

Byung Hee Hong

List of Publications by Citations

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215
papers

36,748
citations

74
h-index

191
g-index

226
ext. papers

39,907
ext. citations

10.6
avg, IF

6.94
L-index

#	Paper	IF	Citations
215	Large-scale pattern growth of graphene films for stretchable transparent electrodes. <i>Nature</i> , 2009 , 457, 706-10	50.4	8675
214	Roll-to-roll production of 30-inch graphene films for transparent electrodes. <i>Nature Nanotechnology</i> , 2010 , 5, 574-8	28.7	6507
213	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. <i>Nanoscale</i> , 2015 , 7, 4598-810	7.7	2015
212	Biomedical applications of graphene and graphene oxide. <i>Accounts of Chemical Research</i> , 2013 , 46, 2211-243	24.3	1179
211	Extremely efficient flexible organic light-emitting diodes with modified graphene anode. <i>Nature Photonics</i> , 2012 , 6, 105-110	33.9	1141
210	Wafer-scale synthesis and transfer of graphene films. <i>Nano Letters</i> , 2010 , 10, 490-3	11.5	932
209	Graphene for controlled and accelerated osteogenic differentiation of human mesenchymal stem cells. <i>ACS Nano</i> , 2011 , 5, 4670-8	16.7	724
208	Length-dependent thermal conductivity in suspended single-layer graphene. <i>Nature Communications</i> , 2014 , 5, 3689	17.4	603
207	Ultrathin single-crystalline silver nanowire arrays formed in an ambient solution phase. <i>Science</i> , 2001 , 294, 348-51	33.3	599
206	Enhanced differentiation of human neural stem cells into neurons on graphene. <i>Advanced Materials</i> , 2011 , 23, H263-7	24	542
205	Prospects and challenges of graphene in biomedical applications. <i>Advanced Materials</i> , 2013 , 25, 2258-68	24	497
204	Anomalous behaviors of visible luminescence from graphene quantum dots: interplay between size and shape. <i>ACS Nano</i> , 2012 , 6, 8203-8	16.7	469
203	High-performance graphene-based transparent flexible heaters. <i>Nano Letters</i> , 2011 , 11, 5154-8	11.5	396
202	Covalently bridging gaps in single-walled carbon nanotubes with conducting molecules. <i>Science</i> , 2006 , 311, 356-9	33.3	390
201	Graphene transfer: key for applications. <i>Nanoscale</i> , 2012 , 4, 5527-37	7.7	352
200	High-performance flexible graphene field effect transistors with ion gel gate dielectrics. <i>Nano Letters</i> , 2010 , 10, 3464-6	11.5	350
199	Stretchable graphene transistors with printed dielectrics and gate electrodes. <i>Nano Letters</i> , 2011 , 11, 4642-6	11.5	326

198	UV/ozone-oxidized large-scale graphene platform with large chemical enhancement in surface-enhanced Raman scattering. <i>ACS Nano</i> , 2011 , 5, 9799-806	16.7	298
197	Near-field focusing and magnification through self-assembled nanoscale spherical lenses. <i>Nature</i> , 2009 , 460, 498-501	50.4	290
196	Surface-directed molecular assembly of pentacene on monolayer graphene for high-performance organic transistors. <i>Journal of the American Chemical Society</i> , 2011 , 133, 4447-54	16.4	287
195	Materials for Flexible, Stretchable Electronics: Graphene and 2D Materials. <i>Annual Review of Materials Research</i> , 2015 , 45, 63-84	12.8	266
194	Scaling of resistance and electron mean free path of single-walled carbon nanotubes. <i>Physical Review Letters</i> , 2007 , 98, 186808	7.4	243
193	Large-scale patterned multi-layer graphene films as transparent conducting electrodes for GaN light-emitting diodes. <i>Nanotechnology</i> , 2010 , 21, 175201	3.4	233
192	Self-assembled arrays of organic nanotubes with infinitely long one-dimensional H-bond chains. <i>Journal of the American Chemical Society</i> , 2001 , 123, 10748-9	16.4	233
191	Work-Function Engineering of Graphene Electrodes by Self-Assembled Monolayers for High-Performance Organic Field-Effect Transistors. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 841-5	6.4	224
190	Self-Activated Transparent All-Graphene Gas Sensor with Endurance to Humidity and Mechanical Bending. <i>ACS Nano</i> , 2015 , 9, 10453-60	16.7	220
189	Single-gate bandgap opening of bilayer graphene by dual molecular doping. <i>Advanced Materials</i> , 2012 , 24, 407-11	24	212
188	Graphene quantum dots prevent α -synucleinopathy in Parkinson's disease. <i>Nature Nanotechnology</i> , 2018 , 13, 812-818	28.7	207
187	All graphene-based thin film transistors on flexible plastic substrates. <i>Nano Letters</i> , 2012 , 12, 3472-6	11.5	198
186	Toward wafer scale fabrication of graphene based spin valve devices. <i>Nano Letters</i> , 2011 , 11, 2363-8	11.5	189
185	Flexible inorganic nanostructure light-emitting diodes fabricated on graphene films. <i>Advanced Materials</i> , 2011 , 23, 4614-9	24	186
184	Substituent effects on the edge-to-face aromatic interactions. <i>Journal of the American Chemical Society</i> , 2005 , 127, 4530-7	16.4	182
183	Transparent flexible organic transistors based on monolayer graphene electrodes on plastic. <i>Advanced Materials</i> , 2011 , 23, 1752-6	24	175
182	Fast synthesis of high-performance graphene films by hydrogen-free rapid thermal chemical vapor deposition. <i>ACS Nano</i> , 2014 , 8, 950-6	16.7	170
181	Graphene oxide flakes as a cellular adhesive: prevention of reactive oxygen species mediated death of implanted cells for cardiac repair. <i>ACS Nano</i> , 2015 , 9, 4987-99	16.7	164

180	Exfoliation and Raman Spectroscopic Fingerprint of Few-Layer NiPS ₃ Van der Waals Crystals. <i>Scientific Reports</i> , 2016 , 6, 20904	4.9	159
179	Graphene-ferroelectric hybrid structure for flexible transparent electrodes. <i>ACS Nano</i> , 2012 , 6, 3935-42	16.7	156
178	Graphene-based nanomaterials for versatile imaging studies. <i>Chemical Society Reviews</i> , 2015 , 44, 4835-538.5	38.5	154
177	Balancing light absorptivity and carrier conductivity of graphene quantum dots for high-efficiency bulk heterojunction solar cells. <i>ACS Nano</i> , 2013 , 7, 7207-12	16.7	152
176	Smart Contact Lenses with Graphene Coating for Electromagnetic Interference Shielding and Dehydration Protection. <i>ACS Nano</i> , 2017 , 11, 5318-5324	16.7	148
175	Graphene-based bimorph microactuators. <i>Nano Letters</i> , 2011 , 11, 977-81	11.5	147
174	Efficient transfer of large-area graphene films onto rigid substrates by hot pressing. <i>ACS Nano</i> , 2012 , 6, 5360-5	16.7	143
173	Active control of all-fibre graphene devices with electrical gating. <i>Nature Communications</i> , 2015 , 6, 6851	17.4	127
172	Graphene for displays that bend. <i>Nature Nanotechnology</i> , 2014 , 9, 737-8	28.7	124
171	Electrochemical synthesis of CdSe quantum-dot arrays on a graphene basal plane using mesoporous silica thin-film templates. <i>Advanced Materials</i> , 2010 , 22, 515-8	24	123
170	Quasi-continuous growth of ultralong carbon nanotube arrays. <i>Journal of the American Chemical Society</i> , 2005 , 127, 15336-7	16.4	122
169	N-doped monolayer graphene catalyst on silicon photocathode for hydrogen production. <i>Energy and Environmental Science</i> , 2013 , 6, 3658	35.4	119
168	Graphene-incorporated chitosan substrata for adhesion and differentiation of human mesenchymal stem cells. <i>Journal of Materials Chemistry B</i> , 2013 , 1, 933-938	7.3	119
167	Control of graphene field-effect transistors by interfacial hydrophobic self-assembled monolayers. <i>Advanced Materials</i> , 2011 , 23, 3460-4	24	119
166	Efficient Mode-Locking of Sub-70-fs Ti:Sapphire Laser by Graphene Saturable Absorber. <i>Applied Physics Express</i> , 2012 , 5, 032701	2.4	118
165	Graphene-regulated cardiomyogenic differentiation process of mesenchymal stem cells by enhancing the expression of extracellular matrix proteins and cell signaling molecules. <i>Advanced Healthcare Materials</i> , 2014 , 3, 176-81	10.1	117
164	Towards industrial applications of graphene electrodes. <i>Physica Scripta</i> , 2012 , T146, 014024	2.6	117
163	Plasmon-enhanced ultraviolet photoluminescence from hybrid structures of graphene/ZnO films. <i>Physical Review Letters</i> , 2010 , 105, 127403	7.4	116

162	N-doped graphene quantum sheets on silicon nanowire photocathodes for hydrogen production. <i>Energy and Environmental Science</i> , 2015 , 8, 1329-1338	35.4	113
161	Quasi-periodic nanoripples in graphene grown by chemical vapor deposition and its impact on charge transport. <i>ACS Nano</i> , 2012 , 6, 1158-64	16.7	111
160	An Ag-grid/graphene hybrid structure for large-scale, transparent, flexible heaters. <i>Nanoscale</i> , 2015 , 7, 6567-73	7.7	107
159	High-quality, large-area monolayer graphene for efficient bulk laser mode-locking near 1.25 μm . <i>Optics Letters</i> , 2011 , 36, 4089-91	3	107
158	Transferable graphene oxide by stamping nanotechnology: electron-transport layer for efficient bulk-heterojunction solar cells. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 2874-80	16.4	105
157	Size control of semimetal bismuth nanoparticles and the UV-visible and IR absorption spectra. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 7067-72	3.4	104
156	Growth dynamics and gas transport mechanism of nanobubbles in graphene liquid cells. <i>Nature Communications</i> , 2015 , 6, 6068	17.4	103
155	Hydrogenated monolayer graphene with reversible and tunable wide band gap and its field-effect transistor. <i>Nature Communications</i> , 2016 , 7, 13261	17.4	101
154	Assembling phenomena of calix[4]hydroquinone nanotube bundles by one-dimensional short hydrogen bonding and displaced pi-pi stacking. <i>Journal of the American Chemical Society</i> , 2002 , 124, 14268-79	16.4	101
153	One-step synthesis of N-doped graphene quantum sheets from monolayer graphene by nitrogen plasma. <i>Advanced Materials</i> , 2014 , 26, 3501-5	24	98
152	Covalent conjugation of mechanically stiff graphene oxide flakes to three-dimensional collagen scaffolds for osteogenic differentiation of human mesenchymal stem cells. <i>Carbon</i> , 2015 , 83, 162-172	10.4	97
151	Graphene Potentiates the Myocardial Repair Efficacy of Mesenchymal Stem Cells by Stimulating the Expression of Angiogenic Growth Factors and Gap Junction Protein. <i>Advanced Functional Materials</i> , 2015 , 25, 2590-2600	15.6	85
150	Ultraclean patterned transfer of single-layer graphene by recyclable pressure sensitive adhesive films. <i>Nano Letters</i> , 2015 , 15, 3236-40	11.5	83
149	Graphene enhances the cardiomyogenic differentiation of human embryonic stem cells. <i>Biochemical and Biophysical Research Communications</i> , 2014 , 452, 174-80	3.4	83
148	Chemical vapour deposition. <i>Nature Reviews Methods Primers</i> , 2021 , 1,		80
147	Reduced Water Vapor Transmission Rate of Graphene Gas Barrier Films for Flexible Organic Field-Effect Transistors. <i>ACS Nano</i> , 2015 , 9, 5818-24	16.7	79
146	Graphene quantum dots: structural integrity and oxygen functional groups for high sulfur/sulfide utilization in lithium sulfur batteries. <i>NPG Asia Materials</i> , 2016 , 8, e272-e272	10.3	78
145	Selective n-type doping of graphene by photo-patterned gold nanoparticles. <i>ACS Nano</i> , 2011 , 5, 3639-44	16.7	77

144	Protein Quality of Wheat Desirable for Making Fresh White Salted Noodles and Its Influences on Processing and Texture of Noodles. <i>Cereal Chemistry</i> , 2003 , 80, 297-303	2.4	76
143	Atomic layer etching of graphene for full graphene device fabrication. <i>Carbon</i> , 2012 , 50, 429-435	10.4	74
142	Optical response of large scale single layer graphene. <i>Applied Physics Letters</i> , 2011 , 98, 071905	3.4	74
141	Vapor-phase molecular doping of graphene for high-performance transparent electrodes. <i>ACS Nano</i> , 2014 , 8, 868-74	16.7	73
140	Wafer-scale graphene/ferroelectric hybrid devices for low-voltage electronics. <i>Europhysics Letters</i> , 2011 , 93, 17002	1.6	67
139	Extremely stable graphene electrodes doped with macromolecular acid. <i>Nature Communications</i> , 2018 , 9, 2037	17.4	65
138	Number of graphene layers as a modulator of the open-circuit voltage of graphene-based solar cell. <i>Applied Physics Letters</i> , 2010 , 97, 032113	3.4	63
137	In situ hybridization of carbon nanotubes with bacterial cellulose for three-dimensional hybrid bioscaffolds. <i>Biomaterials</i> , 2015 , 58, 93-102	15.6	62
136	Flexible, transparent single-walled carbon nanotube transistors with graphene electrodes. <i>Nanotechnology</i> , 2010 , 21, 425201	3.4	62
135	Extracting subnanometer single shells from ultralong multiwalled carbon nanotubes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 14155-8	11.5	59
134	Chemically fluorinated graphene oxide for room temperature ammonia detection at ppb levels. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 19116-19125	13	58
133	A transparent and stretchable graphene-based actuator for tactile display. <i>Nanotechnology</i> , 2013 , 24, 145501	3.4	58
132	Mechanical and environmental stability of polymer thin-film-coated graphene. <i>ACS Nano</i> , 2012 , 6, 2096-1037	10.7	57
131	High-performance ultraviolet photodetectors based on solution-grown ZnS nanobelts sandwiched between graphene layers. <i>Scientific Reports</i> , 2015 , 5, 12345	4.9	55
130	Far-infrared study of substrate-effect on large scale graphene. <i>Applied Physics Letters</i> , 2011 , 98, 201907	3.4	54
129	An electrochemically controllable nanomechanical molecular system utilizing edge-to-face and face-to-face aromatic interactions. <i>Organic Letters</i> , 2002 , 4, 3971-4	6.2	51
128	Bacterial cellulose nanofibrillar patch as a wound healing platform of tympanic membrane perforation. <i>Advanced Healthcare Materials</i> , 2013 , 2, 1525-31	10.1	50
127	Sub-100-fs Cr:YAG laser mode-locked by monolayer graphene saturable absorber. <i>Optics Letters</i> , 2013 , 38, 1745-7	3	50

126	Strain Relaxation of Graphene Layers by Cu Surface Roughening. <i>Nano Letters</i> , 2016 , 16, 5993-5998	11.5	48
125	Surface-Engineered Graphene Quantum Dots Incorporated into Polymer Layers for High Performance Organic Photovoltaics. <i>Scientific Reports</i> , 2015 , 5, 14276	4.9	48
124	Optical probing of the electronic interaction between graphene and hexagonal boron nitride. <i>ACS Nano</i> , 2013 , 7, 1533-41	16.7	48
123	Origin of White Electroluminescence in Graphene Quantum Dots Embedded Host/Guest Polymer Light Emitting Diodes. <i>Scientific Reports</i> , 2015 , 5, 11032	4.9	46
122	All-fiber dissipative soliton laser with 10.2 nJ pulse energy using an evanescent field interaction with graphene saturable absorber. <i>Laser Physics Letters</i> , 2014 , 11, 015101	1.5	45
121	Graphene quantum dots-decorated ZnS nanobelts with highly efficient photocatalytic performances. <i>RSC Advances</i> , 2016 , 6, 24115-24120	3.7	44
120	Monolayer Graphene-Directed Growth and Neuronal Differentiation of Mesenchymal Stem Cells. <i>Journal of Biomedical Nanotechnology</i> , 2015 , 11, 2024-33	4	43
119	Antimony Nanowires Self-Assembled from Sb Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 16723-16726	3.4	43
118	Graphene quantum dots as anti-inflammatory therapy for colitis. <i>Science Advances</i> , 2020 , 6, eaaz2630	14.3	42
117	Laser-induced solid-phase doped graphene. <i>ACS Nano</i> , 2014 , 8, 7671-7	16.7	41
116	Detection of acetone vapor using graphene on polymer optical fiber. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 5939-43	1.3	41
115	Graphene/nanowire hybrid structures for high-performance photoconductive devices. <i>Journal of Materials Chemistry</i> , 2012 , 22, 8372		40
114	Laser-directed synthesis of strain-induced crumpled MoS ₂ structure for enhanced triboelectrification toward haptic sensors. <i>Nano Energy</i> , 2020 , 78, 105266	17.1	40
113	Au decoration of a graphene microchannel for self-activated chemoresistive flexible gas sensors with substantially enhanced response to hydrogen. <i>Nanoscale</i> , 2019 , 11, 2966-2973	7.7	38
112	Engineering electrical properties of graphene: chemical approaches. <i>2D Materials</i> , 2015 , 2, 042001	5.9	37
111	Ultrastrong Graphene-Copper Core-Shell Wires for High-Performance Electrical Cables. <i>ACS Nano</i> , 2018 , 12, 2803-2808	16.7	36
110	Graphene mode-locked femtosecond Yb:KLuW laser. <i>Applied Physics Letters</i> , 2012 , 101, 161112	3.4	35
109	Theoretical Study of the Conformations and Strain Energies of [n,n]Metaparacyclophanes: Indication of Stable Edge-to-Face and Displaced Face-to-Face Conformers for n = 4. <i>Journal of Organic Chemistry</i> , 1999 , 64, 5661-5665	4.2	35

108	Stable n-type doping of graphene via high-molecular-weight ethylene amines. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 29492-5	3.6	34
107	Fluorinated CYTOP passivation effects on the electrical reliability of multilayer MoS ₂ field-effect transistors. <i>Nanotechnology</i> , 2015 , 26, 455201	3.4	34
106	Simultaneous Etching and Doping by Cu-Stabilizing Agent for High-Performance Graphene-Based Transparent Electrodes. <i>Chemistry of Materials</i> , 2014 , 26, 2332-2336	9.6	33
105	High-performance near-field electromagnetic wave attenuation in ultra-thin and transparent graphene films. <i>2D Materials</i> , 2017 , 4, 025003	5.9	30
104	High-performance polymer light emitting diodes with interface-engineered graphene anodes. <i>Organic Electronics</i> , 2013 , 14, 2324-2330	3.5	28
103	Thermal stability of metal Ohmic contacts in indium gallium zinc oxide transistors using a graphene barrier layer. <i>Applied Physics Letters</i> , 2013 , 102, 113112	3.4	27
102	Large-area graphene synthesis and its application to interface-engineered field effect transistors. <i>Solid State Communications</i> , 2012 , 152, 1350-1358	1.6	26
101	Interactions of neutral and cationic transition metals with the redox system of hydroquinone and quinone: theoretical characterization of the binding topologies, and implications for the formation of nanomaterials. <i>Chemistry - A European Journal</i> , 2006 , 12, 4885-92	4.8	26
100	Roll-to-roll continuous patterning and transfer of graphene via dispersive adhesion. <i>Nanoscale</i> , 2015 , 7, 7138-42	7.7	25
99	Low-temperature growth and direct transfer of graphene-graphitic carbon films on flexible plastic substrates. <i>Nanotechnology</i> , 2012 , 23, 344016	3.4	25
98	A highly conducting graphene film with dual-side molecular n-doping. <i>Nanoscale</i> , 2014 , 6, 9545-9	7.7	24
97	Self-organizing properties of triethylsilylethynyl-anthradithiophene on monolayer graphene electrodes in solution-processed transistors. <i>Nanoscale</i> , 2013 , 5, 11094-101	7.7	24
96	Ultrafast modulation of optical transitions in monolayer and multilayer graphene. <i>Carbon</i> , 2011 , 49, 4781-4785	16.4	24
95	A new type of helix pattern in polyalanine peptide. <i>Journal of the American Chemical Society</i> , 2001 , 123, 514-5	16.4	24
94	Efficient solution-processed small-molecule solar cells by insertion of graphene quantum dots. <i>Nanoscale</i> , 2014 , 6, 15175-80	7.7	23
93	Non-destructive electron microscopy imaging and analysis of biological samples with graphene coating. <i>2D Materials</i> , 2016 , 3, 045004	5.9	23
92	Efficient heat generation in large-area graphene films by electromagnetic wave absorption. <i>2D Materials</i> , 2017 , 4, 025037	5.9	22
91	How to optically count graphene layers. <i>Optics Letters</i> , 2012 , 37, 3765-7	3	22

90	Roll-to-Roll Laser-Printed Graphene-Graphitic Carbon Electrodes for High-Performance Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 1033-1038	9.5	21
89	Solution-Processed n-Type Graphene Doping for Cathode in Inverted Polymer Light-Emitting Diodes. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 4874-4881	9.5	20
88	Tailored Graphene Micropatterns by Wafer-Scale Direct Transfer for Flexible Chemical Sensor Platform. <i>Advanced Materials</i> , 2021 , 33, e2004827	24	20
87	Multifunctional reduced graphene oxide-CVD graphene core-shell fibers. <i>Nanoscale</i> , 2019 , 11, 12637-12642	7.4	19
86	An electrochemical approach to graphene oxide coated sulfur for long cycle life. <i>Nanoscale</i> , 2015 , 7, 13249-55	7.5	19
85	Layer-Selective Synthesis of MoS and WS Structures under Ambient Conditions for Customized Electronics. <i>ACS Nano</i> , 2020 , 14, 8485-8494	16.7	19
84	Tension-controlled single-crystallization of copper foils for roll-to-roll synthesis of high-quality graphene films. <i>2D Materials</i> , 2018 , 5, 024002	5.9	19
83	Multiscale Modulation of Nanocrystalline Cellulose Hydrogel via Nanocarbon Hybridization for 3D Neuronal Bilayer Formation. <i>Small</i> , 2017 , 13, 1700331	11	16
82	Highly uniform growth of monolayer graphene by chemical vapor deposition on Cu-Ag alloy catalysts. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 3087-94	3.6	16
81	Hierarchical carbon-silicon nanowire heterostructures for the hydrogen evolution reaction. <i>Nanoscale</i> , 2018 , 10, 13936-13941	7.7	16
80	Double-Layer Graphene Outperforming Monolayer as Catalyst on Silicon Photocathode for Hydrogen Production. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 3570-3580	9.5	15
79	Thermoelectric Properties of Thermally Reduced Graphene Oxide Observed by Tuning the Energy States. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 7468-7474	8.3	15
78	Nanoscale Direct Mapping of Noise Source Activities on Graphene Domains. <i>ACS Nano</i> , 2016 , 10, 10135-10142	10.4	15
77	Defect-engineered MoS ₂ with extended photoluminescence lifetime for high-performance hydrogen evolution. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 10173-10178	7.1	15
76	Controlling the ripple density and heights: a new way to improve the electrical performance of CVD-grown graphene. <i>Nanoscale</i> , 2016 , 8, 9822-7	7.7	15
75	Enhancement of electrochemical properties by polysulfide trapping in a graphene-coated sulfur cathode on patterned current collector. <i>Chemical Communications</i> , 2016 , 52, 3203-6	5.8	14
74	Synthesis of ultra-long super-aligned double-walled carbon nanotube forests. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 470-3	1.3	14
73	Threshold Voltage Control of Multilayered MoS Field-Effect Transistors via Octadecyltrichlorosilane and their Applications to Active Matrixed Quantum Dot Displays Driven by Enhancement-Mode Logic Gates. <i>Small</i> , 2019 , 15, e1803852	11	14

72	Catalytic degradation of phenols by recyclable CVD graphene films. <i>Nanoscale</i> , 2018 , 10, 5840-5844	7.7	13
71	Engineering structures and functions of mesenchymal stem cells by suspended large-area graphene nanopatterns. <i>2D Materials</i> , 2016 , 3, 035013	5.9	13
70	Distortion in Two-Dimensional Shapes of Merging Nanobubbles: Evidence for Anisotropic Gas Flow Mechanism. <i>Langmuir</i> , 2016 , 32, 11303-11308	4	12
69	Carbon nanostructure-based saturable absorber mirror for a diode-pumped 500-MHz femtosecond Yb:KLu(WO ₄) ₂ laser. <i>Optics Express</i> , 2014 , 22, 15626-31	3.3	12
68	Strain-Assisted Wafer-Scale Nanoperforation of Single-Layer Graphene by Arrayed Pt Nanoparticles. <i>Chemistry of Materials</i> , 2015 , 27, 7003-7010	9.6	11
67	Controlled growth of a graphene charge-floating gate for organic non-volatile memory transistors. <i>Organic Electronics</i> , 2015 , 27, 227-231	3.5	11
66	Structural evolution of graphene in air at the electrical breakdown limit. <i>Carbon</i> , 2016 , 99, 466-471	10.4	11
65	Enhanced Chemical Reactivity of Graphene by Fermi Level Modulation. <i>Chemistry of Materials</i> , 2018 , 30, 5602-5609	9.6	11
64	In-situ Raman spectroscopy of current-carrying graphene microbridge. <i>Journal of Raman Spectroscopy</i> , 2014 , 45, 168-172	2.3	11
63	Mechanistic Study on Electrochemical Reduction of Calix[4]quinone in Acetonitrile Containing Water. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 4927-4936	3.4	11
62	Degradation Protection of Color Dyes Encapsulated by Graphene Barrier Films. <i>Chemistry of Materials</i> , 2019 , 31, 7173-7177	9.6	9
61	3D graphene-cellulose nanofiber hybrid scaffolds for cortical reconstruction in brain injuries. <i>2D Materials</i> , 2019 , 6, 045043	5.9	9
60	Efficient n-doping of graphene films by APPE (aminophenyl propargyl ether): a substituent effect. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 18353-6	3.6	9
59	Structure-controllable growth of nitrogenated graphene quantum dots via solvent catalysis for selective C-N bond activation. <i>Nature Communications</i> , 2021 , 12, 5879	17.4	9
58	Mapping of Bernal and non-Bernal stacking domains in bilayer graphene using infrared nanoscopy. <i>Nanoscale</i> , 2017 , 9, 4191-4195	7.7	8
57	High-Density Single-Layer Coating of Gold Nanoparticles onto Multiple Substrates by Using an Intrinsically Disordered Protein of β Synuclein for Nanoapplications. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 8519-8532	9.5	8
56	Continuous Films of Self-Assembled Graphene Quantum Dots for n-Type Doping of Graphene by UV-Triggered Charge Transfer. <i>Small</i> , 2017 , 13, 1603142	11	7
55	A Facile Route for Patterned Growth of Metal-Insulator Carbon Lateral Junction through One-Pot Synthesis. <i>ACS Nano</i> , 2015 , 9, 8352-60	16.7	7

54	Strong hole-doping and robust resistance-decrease in proton-irradiated graphene. <i>Scientific Reports</i> , 2016 , 6, 21311	4.9	7
53	Facile one-pot photosynthesis of stable Ag@graphene oxide nanocolloid core@shell nanoparticles with sustainable localized surface plasmon resonance properties. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 10016-10022	7.1	7
52	Effect of uni-axial strain on THz/far-infrared response of graphene. <i>Applied Physics Letters</i> , 2012 , 100, 041910	3.4	7
51	Graphene nanonet for biological sensing applications. <i>Nanotechnology</i> , 2013 , 24, 375302	3.4	7
50	Graphene Quantum Dots from Carbonized Coffee Bean Wastes for Biomedical Applications. <i>Nanomaterials</i> , 2021 , 11,	5.4	7
49	Performance enhancement of graphene assisted CNT/Cu composites for lightweight electrical cables. <i>Carbon</i> , 2021 , 179, 53-59	10.4	7
48	Transferable Graphene Oxide by Stamping Nanotechnology: Electron-Transport Layer for Efficient Bulk-Heterojunction Solar Cells. <i>Angewandte Chemie</i> , 2013 , 125, 2946-2952	3.6	6
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