

Hongwei Zhu

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

360
papers

24,014
citations

77
h-index

145
g-index

370
ext. papers

26,935
ext. citations

8.7
avg, IF

7.14
L-index

#	Paper	IF	Citations
360	Carbon nanotube sponges. <i>Advanced Materials</i> , 2010 , 22, 617-21	24	1240
359	Graphene-on-silicon Schottky junction solar cells. <i>Advanced Materials</i> , 2010 , 22, 2743-8	24	910
358	Hydrothermal synthesis and pseudocapacitance properties of MnO ₂ nanostructures. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 20207-14	3.4	832
357	Wearable and Highly Sensitive Graphene Strain Sensors for Human Motion Monitoring. <i>Advanced Functional Materials</i> , 2014 , 24, 4666-4670	15.6	769
356	Adsorption of methylene blue from aqueous solution by graphene. <i>Colloids and Surfaces B: Biointerfaces</i> , 2012 , 90, 197-203	6	530
355	Selective ion penetration of graphene oxide membranes. <i>ACS Nano</i> , 2013 , 7, 428-37	16.7	520
354	Stretchable and highly sensitive graphene-on-polymer strain sensors. <i>Scientific Reports</i> , 2012 , 2, 870	4.9	450
353	Recent Developments in Graphene-Based Membranes: Structure, Mass-Transport Mechanism and Potential Applications. <i>Advanced Materials</i> , 2016 , 28, 2287-310	24	433
352	Recent advances in wearable tactile sensors: Materials, sensing mechanisms, and device performance. <i>Materials Science and Engineering Reports</i> , 2017 , 115, 1-37	30.9	405
351	Two-dimensional MoS ₂ : Properties, preparation, and applications. <i>Journal of Materiomics</i> , 2015 , 1, 33-446.7		396
350	Hydrogen uptake in boron nitride nanotubes at room temperature. <i>Journal of the American Chemical Society</i> , 2002 , 124, 7672-3	16.4	384
349	Graphene and related two-dimensional materials: Structure-property relationships for electronics and optoelectronics. <i>Applied Physics Reviews</i> , 2017 , 4, 021306	17.3	368
348	Role of interfacial oxide in high-efficiency graphene-silicon Schottky barrier solar cells. <i>Nano Letters</i> , 2015 , 15, 2104-10	11.5	346
347	Nanostructured MnO ₂ : Hydrothermal synthesis and electrochemical properties as a supercapacitor electrode material. <i>Journal of Power Sources</i> , 2006 , 159, 361-364	8.9	299
346	High Detectivity Graphene-Silicon Heterojunction Photodetector. <i>Small</i> , 2016 , 12, 595-601	11	285
345	Selective trans-membrane transport of alkali and alkaline earth cations through graphene oxide membranes based on cation-π interactions. <i>ACS Nano</i> , 2014 , 8, 850-9	16.7	283
344	Colloidal antireflection coating improves graphene-silicon solar cells. <i>Nano Letters</i> , 2013 , 13, 1776-81	11.5	277

343	Graphene Reinforced Carbon Nanotube Networks for Wearable Strain Sensors. <i>Advanced Functional Materials</i> , 2016 , 26, 2078-2084	15.6	276
342	Highly Sensitive, Wearable, Durable Strain Sensors and Stretchable Conductors Using Graphene/Silicon Rubber Composites. <i>Advanced Functional Materials</i> , 2016 , 26, 7614-7625	15.6	272
341	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	15.6	270
340	Core-double-shell, carbon nanotube@polypyrrole@MnO ₂ sponge as freestanding, compressible supercapacitor electrode. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 5228-34	9.5	269
339	Applications of carbon materials in photovoltaic solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2009 , 93, 1461-1470	6.4	269
338	Recyclable carbon nanotube sponges for oil absorption. <i>Acta Materialia</i> , 2011 , 59, 4798-4804	8.4	255
337	The physics and chemistry of graphene-on-surfaces. <i>Chemical Society Reviews</i> , 2017 , 46, 4417-4449	58.5	247
336	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	58.5	226
335	Adsorption of fluoride from aqueous solution by graphene. <i>Journal of Colloid and Interface Science</i> , 2011 , 363, 348-54	9.3	226
334	Tactile Sensing System Based on Arrays of Graphene Woven Microfabrics: Electromechanical Behavior and Electronic Skin Application. <i>ACS Nano</i> , 2015 , 9, 10867-75	16.7	220
333	Achieving high efficiency silicon-carbon nanotube heterojunction solar cells by acid doping. <i>Nano Letters</i> , 2011 , 11, 1901-5	11.5	216
332	Soft, highly conductive nanotube sponges and composites with controlled compressibility. <i>ACS Nano</i> , 2010 , 4, 2320-6	16.7	206
331	A Wearable and Highly Sensitive Graphene Strain Sensor for Precise Home-Based Pulse Wave Monitoring. <i>ACS Sensors</i> , 2017 , 2, 967-974	9.2	194
330	Graphene/silicon nanowire Schottky junction for enhanced light harvesting. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 721-5	9.5	193
329	Tribological properties of oleic acid-modified graphene as lubricant oil additives. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 205303	3	189
328	Structural engineering of gold thin films with channel cracks for ultrasensitive strain sensing. <i>Materials Horizons</i> , 2016 , 3, 248-255	14.4	177
327	Graphene sheets from worm-like exfoliated graphite. <i>Journal of Materials Chemistry</i> , 2009 , 19, 3367		173
326	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, 12164-71	4	166

325	Super-stretchable spring-like carbon nanotube ropes. <i>Advanced Materials</i> , 2012 , 24, 2896-900	24	165
324	Equilibrium, kinetic and thermodynamic studies on the adsorption of phenol onto graphene. <i>Materials Research Bulletin</i> , 2012 , 47, 1898-1904	5.1	157
323	Graphene/polyaniline woven fabric composite films as flexible supercapacitor electrodes. <i>Nanoscale</i> , 2015 , 7, 7318-22	7.7	154
322	Boron Doping of Graphene for Graphene/Silicon p-n Junction Solar Cells. <i>Advanced Energy Materials</i> , 2012 , 2, 425-429	21.8	147
321	Carbon/Silicon Heterojunction Solar Cells: State of the Art and Prospects. <i>Advanced Materials</i> , 2015 , 27, 6549-74	24	144
320	Flexible all solid-state supercapacitors based on chemical vapor deposition derived graphene fibers. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 17752-7	3.6	142
319	Multifunctional graphene woven fabrics. <i>Scientific Reports</i> , 2012 , 2, 395	4.9	139
318	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	15.6	139
317	Graphene/semiconductor heterojunction solar cells with modulated antireflection and graphene work function. <i>Energy and Environmental Science</i> , 2013 , 6, 108-115	35.4	134
316	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	2.5	133
315	Effect of different gel electrolytes on graphene-based solid-state supercapacitors. <i>RSC Advances</i> , 2014 , 4, 36253-36256	3.7	129
314	TiO ₂ -coated carbon nanotube-silicon solar cells with efficiency of 15%. <i>Scientific Reports</i> , 2012 , 2, 884	4.9	127
313	Recent advances in friction and lubrication of graphene and other 2D materials: Mechanisms and applications. <i>Friction</i> , 2019 , 7, 199-216	5.6	120
312	Ion doping of graphene for high-efficiency heterojunction solar cells. <i>Nanoscale</i> , 2013 , 5, 1945-8	7.7	119
311	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	13	115
310	Graphene Nano-patches on a Carbon Nanotube Network for Highly Transparent/Conductive Thin Film Applications. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 14008-14012	3.8	114
309	Ultra-sensitive graphene strain sensor for sound signal acquisition and recognition. <i>Nano Research</i> , 2015 , 8, 1627-1636	10	112
308	High rate reversibility anode materials of lithium batteries from vapor-grown carbon nanofibers. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 7178-83	3.4	107

307	Single-layer nanosheets with exceptionally high and anisotropic hydroxyl ion conductivity. <i>Science Advances</i> , 2017 , 3, e1602629	14.3	105
306	Carbon nanotube-polypyrrole core-shell sponge and its application as highly compressible supercapacitor electrode. <i>Nano Research</i> , 2014 , 7, 209-218	10	98
305	Scalable Low-Band-Gap SbSe Thin-Film Photocathodes for Efficient Visible-Near-Infrared Solar Hydrogen Evolution. <i>ACS Nano</i> , 2017 , 11, 12753-12763	16.7	98
304	Three-dimensional porous graphene sponges assembled with the combination of surfactant and freeze-drying. <i>Nano Research</i> , 2014 , 7, 1477-1487	10	93
303	Novel Microwave Synthesis of Nanocrystalline SnO ₂ and Its Electrochemical Properties. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 4550-4556	3.8	93
302	Enhanced photovoltaic properties in graphene/polycrystalline BiFeO ₃ /Pt heterojunction structure. <i>Applied Physics Letters</i> , 2011 , 99, 132904	3.4	91
301	Anomalous Behaviors of Graphene Transparent Conductors in Graphene/Silicon Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2013 , 3, 1029-1034	21.8	90
300	Carbon nanotube sponge filters for trapping nanoparticles and dye molecules from water. <i>Chemical Communications</i> , 2010 , 46, 7966-8	5.8	90
299	Encapsulated carbon nanotube-oxide-silicon solar cells with stable 10% efficiency. <i>Applied Physics Letters</i> , 2011 , 98, 133115	3.4	89
298	Vertical junction photodetectors based on reduced graphene oxide/silicon Schottky diodes. <i>Nanoscale</i> , 2014 , 6, 4909-14	7.7	88
297	Hybrid heterojunction and photoelectrochemistry solar cell based on silicon nanowires and double-walled carbon nanotubes. <i>Nano Letters</i> , 2009 , 9, 4338-42	11.5	88
296	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014 , 20, 411-415	3.8	86
295	Highly deformation-tolerant carbon nanotube sponges as supercapacitor electrodes. <i>Nanoscale</i> , 2013 , 5, 8472-9	7.7	86
294	Graphene: Fundamental research and potential applications. <i>FlatChem</i> , 2017 , 4, 20-32	5.1	86
293	Anthocyanin-sensitized solar cells using carbon nanotube films as counter electrodes. <i>Nanotechnology</i> , 2008 , 19, 465204	3.4	85
292	Carbon nanotube and CdSe nanobelt Schottky junction solar cells. <i>Nano Letters</i> , 2010 , 10, 3583-9	11.5	84
291	Carbon nanotube filaments in household light bulbs. <i>Applied Physics Letters</i> , 2004 , 84, 4869-4871	3.4	84
290	Simultaneous High Sensitivity Sensing of Temperature and Humidity with Graphene Woven Fabrics. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 30171-30176	9.5	83

289	Atomic-resolution imaging of the nucleation points of single-walled carbon nanotubes. <i>Small</i> , 2005 , 1, 1180-3	11	83
288	Recent advances in transition-metal-sulfide-based bifunctional electrocatalysts for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 5320-5363	13	80
287	Highly efficient quasi-static water desalination using monolayer graphene oxide/titania hybrid laminates. <i>NPG Asia Materials</i> , 2015 , 7, e162-e162	10.3	78
286	Flexible, temperature-tolerant supercapacitor based on hybrid carbon film electrodes. <i>Nano Energy</i> , 2017 , 40, 224-232	17.1	78
285	Precise Control of the Number of Layers of Graphene by Picosecond Laser Thinning. <i>Scientific Reports</i> , 2015 , 5, 11662	4.9	78
284	Graphene oxide-in-polymer nanofiltration membranes with enhanced permeability by interfacial polymerization. <i>Journal of Membrane Science</i> , 2018 , 564, 813-819	9.6	77
283	Ultrasensitive and Stretchable Strain Sensors Based on Maze-like Vertical Graphene Network. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 36312-36322	9.5	77
282	Highly flexible and adaptable, all-solid-state supercapacitors based on graphene woven-fabric film electrodes. <i>Small</i> , 2014 , 10, 2583-8	11	76
281	In-situ formation of sandwiched structures of nanotube/Cu _x O _y /Cu composites for lithium battery applications. <i>ACS Nano</i> , 2009 , 3, 2177-84	16.7	76
280	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	13	75
279	Self-Assembled Graphene Film as Low Friction Solid Lubricant in Macroscale Contact. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 21554-21562	9.5	73
278	Graphene-based transparent conductive electrodes for GaN-based light emitting diodes: Challenges and countermeasures. <i>Nano Energy</i> , 2015 , 12, 419-436	17.1	73
277	Highly twisted double-helix carbon nanotube yarns. <i>ACS Nano</i> , 2013 , 7, 1446-53	16.7	73
276	Hydrogen uptake by graphitized multi-walled carbon nanotubes under moderate pressure and at room temperature. <i>Carbon</i> , 2001 , 39, 2077-2079	10.4	71
275	Formation of Uniform Water Microdroplets on Wrinkled Graphene for Ultrafast Humidity Sensing. <i>Small</i> , 2018 , 14, e1703848	11	70
274	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	2.6	70
273	Boosting supercapacitor performance of carbon fibres using electrochemically reduced graphene oxide additives. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 19550-6	3.6	69
272	Dynamically stretchable supercapacitors based on graphene woven fabric electrodes. <i>Nano Energy</i> , 2015 , 15, 83-91	17.1	69

271	Efficiency enhancement of graphene/silicon-pillar-array solar cells by HNO ₃ and PEDOT-PSS. <i>Nanoscale</i> , 2012 , 4, 2130-3	7.7	69
270	Graphene based Schottky junction solar cells on patterned silicon-pillar-array substrate. <i>Applied Physics Letters</i> , 2011 , 99, 233505	3.4	68
269	Preparation of highly pure double-walled carbon nanotubes. <i>Journal of Materials Chemistry</i> , 2003 , 13, 1340		67
268	In-situ synthesis of carbon nanotube/graphene composite sponge and its application as compressible supercapacitor electrode. <i>Electrochimica Acta</i> , 2015 , 157, 134-141	6.7	64
267	The effect of sulfur on the number of layers in a carbon nanotube. <i>Carbon</i> , 2007 , 45, 2152-2158	10.4	64
266	Strong and reversible modulation of carbon nanotube-silicon heterojunction solar cells by an interfacial oxide layer. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 8391-6	3.6	63
265	Photo-Promoted Platinum Nanoparticles Decorated MoS ₂ @Graphene Woven Fabric Catalyst for Efficient Hydrogen Generation. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 10866-73	9.5	63
264	Graphene oxide-embedded polyamide nanofiltration membranes for selective ion separation. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 25632-25640	13	62
263	Large area, highly transparent carbon nanotube spiderwebs for energy harvesting. <i>Journal of Materials Chemistry</i> , 2010 , 20, 7236		62
262	Direct fabrication of single-walled carbon nanotube macro-films on flexible substrates. <i>Chemical Communications</i> , 2007 , 3042-4	5.8	62
261	A strategy to control the chirality of single-walled carbon nanotubes. <i>Journal of Crystal Growth</i> , 2008 , 310, 5473-5476	1.6	62
260	High-Response Room-Temperature NO Sensor and Ultrafast Humidity Sensor Based on SnO with Rich Oxygen Vacancy. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 13441-13449	9.5	61
259	Ultrafast liquid water transport through graphene-based nanochannels measured by isotope labelling. <i>Chemical Communications</i> , 2015 , 51, 3251-4	5.8	60
258	Enhancing Capacitance Performance of TiCT MXene as Electrode Materials of Supercapacitor: From Controlled Preparation to Composite Structure Construction. <i>Nano-Micro Letters</i> , 2020 , 12, 77	19.5	60
257	Graphene oxide as a water transporter promoting germination of plants in soil. <i>Nano Research</i> , 2018 , 11, 1928-1937	10	60
256	Flame synthesis of few-layered graphene/graphite films. <i>Chemical Communications</i> , 2011 , 47, 3520-2	5.8	60
255	A Bubble-Derived Strategy to Prepare Multiple Graphene-Based Porous Materials. <i>Advanced Functional Materials</i> , 2018 , 28, 1705879	15.6	59
254	Protecting carbon steel from corrosion by laser in situ grown graphene films. <i>Carbon</i> , 2015 , 94, 326-334	10.4	58

253	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	8.5	58
252	Synthesis of boron nitride nanofibers and measurement of their hydrogen uptake capacity. <i>Applied Physics Letters</i> , 2002 , 81, 5225-5227	3.4	57
251	Direct Synthesis of Graphene Quantum Dots by Chemical Vapor Deposition. <i>Particle and Particle Systems Characterization</i> , 2013 , 30, 764-769	3.1	56
250	Graphene-CdSe nanobelt solar cells with tunable configurations. <i>Nano Research</i> , 2011 , 4, 891-900	10	56
249	Structural Characterizations of Long Single-Walled Carbon Nanotube Strands. <i>Nano Letters</i> , 2002 , 2, 1105-1107	15.6	56
248	The graphene-semiconductor Schottky junction. <i>Physics Today</i> , 2016 , 69, 46-51	0.9	56
247	Carbon nanotube sponges as conductive networks for supercapacitor devices. <i>Nano Energy</i> , 2013 , 2, 1025-1030	17.1	54
246	Raman study on double-walled carbon nanotubes. <i>Chemical Physics Letters</i> , 2003 , 376, 753-757	2.5	54
245	Polymer-Coated Graphene Aerogel Beads and Supercapacitor Application. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 11179-87	9.5	54
244	Intrinsic high water/ion selectivity of graphene oxide lamellar membranes in concentration gradient-driven diffusion. <i>Chemical Science</i> , 2016 , 7, 6988-6994	9.4	53
243	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	10	52
242	Highly conductive, twistable and bendable polypyrrole-carbon nanotube fiber for efficient supercapacitor electrodes. <i>RSC Advances</i> , 2015 , 5, 22015-22021	3.7	52
241	Discrete breathers in hydrogenated graphene. <i>Journal Physics D: Applied Physics</i> , 2013 , 46, 305302	3	51
240	A facile route to isotropic conductive nanocomposites by direct polymer infiltration of carbon nanotube sponges. <i>ACS Nano</i> , 2011 , 5, 4276-83	16.7	51
239	Three-dimensional Sponges with Super Mechanical Stability: Harnessing True Elasticity of Individual Carbon Nanotubes in Macroscopic Architectures. <i>Scientific Reports</i> , 2016 , 6, 18930	4.9	50
238	Synthesis of nitrogen-doped carbon thin films and their applications in solar cells. <i>Carbon</i> , 2011 , 49, 5022-5028	50	50
237	The Interaction between Quantum Dots and Graphene: The Applications in Graphene-Based Solar Cells and Photodetectors. <i>Advanced Functional Materials</i> , 2018 , 28, 1804712	15.6	50
236	Role of hydrogen in the chemical vapor deposition growth of MoS ₂ atomic layers. <i>Nanoscale</i> , 2015 , 7, 8398-404	7.7	49

235	Solution-processed CuSbS ₂ thin film: A promising earth-abundant photocathode for efficient visible-light-driven hydrogen evolution. <i>Nano Energy</i> , 2016 , 28, 135-142	17.1	49
234	Highly Stretchable, Adaptable, and Durable Strain Sensing Based on a Bioinspired Dynamically Cross-Linked Graphene/Polymer Composite. <i>Small</i> , 2019 , 15, e1900848	11	47
233	Carbon nanotube films by filtration for nanotube-silicon heterojunction solar cells. <i>Materials Research Bulletin</i> , 2010 , 45, 1401-1405	5.1	47
232	Photo-induced selective gas detection based on reduced graphene oxide/Si Schottky diode. <i>Carbon</i> , 2015 , 84, 138-145	10.4	46
231	Small temperature coefficient of resistivity of graphene/graphene oxide hybrid membranes. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 9563-71	9.5	46
230	Synthetic Multifunctional Graphene Composites with Reshaping and Self-Healing Features via a Facile Biomineralization-Inspired Process. <i>Advanced Materials</i> , 2018 , 30, e1803004	24	45
229	Solar cells and light sensors based on nanoparticle-grafted carbon nanotube films. <i>ACS Nano</i> , 2010 , 4, 2142-8	16.7	44
228	Cation- π Interactions in Graphene-Containing Systems for Water Treatment and Beyond. <i>Advanced Materials</i> , 2020 , 32, e1905756	24	43
227	Twin Structure in BiVO ₄ Photoanodes Boosting Water Oxidation Performance through Enhanced Charge Separation and Transport. <i>Advanced Energy Materials</i> , 2018 , 8, 1802198	21.8	43
226	Fabrication of large area hexagonal boron nitride thin films for bendable capacitors. <i>Nano Research</i> , 2013 , 6, 602-610	10	42
225	Torsion sensors of high sensitivity and wide dynamic range based on a graphene woven structure. <i>Nanoscale</i> , 2014 , 6, 13053-9	7.7	42
224	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	10.3	42
223	Thermal conductivity of silicene nanosheets and the effect of isotopic doping. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 165301	3	41
222	Shape anisotropic Fe ₃ O ₄ nanotubes for efficient microwave absorption. <i>Nano Research</i> , 2020 , 13, 621-629	3.5	40
221	Direct laser fabrication of large-area and patterned graphene at room temperature. <i>Carbon</i> , 2014 , 68, 784-790	10.4	40
220	Polymer solar cells with gold nanoclusters decorated multi-layer graphene as transparent electrode. <i>Applied Physics Letters</i> , 2011 , 99, 223302	3.4	40
219	Growth mechanism of Y-junction carbon nanotubes. <i>Diamond and Related Materials</i> , 2002 , 11, 1349-1352	3.5	40
218	Polyaniline/graphene/carbon fiber ternary composites as supercapacitor electrodes. <i>Materials Letters</i> , 2015 , 140, 43-47	3.3	39

217	Hybrid Heterojunction and Solid-State Photoelectrochemical Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1400224	21.8	39
216	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	5	39
215	Flexible graphene woven fabrics for touch sensing. <i>Applied Physics Letters</i> , 2013 , 102, 163117	3.4	39
214	Topology evolution of graphene in chemical vapor deposition, a combined theoretical/experimental approach toward shape control of graphene domains. <i>Nanotechnology</i> , 2012 , 23, 115605	3.4	39
213	TiO ₂ enhanced ultraviolet detection based on a graphene/Si Schottky diode. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 8133-8138	13	38
212	A large area, flexible polyaniline/buckypaper composite with a core-shell structure for efficient supercapacitors. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 5898-5902	13	37
211	Doped carbon nanotube array with a gradient of nitrogen concentration. <i>Carbon</i> , 2010 , 48, 3097-3102	10.4	37
210	Photocatalytic, recyclable CdS nanoparticle-carbon nanotube hybrid sponges. <i>Nano Research</i> , 2012 , 5, 265-271	10	36
209	Effective recovery of acids from iron-based electrolytes using graphene oxide membrane filters. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 7734-7737	13	35
208	Selective Ion Transport through Functionalized Graphene Membranes Based on Delicate Ion-Graphene Interactions. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19396-19401	3.8	35
207	High flux nanofiltration membranes prepared with a graphene oxide homo-structure. <i>Journal of Membrane Science</i> , 2019 , 585, 29-37	9.6	34
206	Cellulose-Templated Graphene Monoliths with Anisotropic Mechanical, Thermal, and Electrical Properties. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 19145-52	9.5	34
205	Widely Spaced Bound States in a Soliton Fiber Laser With Graphene Saturable Absorber. <i>IEEE Photonics Technology Letters</i> , 2013 , 25, 1184-1187	2.2	34
204	Polymer-coated graphene films as anti-reflective transparent electrodes for Schottky junction solar cells. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 13795-13802	13	34
203	Magnetic transitions in graphene derivatives. <i>Nano Research</i> , 2014 , 7, 1507-1518	10	33
202	Fiber and fabric solar cells by directly weaving carbon nanotube yarns with CdSe nanowire-based electrodes. <i>Nanoscale</i> , 2012 , 4, 4954-9	7.7	33
201	Controllable growth of shaped graphene domains by atmospheric pressure chemical vapour deposition. <i>Nanoscale</i> , 2011 , 3, 4946	7.7	33
200	Efficient energy conversion of nanotube/nanowire-based solar cells. <i>Chemical Communications</i> , 2010 , 46, 5533-5	5.8	33

199	Structural identification of single and double-walled carbon nanotubes by high-resolution transmission electron microscopy. <i>Chemical Physics Letters</i> , 2005 , 412, 116-120	2.5	33
198	Hybrid thin films of graphene nanowhiskers and amorphous carbon as transparent conductors. <i>Chemical Communications</i> , 2010 , 46, 3502-4	5.8	32
197	Enhanced light emission of GaN-based diodes with a NiO(x)/graphene hybrid electrode. <i>Nanoscale</i> , 2012 , 4, 5852-5	7.7	31
196	Photoinduced molecular desorption from graphene films. <i>Applied Physics Letters</i> , 2012 , 101, 053107	3.4	31
195	Realizing synchronous energy harvesting and ion separation with graphene oxide membranes. <i>Scientific Reports</i> , 2014 , 4, 5528	4.9	30
194	High-quality textured SnSe thin films for self-powered, rapid-response photothermoelectric application. <i>Nano Energy</i> , 2020 , 72, 104742	17.1	30
193	Suppression of the coffee-ring effect by self-assembling graphene oxide and monolayer titania. <i>Nanotechnology</i> , 2013 , 24, 075601	3.4	30
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- 1 Degeneration of Key Structural Components Resulting in Ageing of Supercapacitors and the Related Chemical Ageing Mechanism. *ACS Applied Materials & Interfaces*, **2021**, 13, 39379-39393 9.5