube Ropes. <i>Advanced Materials</i> , 2012, 24, 2896-2900.	11.1	193

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37	Graphene sheets from worm-like exfoliated graphite. <i>Journal of Materials Chemistry</i> , 2009, 19, 3367.	6.7	189
38	Equilibrium, kinetic and thermodynamic studies on the adsorption of phenol onto graphene. <i>Materials Research Bulletin</i> , 2012, 47, 1898-1904.	2.7	185
39	Directly Drawing Self-Assembled, Porous, and Monolithic Graphene Fiber from Chemical Vapor Deposition Grown Graphene Film and Its Electrochemical Properties. <i>Langmuir</i> , 2011, 27, 12164-12171.	1.6	179
40	Graphene/polyaniline woven fabric composite films as flexible supercapacitor electrodes. <i>Nanoscale</i> , 2015, 7, 7318-7322.	2.8	175
41	Boron Doping of Graphene for Graphene/Silicon Junction Solar Cells. <i>Advanced Energy Materials</i> , 2012, 2, 425-429.	10.2	169
42	Effect of different gel electrolytes on graphene-based solid-state supercapacitors. <i>RSC Advances</i> , 2014, 4, 36253-36256.	1.7	163
43	Long-Cycle Electrochemical Behavior of Multiwall Carbon Nanotubes Synthesized on Stainless Steel in Li Ion Batteries. <i>Advanced Functional Materials</i> , 2009, 19, 1008-1014.	7.8	159
44	Carbon/Silicon Heterojunction Solar Cells: State of the Art and Prospects. <i>Advanced Materials</i> , 2015, 27, 6549-6574.	11.1	159
45	Multifunctional graphene woven fabrics. <i>Scientific Reports</i> , 2012, 2, 395.	1.6	156
46	Flexible all solid-state supercapacitors based on chemical vapor deposition derived graphene fibers. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 17752.	1.3	156
47	Graphene/semiconductor heterojunction solar cells with modulated antireflection and graphene work function. <i>Energy and Environmental Science</i> , 2013, 6, 108-115.	15.6	154
48	Single-layer nanosheets with exceptionally high and anisotropic hydroxyl ion conductivity. <i>Science Advances</i> , 2017, 3, e1602629.	4.7	154
49	Cobalt and nickel selenide nanowalls anchored on graphene as bifunctional electrocatalysts for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14789-14795.	5.2	150
50	Ultra-sensitive graphene strain sensor for sound signal acquisition and recognition. <i>Nano Research</i> , 2015, 8, 1627-1636.	5.8	149
51	Alcohol-assisted room temperature synthesis of different nanostructured manganese oxides and their pseudocapacitance properties in neutral electrolyte. <i>Chemical Physics Letters</i> , 2008, 453, 242-249.	1.2	148
52	TiO <sub>2</sub> -Coated Carbon Nanotube-Silicon Solar Cells with Efficiency of 15%. <i>Scientific Reports</i> , 2012, 2, 884.	1.6	141
53	Ion doping of graphene for high-efficiency heterojunction solar cells. <i>Nanoscale</i> , 2013, 5, 1945.	2.8	136
54	Enhancing Capacitance Performance of Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene as Electrode Materials of Supercapacitor: From Controlled Preparation to Composite Structure Construction. <i>Nano-Micro Letters</i> , 2020, 12, 77.	14.4	136

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55	Broadband Graphene Saturable Absorber for Pulsed Fiber Lasers at 1, 1.5, and 2 $\mu$ m. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 411-415.	1.9	133
56	Scalable Low-Band-Gap Sb <sub>2</sub> Se <sub>3</sub> Thin-Film Photocathodes for Efficient Visible-Near-Infrared Solar Hydrogen Evolution. ACS Nano, 2017, 11, 12753-12763.	7.3	127
57	Graphene Nano-patches on a Carbon Nanotube Network for Highly Transparent/Conductive Thin Film Applications. Journal of Physical Chemistry C, 2010, 114, 14008-14012.	1.5	125
58	Simultaneous High Sensitivity Sensing of Temperature and Humidity with Graphene Woven Fabrics. ACS Applied Materials & Interfaces, 2017, 9, 30171-30176.	4.0	122
59	Flexible, temperature-tolerant supercapacitor based on hybrid carbon film electrodes. Nano Energy, 2017, 40, 224-232.	8.2	121
60	Graphene: Fundamental research and potential applications. FlatChem, 2017, 4, 20-32.	2.8	120
61	Ultrasensitive and Stretchable Strain Sensors Based on Maze-like Vertical Graphene Network. ACS Applied Materials & Interfaces, 2018, 10, 36312-36322.	4.0	116
62	High Rate Reversibility Anode Materials of Lithium Batteries from Vapor-Grown Carbon Nanofibers. Journal of Physical Chemistry B, 2006, 110, 7178-7183.	1.2	115
63	Carbon nanotube-polypyrrole core-shell sponge and its application as highly compressible supercapacitor electrode. Nano Research, 2014, 7, 209-218.	5.8	115
64	Three-dimensional porous graphene sponges assembled with the combination of surfactant and freeze-drying. Nano Research, 2014, 7, 1477-1487.	5.8	111
65	Formation of Uniform Water Microdroplets on Wrinkled Graphene for Ultrafast Humidity Sensing. Small, 2018, 14, e1703848.	5.2	109
66	High-Response Room-Temperature NO <sub>2</sub> Sensor and Ultrafast Humidity Sensor Based on SnO <sub>2</sub> with Rich Oxygen Vacancy. ACS Applied Materials & Interfaces, 2019, 11, 13441-13449.	4.0	108
67	Carbon nanotube filaments in household light bulbs. Applied Physics Letters, 2004, 84, 4869-4871.	1.5	105
68	Graphene oxide-in-polymer nanofiltration membranes with enhanced permeability by interfacial polymerization. Journal of Membrane Science, 2018, 564, 813-819.	4.1	105
69	Vertical junction photodetectors based on reduced graphene oxide/silicon Schottky diodes. Nanoscale, 2014, 6, 4909-4914.	2.8	104
70	Self-Assembled Graphene Film as Low Friction Solid Lubricant in Macroscale Contact. ACS Applied Materials & Interfaces, 2017, 9, 21554-21562.	4.0	103
71	Anomalous Behaviors of Graphene Transparent Conductors in Graphene-Silicon Heterojunction Solar Cells. Advanced Energy Materials, 2013, 3, 1029-1034.	10.2	102
72	Highly deformation-tolerant carbon nanotube sponges as supercapacitor electrodes. Nanoscale, 2013, 5, 8472.	2.8	101

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73	Hybrid Heterojunction and Photoelectrochemistry Solar Cell Based on Silicon Nanowires and Double-Walled Carbon Nanotubes. <i>Nano Letters</i> , 2009, 9, 4338-4342.	4.5	98
74	Encapsulated carbon nanotube-oxide-silicon solar cells with stable 10% efficiency. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	98
75	Enhanced photovoltaic properties in graphene/polycrystalline BiFeO <sub>3</sub> /Pt heterojunction structure. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	97
76	Novel Microwave Synthesis of Nanocrystalline SnO <sub>2</sub> and Its Electrochemical Properties. <i>Journal of Physical Chemistry C</i> , 2008, 112, 4550-4556.	1.5	95
77	Carbon nanotube sponge filters for trapping nanoparticles and dye molecules from water. <i>Chemical Communications</i> , 2010, 46, 7966.	2.2	95
78	Highly dispersed Au nanoparticles immobilized on Zr-based metal-organic frameworks as heterostructured catalyst for CO oxidation. <i>Journal of Materials Chemistry A</i> , 2013, 1, 14294.	5.2	95
79	Highly efficient quasi-static water desalination using monolayer graphene oxide/titania hybrid laminates. <i>NPG Asia Materials</i> , 2015, 7, e162-e162.	3.8	94
80	Atomic-Resolution Imaging of the Nucleation Points of Single-Walled Carbon Nanotubes. <i>Small</i> , 2005, 1, 1180-1183.	5.2	93
81	Determination of band gaps of self-assembled carbon nanotube films using Tauc/Davis-Mott model. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 97, 341-344.	1.1	92
82	Graphene oxide as a water transporter promoting germination of plants in soil. <i>Nano Research</i> , 2018, 11, 1928-1937.	5.8	92
83	Cation-Interactions in Graphene-Containing Systems for Water Treatment and Beyond. <i>Advanced Materials</i> , 2020, 32, e1905756.	11.1	92
84	Precise Control of the Number of Layers of Graphene by Picosecond Laser Thinning. <i>Scientific Reports</i> , 2015, 5, 11662.	1.6	91
85	Carbon Nanotube and CdSe Nanobelt Schottky Junction Solar Cells. <i>Nano Letters</i> , 2010, 10, 3583-3589.	4.5	90
86	Shape anisotropic Fe <sub>3</sub> O <sub>4</sub> nanotubes for efficient microwave absorption. <i>Nano Research</i> , 2020, 13, 621-629.	5.8	90
87	Anthocyanin-sensitized solar cells using carbon nanotube films as counter electrodes. <i>Nanotechnology</i> , 2008, 19, 465204.	1.3	88
88	Highly Twisted Double-Helix Carbon Nanotube Yarns. <i>ACS Nano</i> , 2013, 7, 1446-1453.	7.3	88
89	Graphene oxide-embedded polyamide nanofiltration membranes for selective ion separation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 25632-25640.	5.2	88
90	Hydrogen uptake by graphitized multi-walled carbon nanotubes under moderate pressure and at room temperature. <i>Carbon</i> , 2001, 39, 2077-2079.	5.4	86

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91	Graphene-based transparent conductive electrodes for GaN-based light emitting diodes: Challenges and countermeasures. <i>Nano Energy</i> , 2015, 12, 419-436.	8.2	86
92	Highly Flexible and Adaptable, All-Solid-State Supercapacitors Based on Graphene Woven Fabric Film Electrodes. <i>Small</i> , 2014, 10, 2583-2588.	5.2	85
93	A Bubble-Derived Strategy to Prepare Multiple Graphene-Based Porous Materials. <i>Advanced Functional Materials</i> , 2018, 28, 1705879.	7.8	85
94	<i>In-Situ</i> Formation of Sandwiched Structures of Nanotube/Cu <sub>x</sub> O <sub>y</sub> /Cu Composites for Lithium Battery Applications. <i>ACS Nano</i> , 2009, 3, 2177-2184.	7.3	84
95	Dynamically stretchable supercapacitors based on graphene woven fabric electrodes. <i>Nano Energy</i> , 2015, 15, 83-91.	8.2	84
96	Efficiency enhancement of graphene/silicon-pillar-array solar cells by HNO <sub>3</sub> and PEDOT-PSS. <i>Nanoscale</i> , 2012, 4, 2130.	2.8	81
97	Large area, highly transparent carbon nanotube spiderwebs for energy harvesting. <i>Journal of Materials Chemistry</i> , 2010, 20, 7236.	6.7	76
98	Graphene based Schottky junction solar cells on patterned silicon-pillar-array substrate. <i>Applied Physics Letters</i> , 2011, 99, 233505.	1.5	76
99	Protecting carbon steel from corrosion by laser in situ grown graphene films. <i>Carbon</i> , 2015, 94, 326-334.	5.4	76
100	Ultrafast liquid water transport through graphene-based nanochannels measured by isotope labelling. <i>Chemical Communications</i> , 2015, 51, 3251-3254.	2.2	74
101	Boosting supercapacitor performance of carbon fibres using electrochemically reduced graphene oxide additives. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 19550.	1.3	73
102	Sponge-like nickel phosphide-carbon nanotube hybrid electrodes for efficient hydrogen evolution over a wide pH range. <i>Nano Research</i> , 2017, 10, 415-425.	5.8	73
103	In-situ synthesis of carbon nanotube/graphene composite sponge and its application as compressible supercapacitor electrode. <i>Electrochimica Acta</i> , 2015, 157, 134-141.	2.6	72
104	Photo-Promoted Platinum Nanoparticles Decorated MoS <sub>2</sub> @Graphene Woven Fabric Catalyst for Efficient Hydrogen Generation. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 10866-10873.	4.0	72
105	Preparation of highly pure double-walled carbon nanotubes. <i>Journal of Materials Chemistry</i> , 2003, 13, 1340.	6.7	70
106	Solution-processed CuSbS <sub>2</sub> thin film: A promising earth-abundant photocathode for efficient visible-light-driven hydrogen evolution. <i>Nano Energy</i> , 2016, 28, 135-142.	8.2	70
107	Direct Synthesis of Graphene Quantum Dots by Chemical Vapor Deposition. <i>Particle and Particle Systems Characterization</i> , 2013, 30, 764-769.	1.2	69
108	The Interaction between Quantum Dots and Graphene: The Applications in Graphene-Based Solar Cells and Photodetectors. <i>Advanced Functional Materials</i> , 2018, 28, 1804712.	7.8	69

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109	The effect of sulfur on the number of layers in a carbon nanotube. <i>Carbon</i> , 2007, 45, 2152-2158.	5.4	68
110	Strong and reversible modulation of carbon nanotube-silicon heterojunction solar cells by an interfacial oxide layer. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 8391.	1.3	68
111	Flame synthesis of few-layered graphene/graphite films. <i>Chemical Communications</i> , 2011, 47, 3520.	2.2	67
112	Graphene-CdSe nanobelt solar cells with tunable configurations. <i>Nano Research</i> , 2011, 4, 891-900.	5.8	67
113	Reduced graphene oxide/hierarchical flower-like zinc oxide hybrid films for room temperature formaldehyde detection. <i>Sensors and Actuators B: Chemical</i> , 2015, 221, 1290-1298.	4.0	67
114	Nacre-Inspired, Liquid Metal-Based Ultrasensitive Electronic Skin by Spatially Regulated Cracking Strategy. <i>Advanced Functional Materials</i> , 2021, 31, 2102359.	7.8	67
115	Synthesis of boron nitride nanofibers and measurement of their hydrogen uptake capacity. <i>Applied Physics Letters</i> , 2002, 81, 5225-5227.	1.5	66
116	Intrinsic high water/ion selectivity of graphene oxide lamellar membranes in concentration gradient-driven diffusion. <i>Chemical Science</i> , 2016, 7, 6988-6994.	3.7	66
117	Direct fabrication of single-walled carbon nanotube macro-films on flexible substrates. <i>Chemical Communications</i> , 2007, , 3042.	2.2	65
118	A strategy to control the chirality of single-walled carbon nanotubes. <i>Journal of Crystal Growth</i> , 2008, 310, 5473-5476.	0.7	65
119	Polymer-Coated Graphene Aerogel Beads and Supercapacitor Application. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 11179-11187.	4.0	65
120	Structural Characterizations of Long Single-Walled Carbon Nanotube Strands. <i>Nano Letters</i> , 2002, 2, 1105-1107.	4.5	63
121	Highly conductive, twistable and bendable polypyrrole-carbon nanotube fiber for efficient supercapacitor electrodes. <i>RSC Advances</i> , 2015, 5, 22015-22021.	1.7	63
122	Small Temperature Coefficient of Resistivity of Graphene/Graphene Oxide Hybrid Membranes. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 9563-9571.	4.0	62
123	Large-Area Flexible Core-Shell Graphene/Porous Carbon Woven Fabric Films for Fiber Supercapacitor Electrodes. <i>Advanced Functional Materials</i> , 2013, 23, 4862-4869.	7.8	62
124	Role of hydrogen in the chemical vapor deposition growth of MoS <sub>2</sub> atomic layers. <i>Nanoscale</i> , 2015, 7, 8398-8404.	2.8	62
125	Carbon nanotube sponges as conductive networks for supercapacitor devices. <i>Nano Energy</i> , 2013, 2, 1025-1030.	8.2	61
126	Fabrication of large area hexagonal boron nitride thin films for bendable capacitors. <i>Nano Research</i> , 2013, 6, 602-610.	5.8	61



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127	The grapheneâ€“semiconductor Schottky junction. <i>Physics Today</i> , 2016, 69, 46-51.	0.3	61
128	Twin Structure in BiVO <sub>4</sub> Photoanodes Boosting Water Oxidation Performance through Enhanced Charge Separation and Transport. <i>Advanced Energy Materials</i> , 2018, 8, 1802198.	10.2	61
129	Raman study on double-walled carbon nanotubes. <i>Chemical Physics Letters</i> , 2003, 376, 753-757.	1.2	58
130	A Facile Route to Isotropic Conductive Nanocomposites by Direct Polymer Infiltration of Carbon Nanotube Sponges. <i>ACS Nano</i> , 2011, 5, 4276-4283.	7.3	58
131	Highly Stretchable, Adaptable, and Durable Strain Sensing Based on a Bioinspired Dynamically Cross-Linked Graphene/Polymer Composite. <i>Small</i> , 2019, 15, e1900848.	5.2	58
132	High-quality textured SnSe thin films for self-powered, rapid-response photothermoelectric application. <i>Nano Energy</i> , 2020, 72, 104742.	8.2	58
133	Synthesis of nitrogen-doped carbon thin films and their applications in solar cells. <i>Carbon</i> , 2011, 49, 5022-5028.	5.4	56
134	Discrete breathers in hydrogenated graphene. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 305302.	1.3	56
135	Highly selective charge-guided ion transport through a hybrid membrane consisting of anionic graphene oxide and cationic hydroxide nanosheet superlattice units. <i>NPG Asia Materials</i> , 2016, 8, e259-e259.	3.8	56
136	Three-dimensional Sponges with Super Mechanical Stability: Harnessing True Elasticity of Individual Carbon Nanotubes in Macroscopic Architectures. <i>Scientific Reports</i> , 2016, 6, 18930.	1.6	56
137	Synthetic Multifunctional Graphene Composites with Reshaping and Self-Healing Features via a Facile Biomimetic Process. <i>Advanced Materials</i> , 2018, 30, e1803004.	11.1	55
138	Thermal conductivity of silicene nanosheets and the effect of isotopic doping. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 165301.	1.3	54
139	Photo-induced selective gas detection based on reduced graphene oxide/Si Schottky diode. <i>Carbon</i> , 2015, 84, 138-145.	5.4	53
140	Carbon nanotube films by filtration for nanotube-silicon heterojunction solar cells. <i>Materials Research Bulletin</i> , 2010, 45, 1401-1405.	2.7	52
141	Direct laser fabrication of large-area and patterned graphene at room temperature. <i>Carbon</i> , 2014, 68, 784-790.	5.4	52
142	A highly efficient Fe-doped Ni <sub>3</sub> S <sub>2</sub> electrocatalyst for overall water splitting. <i>Nano Research</i> , 2021, 14, 4740-4747.	5.8	52
143	Low-temperature synthesis of multilayer graphene/amorphous carbon hybrid films and their potential application in solar cells. <i>Nanoscale Research Letters</i> , 2012, 7, 453.	3.1	51
144	High flux nanofiltration membranes prepared with a graphene oxide homo-structure. <i>Journal of Membrane Science</i> , 2019, 585, 29-37.	4.1	51

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145	Widely Spaced Bound States in a Soliton Fiber Laser With Graphene Saturable Absorber. IEEE Photonics Technology Letters, 2013, 25, 1184-1187.	1.3	49
146	Torsion sensors of high sensitivity and wide dynamic range based on a graphene woven structure. Nanoscale, 2014, 6, 13053-13059.	2.8	48
147	Polyaniline/graphene/carbon fiber ternary composites as supercapacitor electrodes. Materials Letters, 2015, 140, 43-47.	1.3	48
148	Solar Cells and Light Sensors Based on Nanoparticle-Grafted Carbon Nanotube Films. ACS Nano, 2010, 4, 2142-2148.	7.3	47
149	TiO <sub>2</sub> enhanced ultraviolet detection based on a graphene/Si Schottky diode. Journal of Materials Chemistry A, 2015, 3, 8133-8138.	5.2	46
150	Growth mechanism of Y-junction carbon nanotubes. Diamond and Related Materials, 2002, 11, 1349-1352.	1.8	45
151	Flexible graphene woven fabrics for touch sensing. Applied Physics Letters, 2013, 102, .	1.5	45
152	Polymer-coated graphene films as anti-reflective transparent electrodes for Schottky junction solar cells. Journal of Materials Chemistry A, 2016, 4, 13795-13802.	5.2	44
153	Research Progress in Application of 2D Materials in Liquid-Phase Lubrication System. Materials, 2018, 11, 1314.	1.3	44
154	Polymer solar cells with gold nanoclusters decorated multi-layer graphene as transparent electrode. Applied Physics Letters, 2011, 99, 223302.	1.5	43
155	Hybrid Heterojunction and Solid-State Photoelectrochemical Solar Cells. Advanced Energy Materials, 2014, 4, 1400224.	10.2	43
156	A large area, flexible polyaniline/buckypaper composite with a core-shell structure for efficient supercapacitors. Journal of Materials Chemistry A, 2014, 2, 5898-5902.	5.2	43
157	Topology evolution of graphene in chemical vapor deposition, a combined theoretical/experimental approach toward shape control of graphene domains. Nanotechnology, 2012, 23, 115605.	1.3	42
158	Selective Ion Transport through Functionalized Graphene Membranes Based on Delicate Ion-Graphene Interactions. Journal of Physical Chemistry C, 2014, 118, 19396-19401.	1.5	41
159	Doped carbon nanotube array with a gradient of nitrogen concentration. Carbon, 2010, 48, 3097-3102.	5.4	40
160	Interfacial shear strength of reduced graphene oxide polymer composites. Carbon, 2014, 77, 390-397.	5.4	40
161	Room-temperature out-of-plane and in-plane ferroelectricity of two-dimensional $\text{In}_2\text{Se}_3$ nanoflakes. Applied Physics Letters, 2019, 114, .	1.5	40
162	Magnetic transitions in graphene derivatives. Nano Research, 2014, 7, 1507-1518.	5.8	39

#	ARTICLE	IF	CITATIONS
163	Effective recovery of acids from iron-based electrolytes using graphene oxide membrane filters. <i>Journal of Materials Chemistry A</i> , 2014, 2, 7734-7737.	5.2	39
164	Efficient photovoltaic conversion of graphene-carbon nanotube hybrid films grown from solid precursors. <i>2D Materials</i> , 2015, 2, 034003.	2.0	38
165	Research Progress of the Liquid-Phase Exfoliation and Stable Dispersion Mechanism and Method of Graphene. <i>Frontiers in Materials</i> , 2019, 6, .	1.2	38
166	Machine Learning for Transition-Metal-Based Hydrogen Generation Electrocatalysts. <i>ACS Catalysis</i> , 2021, 11, 3930-3937.	5.5	38
167	Structural identification of single and double-walled carbon nanotubes by high-resolution transmission electron microscopy. <i>Chemical Physics Letters</i> , 2005, 412, 116-120.	1.2	37
168	Controllable growth of shaped graphene domains by atmospheric pressure chemical vapour deposition. <i>Nanoscale</i> , 2011, 3, 4946.	2.8	37
169	Photocatalytic, recyclable CdS nanoparticle-carbon nanotube hybrid sponges. <i>Nano Research</i> , 2012, 5, 265-271.	5.8	37
170	Realizing Synchronous Energy Harvesting and Ion Separation with Graphene Oxide Membranes. <i>Scientific Reports</i> , 2014, 4, 5528.	1.6	37
171	Cellulose-Templated Graphene Monoliths with Anisotropic Mechanical, Thermal, and Electrical Properties. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 19145-19152.	4.0	37
172	Electro- and Magneto-Modulated Ion Transport through Graphene Oxide Membranes. <i>Scientific Reports</i> , 2014, 4, 6798.	1.6	37
173	Hydroxyapatite/Mesoporous Graphene/Single-Walled Carbon Nanotubes Freestanding Flexible Hybrid Membranes for Regenerative Medicine. <i>Advanced Functional Materials</i> , 2016, 26, 7965-7974.	7.8	37
174	Nanocellulose-Graphene Hybrids: Advanced Functional Materials as Multifunctional Sensing Platform. <i>Nano-Micro Letters</i> , 2021, 13, 94.	14.4	37
175	Photoinduced molecular desorption from graphene films. <i>Applied Physics Letters</i> , 2012, 101, 053107.	1.5	36
176	Fiber and fabric solar cells by directly weaving carbon nanotube yarns with CdSe nanowire-based electrodes. <i>Nanoscale</i> , 2012, 4, 4954.	2.8	36
177	High resolution non-invasive intraocular pressure monitoring by use of graphene woven fabrics on contact lens. <i>Microsystems and Nanoengineering</i> , 2019, 5, 39.	3.4	35
178	Graphene oxide quantum dots embedded polysulfone membranes with enhanced hydrophilicity, permeability and antifouling performance. <i>Science China Materials</i> , 2019, 62, 1177-1187.	3.5	35
179	Efficient energy conversion of nanotube/nanowire-based solar cells. <i>Chemical Communications</i> , 2010, 46, 5533.	2.2	34
180	Enhanced light emission of GaN-based diodes with a NiOx/graphene hybrid electrode. <i>Nanoscale</i> , 2012, 4, 5852.	2.8	34

#	ARTICLE	IF	CITATIONS
181	Highly Efficient NiFe Nanoparticle Decorated Si Photoanode for Photoelectrochemical Water Oxidation. <i>Chemistry of Materials</i> , 2019, 31, 171-178.	3.2	34
182	Nanostructured manganese oxides and their composites with carbon nanotubes as electrode materials for energy storage devices. <i>Pure and Applied Chemistry</i> , 2008, 80, 2327-2343.	0.9	33
183	Hybrid thin films of graphene nanowhiskers and amorphous carbon as transparent conductors. <i>Chemical Communications</i> , 2010, 46, 3502.	2.2	33
184	Bio-inspired mechanics of highly sensitive stretchable graphene strain sensors. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	33
185	One-step synthesis of a hierarchical self-supported WS <sub>2</sub> film for efficient electrocatalytic hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 22405-22411.	5.2	33
186	Transparent Electrothermal Film Defoggers and Antiicing Coatings based on Wrinkled Graphene. <i>Small</i> , 2020, 16, e1905945.	5.2	33
187	Electronic properties of double-walled carbon nanotube films. <i>Carbon</i> , 2003, 41, 2495-2500.	5.4	32
188	Suppression of the coffee-ring effect by self-assembling graphene oxide and monolayer titania. <i>Nanotechnology</i> , 2013, 24, 075601.	1.3	32
189	Passive harmonic mode locking in erbium-doped fiber laser with graphene saturable absorber. <i>Optics Communications</i> , 2013, 286, 304-308.	1.0	32
190	Galvanism of continuous ionic liquid flow over graphene grids. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	32
191	Hierarchically Mesostructured Aluminum Current Collector for Enhancing the Performance of Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 16572-16580.	4.0	32
192	Microwave absorbing properties and magnetic properties of different carbon nanotubes. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 227-231.	0.9	31
193	Physically Coating Nanofiltration Membranes with Graphene Oxide Quantum Dots for Simultaneously Improved Water Permeability and Salt/Dye Rejection. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801742.	1.9	31
194	Hydrogen storage in heat-treated carbon nanofibers prepared by the vertical floating catalyst method. <i>Materials Chemistry and Physics</i> , 2003, 78, 670-675.	2.0	30
195	Annealed InGaN green light-emitting diodes with graphene transparent conductive electrodes. <i>Journal of Applied Physics</i> , 2012, 111, 114501.	1.1	30
196	Generation of 35-nJ Nanosecond Pulse From a Passively Mode-Locked Tm, Ho-Codoped Fiber Laser With Graphene Saturable Absorber. <i>IEEE Photonics Technology Letters</i> , 2013, 25, 1447-1449.	1.3	30
197	Large area high-performance bismuth vanadate photoanode for efficient solar water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3845-3850.	5.2	30
198	Structure Evolution of Graphene Oxide during Thermally Driven Phase Transformation: Is the Oxygen Content Really Preserved?. <i>PLoS ONE</i> , 2014, 9, e111908.	1.1	29

#	ARTICLE	IF	CITATIONS
199	A porous graphene/polydimethylsiloxane composite by chemical foaming for simultaneous tensile and compressive strain sensing. <i>FlatChem</i> , 2018, 10, 1-7.	2.8	29
200	Graphene Oxide Promoted Cadmium Uptake by Rice in Soil. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 10283-10292.	3.2	29
201	Graphitization behavior of carbon nanofibers prepared by the floating catalyst method. <i>Materials Letters</i> , 2000, 43, 291-294.	1.3	28
202	Self-Assembled Graphene Membrane as an Ultrafast Mode-Locker in an Erbium Fiber Laser. <i>IEEE Photonics Technology Letters</i> , 2011, 23, 1790-1792.	1.3	28
203	Evaluation of layer-by-layer graphene structures as supercapacitor electrode materials. <i>Journal of Applied Physics</i> , 2014, 115, 024305.	1.1	28
204	Flow-induced voltage generation in graphene network. <i>Nano Research</i> , 2015, 8, 2467-2473.	5.8	28
205	Graphene oxide as an antimicrobial agent can extend the vase life of cut flowers. <i>Nano Research</i> , 2018, 11, 6010-6022.	5.8	28
206	Partially sandwiched graphene as transparent conductive layer for InGaN-based vertical light emitting diodes. <i>Applied Physics Letters</i> , 2012, 101, 061102.	1.5	26
207	Electrical and thermal properties of a carbon nanotube/polycrystalline BiFeO <sub>3</sub> /Pt photovoltaic heterojunction with CdSe quantum dots sensitization. <i>Nanoscale</i> , 2012, 4, 2926.	2.8	26
208	In Situ Fabrication of Bendable Microscale Hexagonal Pyramids Array Vertical Light Emitting Diodes with Graphene as Stretchable Electrical Interconnects. <i>ACS Photonics</i> , 2014, 1, 421-429.	3.2	26
209	Strong Adhesion of Graphene Oxide Coating on Polymer Separation Membranes. <i>Langmuir</i> , 2018, 34, 10569-10579.	1.6	26
210	Improved transport properties of graphene/GaN junctions in GaN-based vertical light emitting diodes by acid doping. <i>RSC Advances</i> , 2013, 3, 3359.	1.7	25
211	Foldable and electrically stable graphene film resistors prepared by vacuum filtration for flexible electronics. <i>Surface and Coatings Technology</i> , 2016, 299, 22-28.	2.2	25
212	Efficient photoelectrochemical water oxidation enabled by an amorphous metal oxide-catalyzed graphene/silicon heterojunction photoanode. <i>Sustainable Energy and Fuels</i> , 2018, 2, 663-672.	2.5	25
213	A programmable, gradient-composition strategy producing synergistic and ultrahigh sensitivity amplification for flexible pressure sensing. <i>Nano Energy</i> , 2020, 74, 104847.	8.2	25
214	A new method for synthesizing double-walled carbon nanotubes. <i>Carbon</i> , 2002, 40, 2023-2025.	5.4	24
215	Ethanol flame synthesis of highly transparent carbon thin films. <i>Carbon</i> , 2011, 49, 237-241.	5.4	24
216	Anisotropic interfacial friction of inclined multiwall carbon nanotube array surface. <i>Carbon</i> , 2012, 50, 5372-5379.	5.4	24

#	ARTICLE	IF	CITATIONS
217	Carbon nanotube-silicon hybrid solar cells with hydrogen peroxide doping. <i>Chemical Physics Letters</i> , 2012, 533, 70-73.	1.2	24
218	Graphene buffered galvanic synthesis of graphene-metal hybrids. <i>Journal of Materials Chemistry</i> , 2011, 21, 13241.	6.7	23
219	Investigation of the improved performance in a graphene/polycrystalline BiFeO <sub>3</sub> /Pt photovoltaic heterojunction: Experiment, modeling, and application. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	23
220	Thinning of large-area graphene film from multilayer to bilayer with a low-power CO <sub>2</sub> laser. <i>Nanotechnology</i> , 2013, 24, 275302.	1.3	23
221	Back-gate graphene field-effect transistors with double conductance minima. <i>Carbon</i> , 2014, 79, 363-368.	5.4	23
222	A non-covalent cation-π interaction-based humidity-driven electric nanogenerator prepared with salt decorated wrinkled graphene. <i>Nano Energy</i> , 2019, 62, 189-196.	8.2	23
223	Excellent stability of molecular catalyst/BiVO <sub>4</sub> photoanode in borate buffer solution. <i>Nano Energy</i> , 2020, 70, 104487.	8.2	23
224	The application feasibility of graphene oxide membranes for pressure-driven desalination in a dead-end flow system. <i>Desalination</i> , 2020, 477, 114271.	4.0	23
225	Hydrophobic ionic liquid-in-polymer composites for ultrafast, linear response and highly sensitive humidity sensing. <i>Nano Research</i> , 2021, 14, 1202-1209.	5.8	23
226	Wire-supported CdSe nanowire array photoelectrochemical solar cells. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 3583.	1.3	22
227	Self-powered SnSe photodetectors fabricated by ultrafast laser. <i>Nano Energy</i> , 2022, 97, 107188.	8.2	22
228	Step driven competitive epitaxial and self-limited growth of graphene on copper surface. <i>AIP Advances</i> , 2011, 1, .	0.6	21
229	Interface and transport properties of GaN/graphene junction in GaN-based LEDs. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 505102.	1.3	21
230	Enhanced performance of GaN-based light-emitting diodes with graphene/Ag nanowires hybrid films. <i>AIP Advances</i> , 2013, 3, .	0.6	21
231	Interconnected graphene/polymer micro-tube piping composites for liquid sensing. <i>Nano Research</i> , 2014, 7, 869-876.	5.8	21
232	Graphene synthesis by laser-assisted chemical vapor deposition on Ni plate and the effect of process parameters on uniform graphene growth. <i>Thin Solid Films</i> , 2014, 556, 206-210.	0.8	21
233	All-Carbon Electrodes for Flexible Solar Cells. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 152.	1.3	21
234	Large scale self-assembly of SnSe nanosheets prepared by the hot-injection method for photodetector and capacitor applications. <i>Materials Today Energy</i> , 2019, 12, 418-425.	2.5	21

#	ARTICLE	IF	CITATIONS
235	CuI-Si heterojunction solar cells with carbon nanotube films as flexible top-contact electrodes. Nano Research, 2011, 4, 979-986.	5.8	20
236	Temperature and gate voltage dependent electrical properties of graphene field-effect transistors. Carbon, 2014, 78, 250-256.	5.4	20
237	Full-Inorganic Thin Film Solar Cell and Photodetector Based on Graphene-Antimony Sulfide Heterostructure. Solar Rrl, 2017, 1, 1700135.	3.1	20
238	Synthesis of assembled copper nanoparticles from copper-chelating glycolipid nanotubes. Chemical Physics Letters, 2005, 405, 49-52.	1.2	19
239	Fabrication of silicon microwire arrays for photovoltaic applications. Applied Physics A: Materials Science and Processing, 2011, 102, 109-114.	1.1	19
240	The formation of graphene-titania hybrid films and their resistance change under ultraviolet irradiation. Carbon, 2012, 50, 4518-4523.	5.4	19
241	A Flexible Platform Containing Graphene Mesoporous Structure and Carbon Nanotube for Hydrogen Evolution. Advanced Science, 2016, 3, 1600208.	5.6	19
242	Self-deposition of Pt nanoparticles on graphene woven fabrics for enhanced hybrid Schottky junctions and photoelectrochemical solar cells. Physical Chemistry Chemical Physics, 2016, 18, 1992-1997.	1.3	19
243	Integration of graphene sensor with electrochromic device on modulus-gradient polymer for instantaneous strain visualization. 2D Materials, 2017, 4, 035020.	2.0	19
244	In situ electrodeposition of polypyrrole onto TaSe <sub>2</sub> nanobelts quasi-arrays for high-capacitance supercapacitor. Nanoscale, 2018, 10, 17341-17346.	2.8	19
245	Scalable preparation of hierarchical porous activated carbon/graphene composites for high-performance supercapacitors. Journal of Materials Chemistry A, 2019, 7, 10058-10066.	5.2	19
246	Controllable preparation and microwave absorption properties of shape anisotropic Fe <sub>3</sub> O <sub>4</sub> nanobelts. Journal of Materiomics, 2021, 7, 957-966.	2.8	19
247	Suspended, Straightened Carbon Nanotube Arrays by Gel Chapping. ACS Nano, 2011, 5, 5656-5661.	7.3	18
248	Enhanced Transport of Nanoparticles Across a Porous Nanotube Sponge. Advanced Functional Materials, 2011, 21, 3439-3445.	7.8	18
249	Effect of feed rate on the production of nitrogen-doped graphene from liquid acetonitrile. Carbon, 2012, 50, 3659-3665.	5.4	18
250	Schottky diode characteristics and 1/f noise of high sensitivity reduced graphene oxide/Si heterojunction photodetector. Journal of Applied Physics, 2016, 119, 124303.	1.1	18
251	Influence of low-dimension carbon-based electrodes on the performance of SnO <sub>2</sub> nanofiber gas sensors at room temperature. Nanotechnology, 2019, 30, 345503.	1.3	18
252	Recent progress in two-dimensional materials for terahertz protection. Nanoscale Advances, 2021, 3, 1515-1531.	2.2	18

#	ARTICLE	IF	CITATIONS
253	Super-small energy gaps of single-walled carbon nanotube strands. Applied Physics Letters, 2005, 86, 203107.	1.5	17
254	Unipolar to ambipolar conversion in graphene field-effect transistors. Applied Physics Letters, 2012, 101, .	1.5	17
255	Anti-reflection graphene coating on metal surface. Surface and Coatings Technology, 2015, 261, 327-330.	2.2	17
256	Morphology-controlled Tantalum Diselenide Structures as Self-optimizing Hydrogen Evolution Catalysts. Energy and Environmental Materials, 2020, 3, 12-18.	7.3	17
257	Pyramid Array InGaN/GaN Core-shell Light Emitting Diodes with Homogeneous Multilayer Graphene Electrodes. Applied Physics Express, 2013, 6, 072102.	1.1	16
258	Correlation between nanoparticle location and graphene nucleation in chemical vapour deposition of graphene. Journal of Materials Chemistry A, 2014, 2, 13123-13128.	5.2	16
259	Temperature-resistant and flexible supercapacitors based on 10-inch wafer-scale nanocarbon films. Science China Materials, 2019, 62, 947-954.	3.5	16
260	Graphene oxide/titania hybrid films with dual-UV-responsive surfaces of tunable wettability. RSC Advances, 2012, 2, 10829.	1.7	15
261	Lap joining of graphene flakes by current-assisted CO2 laser irradiation. Carbon, 2013, 61, 329-335.	5.4	15
262	Rapid Liquid Recognition and Quality Inspection with Graphene Test Papers. Global Challenges, 2017, 1, 1700037.	1.8	15
263	Self-Regulating Cross-Linked Graphene Oxide Membranes with Stable Retention Properties over a Wide pH Range. Advanced Materials Interfaces, 2020, 7, 1901535.	1.9	15
264	Out-of-plane and in-plane ferroelectricity of atom-thick two-dimensional InSe. Nanotechnology, 2021, 32, 385202.	1.3	15
265	Nanocellulose-Graphene Derivative Hybrids: Advanced Structure-Based Functionality from Top-down Synthesis to Bottom-up Assembly. ACS Applied Bio Materials, 2021, 4, 7366-7401.	2.3	15
266	Hybrid graphene/amorphous carbon films with tadpole-like structures for high-performance photovoltaic applications. RSC Advances, 2013, 3, 22295.	1.7	14
267	All carbon coaxial supercapacitors based on hollow carbon nanotube sleeve structure. Nanotechnology, 2015, 26, 045401.	1.3	14
268	Reverse osmosis desalination of chitosan cross-linked graphene oxide/titania hybrid lamellar membranes. Nanotechnology, 2016, 27, 274002.	1.3	14
269	Nanoporous silver using pulsed laser deposition for high-performance oxygen reduction reaction and hydrogen peroxide sensing. Nanoscale, 2020, 12, 19413-19419.	2.8	14
270	The $q$ -Ary Antiprimitive BCH Codes. IEEE Transactions on Information Theory, 2022, 68, 1683-1695.	1.5	14



#	ARTICLE	IF	CITATIONS
271	Long super-bundles of single-walled carbon nanotubes. <i>Chemical Communications</i> , 2002, , 1858-1859.	2.2	13
272	Multi-layer graphene treated by O <sub>2</sub> plasma for transparent conductive electrode applications. <i>Materials Letters</i> , 2012, 73, 187-189.	1.3	13
273	Amorphous Nitrogen Doped Carbon Films: A Novel Corrosion Resistant Coating Material. <i>Advanced Engineering Materials</i> , 2014, 16, 532-538.	1.6	13
274	Hybrid Tunnel Junctionâ€“Graphene Transparent Conductive Electrodes for Nitride Lateral Light Emitting Diodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 1176-1183.	4.0	13
275	Graphene-Based Sensors. , 2018, , 157-174.		13
276	Hybrid effect of gas flow and light excitation in carbon/silicon Schottky solar cells. <i>Journal of Materials Chemistry</i> , 2012, 22, 3330.	6.7	12
277	Macro van der Waals p-n heterojunction based on SnSe and SnSe <sub>2</sub> . <i>Nanotechnology</i> , 2020, 31, 385203.	1.3	12
278	Atom-Resolved Imaging of Carbon Hexagons of Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2008, 112, 11098-11101.	1.5	11
279	Diameter dependent growth mode of carbon nanotubes on nanoporous SiO <sub>2</sub> substrates. <i>Materials Letters</i> , 2009, 63, 1366-1369.	1.3	11
280	Temperature dependence of field emission of single-walled carbon nanotube thin films. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2009, 41, 1277-1280.	1.3	11
281	Nanobeltâ€“carbon nanotube cross-junction solar cells. <i>Energy and Environmental Science</i> , 2012, 5, 6119.	15.6	11
282	Preparation of CuI particles and their applications in carbon nanotube-Si heterojunction solar cells. <i>Materials Letters</i> , 2012, 79, 106-108.	1.3	11
283	NO <sub>2</sub> -induced performance enhancement of PEDOT:PSS/Si hybrid solar cells with a high efficiency of 13.44%. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 7184-7189.	1.3	11
284	Ultimate Photo-Thermo-Acoustic Efficiency of Graphene Aerogels. <i>Scientific Reports</i> , 2019, 9, 13386.	1.6	11
285	High-quality bilayer graphene grown on softened copper foils by atmospheric pressure chemical vapor deposition. <i>Science China Materials</i> , 2020, 63, 1973-1982.	3.5	11
286	Mechanical sensors based on two-dimensional materials: Sensing mechanisms, structural designs and wearable applications. <i>IScience</i> , 2022, 25, 103728.	1.9	11
287	The fabrication of GaN-based nanorod light-emitting diodes with multilayer graphene transparent electrodes. <i>Journal of Applied Physics</i> , 2013, 113, 234302.	1.1	10
288	Ambipolar/unipolar conversion in graphene transistors by surface doping. <i>Applied Physics Letters</i> , 2013, 103, 193502.	1.5	10

#	ARTICLE	IF	CITATIONS
289	Poly (ethylene imine)-modulated transport behaviors of graphene field effect transistors with double Dirac points. Journal of Applied Physics, 2017, 121, .	1.1	10
290	Graphene-based membranes for organic solvent nanofiltration. Science China Materials, 2018, 61, 429-431.	3.5	10
291	Green Preparation of Aqueous Graphene Dispersion and Study on Its Dispersion Stability. Materials, 2020, 13, 4069.	1.3	10
292	Graphene Oxide/Hexylamine Superlattice Field-Effect Biochemical Sensors. Advanced Functional Materials, 2021, 31, 2010563.	7.8	10
293	Research progress of surface-modified graphene-based materials for tribological applications. Materials Research Express, 2021, 8, 042002.	0.8	10
294	Enhanced Microwave Absorption of Shape Anisotropic Fe <sub>3</sub> O <sub>4</sub> Nanoflakes and Their Composites. Advanced Engineering Materials, 2022, 24, 2100790.	1.6	10
295	Luminescence of carbon nanotube bulbs. Science Bulletin, 2007, 52, 113-117.	1.7	9
296	Solution-processed bulk heterojunction solar cells based on interpenetrating CdS nanowires and carbon nanotubes. Nano Research, 2012, 5, 595-604.	5.8	9
297	Strong, conductive carbon nanotube fibers as efficient hole collectors. Nanoscale Research Letters, 2012, 7, 137.	3.1	9
298	InGaN-based vertical light-emitting diodes with acid-modified graphene transparent conductor and highly reflective membrane current blocking layer. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20120652.	1.0	9
299	Enhanced performance of PEDOT:PSS/n-Si hybrid solar cell by HNO <sub>3</sub> treatment. Applied Physics Express, 2014, 7, 031603.	1.1	9
300	Graphene Foams: A Bubble-Derived Strategy to Prepare Multiple Graphene-Based Porous Materials (Adv.) Tj ETQq 0 0 rgBT /Overlo	7.8	9
301	A wrinkled graphene and ionic liquid based electric generator for the sea energy harvesting. 2D Materials, 2019, 6, 045040.	2.0	9
302	Highly Sensitive, Selective, Flexible and Scalable Room-Temperature NO <sub>2</sub> Gas Sensor Based on Hollow SnO <sub>2</sub> /ZnO Nanofibers. Molecules, 2021, 26, 6475.	1.7	9
303	Fabrication and field emission properties of multi-walled carbon nanotube/silicon nanowire array. Journal of Physics and Chemistry of Solids, 2010, 71, 708-711.	1.9	8
304	Water-driven actuation of <i>Ornithoctonus huwena</i> spider silk fibers. Applied Physics Letters, 2017, 110, .	1.5	8
305	Direct growth of high crystallinity graphene from water-soluble polymer powders. 2D Materials, 2018, 5, 035001.	2.0	8
306	Cross-Linked Double Network Graphene Oxide/Polymer Composites for Efficient Coagulation-Flocculation. Global Challenges, 2020, 4, 1900051.	1.8	8

#	ARTICLE	IF	CITATIONS
307	Recent progress in wearable tactile sensors combined with algorithms based on machine learning and signal processing. <i>APL Materials</i> , 2021, 9, .	2.2	8
308	Complete b-symbol weight distribution of some irreducible cyclic codes. <i>Designs, Codes, and Cryptography</i> , 2022, 90, 1113-1125.	1.0	8
309	Graphene-Mediated Antioxidant Enzyme Activity and Respiration in Plant Roots. <i>ACS Agricultural Science and Technology</i> , 2022, 2, 646-660.	1.0	8
310	Recent Advances of Graphene and Related Materials in Artificial Intelligence. <i>Advanced Intelligent Systems</i> , 2022, 4, .	3.3	8
311	High-efficiency core-shell solar cell array from Si wafer. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 107, 911-917.	1.1	7
312	Solar Cells: Carbon/Silicon Heterojunction Solar Cells: State of the Art and Prospects ( <i>Adv. Mater.</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	11.1	7
313	Long-term electrical conductivity stability of graphene under uncontrolled ambient conditions. <i>Carbon</i> , 2018, 133, 410-415.	5.4	7
314	Chloride-intercalated continuous chemical vapor deposited graphene film with discrete adlayers. <i>Nano Research</i> , 2018, 11, 440-448.	5.8	7
315	Enhanced ionic photocurrent generation through a homogeneous graphene derivative composite membrane. <i>Chemical Communications</i> , 2020, 56, 9819-9822.	2.2	7
316	Improved Efficiency of Graphene/Si Heterojunction Solar Cells by Optimizing Hydrocarbon Feed Rate. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-7.	1.5	6
317	Tunable transport characteristics of p-type graphene field-effect transistors by poly(ethylene imine) overlayer. <i>Carbon</i> , 2014, 77, 424-430.	5.4	6
318	Graphene water transfer printing for 3D surface. , 2016, , .		6
319	Multifunctional sensing platform with pulsed-laser-deposited silver nanoporous structures. <i>Sensors and Actuators A: Physical</i> , 2019, 293, 136-144.	2.0	6
320	Recent Advances in New Materials for 6G Communications. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	6
321	Bubble-promoted assembly of hierarchical, porous Ag <sub>2</sub> S nanoparticle membranes. <i>Journal of Materials Chemistry</i> , 2012, 22, 24721.	6.7	5
322	Spindle-like hierarchical carbon structure grown from polyhydroxyalkanoate/ferrocene/chloroform precursor. <i>Carbon</i> , 2016, 103, 346-351.	5.4	5
323	Heterojunction solar cells based on graphene woven fabrics and silicon. <i>Journal of Materiomics</i> , 2018, 4, 135-138.	2.8	5
324	Hierarchical structure-dependent high ductility of electrospun polyoxymethylene nanofibers. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47086.	1.3	5

#	ARTICLE	IF	CITATIONS
325	Edge-Rich Reduced Graphene Oxide Embedded in Silica-Based Laminated Ceramic Composites for Efficient and Robust Electrocatalytic Hydrogen Evolution. <i>Small Methods</i> , 2021, 5, e2100621.	4.6	5
326	Thermally Evaporated Ag-Au Bimetallic Catalysts for Efficient Electrochemical CO <sub>2</sub> Reduction. <i>Particle and Particle Systems Characterization</i> , 2021, 38, 2100148.	1.2	5
327	Self-assembly of multiwalled carbon nanotubes from quench-condensed CNi <sub>3</sub> films. <i>Journal of Applied Physics</i> , 2008, 103, 053503.	1.1	4
328	Force- and light-controlled electrical transport characteristics of carbon nanotube 1D/2D bulk junctions. <i>Chemical Physics Letters</i> , 2009, 481, 224-228.	1.2	4
329	Light-Induced Modulation in Resistance Switching of Carbon Nanotube/BiFeO <sub>3</sub> /Pt Heterostructure. <i>Integrated Ferroelectrics</i> , 2012, 134, 58-64.	0.3	4
330	Optimization of graphene/silicon heterojunction solar cells. , 2012, , .		4
331	Electricity generation and local ion ordering induced by cation-controlled selective anion transportation through graphene oxide membranes. <i>2D Materials</i> , 2014, 1, 034004.	2.0	4
332	Laser Controllable Growth of Graphene via Ni-Cu Alloy Composition Modulation. <i>Lasers in Manufacturing and Materials Processing</i> , 2015, 2, 219-230.	1.2	4
333	Sustained and Controlled Release of Volatile Precursors for Chemical Vapor Deposition of Graphene at Atmospheric Pressure. <i>Chemistry - A European Journal</i> , 2020, 26, 7463-7469.	1.7	4
334	Degeneration of Key Structural Components Resulting in Ageing of Supercapacitors and the Related Chemical Ageing Mechanism. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 39379-39393.	4.0	4
335	Enhanced Catalytic Mechanism of Twin-Structured BiVO <sub>4</sub> . <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 10610-10615.	2.1	4
336	Carbon Nanotubes: Super-Stretchable Spring-Like Carbon Nanotube Ropes (Adv. Mater. 21/2012). <i>Advanced Materials</i> , 2012, 24, 2935-2935.	11.1	3
337	Effect of microwave irradiation on carbon nanotube fibers: exfoliation, structural change and strong light emission. <i>RSC Advances</i> , 2014, 4, 15502-15506.	1.7	3
338	Mechanotunable monatomic metal structures at graphene edges. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 10295.	1.3	3
339	Strain Sensing: Graphene Reinforced Carbon Nanotube Networks for Wearable Strain Sensors (Adv.) <i>Tj ETQq1 1 0.784314 rgBT / Over</i>	7.8	3
340	Structural Characterizations of Graphene. , 2018, , 13-26.		3
341	Potential Applications and Perspectives. , 2018, , 233-249.		3
342	Self-supporting copper-based electrode by electrospinning for reduction of carbon dioxide to methane. <i>Energy Technology</i> , 2021, 9, 2100714.	1.8	3

#	ARTICLE	IF	CITATIONS
343	Intrinsic-trap-regulating growth of clean graphene on high-entropy alloy substrate. Nano Research, 2022, 15, 4717-4723.	5.8	3
344	Super-low turn-on and threshold electric fields of plasma-treated partly Fe-filled carbon nanotube films. Materials Research Bulletin, 2010, 45, 568-571.	2.7	2
345	Comparison of Photovoltaic Performance Enhancement in BiFeO <sub>3</sub> by Using Graphene and Carbon Nanotubes as Transparent Electrode. , 2012, , .		2
346	Ultra-fast synthesis of graphene by melt spinning. Carbon, 2013, 61, 299-304.	5.4	2
347	Strain Sensors: Large-area Ultrathin Graphene Films by Single-step Marangoni Self-assembly for Highly Sensitive Strain Sensing Application (Adv. Funct. Mater. 9/2016). Advanced Functional Materials, 2016, 26, 1488-1488.	7.8	2
348	Facile Fabrication of Unimpeded and Stable Graphene Oxide Coating on Reverse Osmosis Membrane for Dual-functional Protection. ChemistrySelect, 2018, 3, 12122-12130.	0.7	2
349	Patterning of graphene for highly sensitive strain sensing on various curved surfaces. Nano Select, 2021, 2, 121-128.	1.9	2
350	Light emission of double-walled carbon nanotube filaments doped with yttrium and europium. Science in China Series D: Earth Sciences, 2009, 52, 252-255.	0.9	1
351	Transformation of Round-shaped Graphene Disks into Hexagonal Domains in CVD. Chemical Vapor Deposition, 2012, 18, 185-190.	1.4	1
352	Improve photocurrent quantum efficiency of carbon nanotube by chemical treatment. Materials Chemistry and Physics, 2012, 131, 680-685.	2.0	1
353	Direct Synthesis of Long Nanotube Yarns for Commercial Fiber Products. , 2014, , 333-348.		1
354	Graphene woven fabric as high-resolution sensing element of contact-lens tonometer. , 2014, , .		1
355	Cycling-stable Cathodes: Hydroxyapatite/Mesoporous Graphene/Single-walled Carbon Nanotubes Freestanding Flexible Hybrid Membranes for Regenerative Medicine (Adv. Funct. Mater. 44/2016). Advanced Functional Materials, 2016, 26, 7946-7946.	7.8	1
356	Full-inorganic Thin Film Solar Cell and Photodetector Based on Graphene-Antimony Sulfide Heterostructure (Solar RRL 12(2017)). Solar Rrl, 2017, 1, 1770146.	3.1	1
357	Graphene: Synthetic Multifunctional Graphene Composites with Reshaping and Self-Healing Features via a Facile Biomineralization-Inspired Process (Adv. Mater. 34/2018). Advanced Materials, 2018, 30, 1870253.	11.1	1
358	Observation of various bound solitons of a fiber laser with carbon nanotubes and graphene as saturable absorbers. , 2011, , .		0
359	Mode-locked operation of an erbium-doped fiber laser using a self-assembled graphene membrane after excitation of Q-switched pulse. , 2011, , .		0
360	Multilayer graphene growth by a metal-catalyzed crystallization of diamond-like carbon. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
361	Light-Induced Modulation in Resistance Switching of Carbon Nanotube/ BiFeO <sub>3</sub> /Pt Heterostructure. Integrated Ferroelectrics, 2012, 132, 53-60.	0.3	0
362	Field emission of graphene and carbon nanotubes. , 2012, , .		0
363	Biochemical Sensors: Graphene Oxide/Hexylamine Superlattice Field-Effect Biochemical Sensors (Adv. Tj ETQq1 1,0.784314 rgBT /C	7.8	0
364	Several classes of asymptotically good quasi-twisted codes with a low index. Journal of Applied Mathematics and Computing, 0, , 1.	1.2	0