Evolution of Graphene Growth on Ni and Cu by Carbon

Nano Letters 9, 4268-4272 DOI: 10.1021/nl902515k

Citation Report

#	Article	IF	CITATIONS
3	Large Scale Growth and Characterization of Atomic Hexagonal Boron Nitride Layers. Nano Letters, 2010, 10, 3209-3215.	9.1	2,317
4	Correlating defect density with carrier mobility in large-scaled graphene films: Raman spectral signatures for the estimation of defect density. Nanotechnology, 2010, 21, 465705.	2.6	86
5	Transparent, Flexible Conducting Hybrid Multilayer Thin Films of Multiwalled Carbon Nanotubes with Graphene Nanosheets. ACS Nano, 2010, 4, 3861-3868.	14.6	313
6	Scalable Synthesis of Graphene on Patterned Ni and Transfer. IEEE Transactions on Electron Devices, 2010, 57, 3472-3476.	3.0	26
7	Graphene and Graphene Oxide: Synthesis, Properties, and Applications. Advanced Materials, 2010, 22, 3906-3924.	21.0	8,959
8	Bulk growth of mono- to few-layer graphene on nickel particles by chemical vapor deposition from methane. Carbon, 2010, 48, 3543-3550.	10.3	96
9	Graphene, a promising transparent conductor. Materials Today, 2010, 13, 52-59.	14.2	469
10	Growth and properties of chemically modified graphene. Physica Status Solidi (B): Basic Research, 2010, 247, 2915-2919.	1.5	15
11	Atomic layers of hybridized boron nitride and graphene domains. Nature Materials, 2010, 9, 430-435.	27.5	2,002
12	Preparation of Bulk ¹³ C-Enriched Graphene Materials. Journal of Nanomaterials, 2010, 2010, 1-5.	2.7	20
13	Direct transformation of a resist pattern into a graphene field effect transistor through interfacial graphitization of liquid gallium. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C6D1-C6D4.	1.2	9
14	Tuning the thermal conductivity of graphene nanoribbons by edge passivation and isotope engineering: A molecular dynamics study. Applied Physics Letters, 2010, 97, 133107.	3.3	146
15	Large low-frequency resistance noise in chemical vapor deposited graphene. Applied Physics Letters, 2010, 97, 133504.	3.3	36
16	Large-Diameter Graphene Nanotubes Synthesized Using Ni Nanowire Templates. Nano Letters, 2010, 10, 4844-4850.	9.1	101
17	Doped graphene electrodes for organic solar cells. Nanotechnology, 2010, 21, 505204.	2.6	241
18	Optical properties of large-area polycrystalline chemical vapor deposited graphene by spectroscopic ellipsometry. Applied Physics Letters, 2010, 97, .	3.3	169
19	Adsorption/desorption and electrically controlled flipping of ammonia molecules on graphene. New Journal of Physics, 2010, 12, 125011.	2.9	56
20	Graphene Islands on Cu Foils: The Interplay between Shape, Orientation, and Defects. Nano Letters, 2010, 10, 4890-4896.	9.1	337

#	Article	IF	CITATIONS
21	Contrasting Behavior of Carbon Nucleation in the Initial Stages of Graphene Epitaxial Growth on Stepped Metal Surfaces. Physical Review Letters, 2010, 104, 186101.	7.8	194
22	Auger Electron Spectroscopy: A Rational Method for Determining Thickness of Graphene Films. ACS Nano, 2010, 4, 2937-2945.	14.6	115
23	Perspectives on the 2010 Nobel Prize in Physics for Graphene. ACS Nano, 2010, 4, 6297-6302.	14.6	94
24	Efficient growth of high-quality graphene films on Cu foils by ambient pressure chemical vapor deposition. Applied Physics Letters, 2010, 97, .	3.3	176
25	Moiré Superstructures of Graphene on Faceted Nickel Islands. ACS Nano, 2010, 4, 6509-6514.	14.6	78
26	Fabrication of Large-Area Graphene Using Liquid Gallium and Its Electrical Properties. Japanese Journal of Applied Physics, 2010, 49, 06GC01.	1.5	24
27	Cluster scattering effects on phonon conduction in graphene. Physical Review B, 2010, 81, .	3.2	93
28	Graphene Films with Large Domain Size by a Two-Step Chemical Vapor Deposition Process. Nano Letters, 2010, 10, 4328-4334.	9.1	896
29	Interface structure and mechanics between graphene and metal substrates: a first-principles study. Journal of Physics Condensed Matter, 2010, 22, 485301.	1.8	206
30	Growth Kinetics and Defects of CVD Graphene on Cu. ECS Transactions, 2010, 28, 109-114.	0.5	27
31	Comparison of Graphene Growth on Single-Crystalline and Polycrystalline Ni by Chemical Vapor Deposition. Journal of Physical Chemistry Letters, 2010, 1, 3101-3107.	4.6	328
32	Nanostructural Transformation and Formation of Heterojunctions from Si Nanowires. ACS Nano, 2010, 4, 5559-5564.	14.6	9
33	Communication: Coalescence of carbon atoms on Cu (111) surface: Emergence of a stable bridging-metal structure motif. Journal of Chemical Physics, 2010, 133, 071101.	3.0	72
34	Graphene growth on epitaxial Ru thin films on sapphire. Applied Physics Letters, 2010, 97, .	3.3	92
35	Continuity of Graphene on Polycrystalline Copper. Nano Letters, 2011, 11, 251-256.	9.1	175
36	Aligned Rectangular Few-Layer Graphene Domains on Copper Surfaces. Chemistry of Materials, 2011, 23, 4543-4547.	6.7	51
37	Nucleation sites for multilayer graphene on nickel catalyst. , 2011, , .		1
38	Boron nitride substrates for high mobility chemical vapor deposited graphene. Applied Physics Letters, 2011, 98, .	3.3	339

#	Article	IF	CITATIONS
39	Passivation of Metal Surface States: Microscopic Origin for Uniform Monolayer Graphene by Low Temperature Chemical Vapor Deposition. ACS Nano, 2011, 5, 1915-1920.	14.6	58
40	A nonequilibrium Green's function study of thermoelectric properties in single-walled carbon nanotubes. Journal of Applied Physics, 2011, 109, .	2.5	102
41	Template Effect in the Competition between Haeckelite and Graphene Growth on Ni(111): Quantum Chemical Molecular Dynamics Simulations. Journal of the American Chemical Society, 2011, 133, 18837-18842.	13.7	95
42	Electron Microscopic Imaging of a Single Group 8 Metal Atom Catalyzing C–C Bond Reorganization of Fullerenes. Journal of the American Chemical Society, 2011, 133, 14151-14153.	13.7	43
43	Synthesis of few-layered graphene by ion implantation of carbon in nickel thin films. Nanotechnology, 2011, 22, 085601.	2.6	81
44	Magnetism and bonding in graphene nanodots with H modified interior, edge, and apex. Journal of Chemical Physics, 2011, 135, 084707.	3.0	4
45	Formation of Bilayer Bernal Graphene: Layer-by-Layer Epitaxy via Chemical Vapor Deposition. Nano Letters, 2011, 11, 1106-1110.	9.1	365
46	Hexagonal Single Crystal Domains of Few-Layer Graphene on Copper Foils. Nano Letters, 2011, 11, 1182-1189.	9.1	289
47	Growth and Atomic-Scale Characterizations of Graphene on Multifaceted Textured Pt Foils Prepared by Chemical Vapor Deposition. ACS Nano, 2011, 5, 9194-9201.	14.6	84
48	Synthesis and Characterization of Large-Area Graphene and Graphite Films on Commercial Cu–Ni Alloy Foils. Nano Letters, 2011, 11, 3519-3525.	9.1	294
49	Ellipsometry as a Real-Time Optical Tool for Monitoring and Understanding Graphene Growth on Metals. Journal of Physical Chemistry C, 2011, 115, 21804-21812.	3.1	36
50	Effect of Substrate Roughness and Feedstock Concentration on Growth of Wafer-Scale Graphene at Atmospheric Pressure. Chemistry of Materials, 2011, 23, 1441-1447.	6.7	277
51	A review of chemical vapour deposition of graphene on copper. Journal of Materials Chemistry, 2011, 21, 3324-3334.	6.7	1,239
52	Photochemical Chlorination of Graphene. ACS Nano, 2011, 5, 5957-5961.	14.6	337
53	Oxidative Doping Renders Graphene Hydrophilic, Facilitating Its Use As a Support in Biological TEM. Nano Letters, 2011, 11, 4319-4323.	9.1	52
54	Oxidation Resistance of Graphene-Coated Cu and Cu/Ni Alloy. ACS Nano, 2011, 5, 1321-1327.	14.6	1,167
55	Growth Mechanism of Hexagonal-Shape Graphene Flakes with Zigzag Edges. ACS Nano, 2011, 5, 9154-9160.	14.6	154
56	Oxygen-Aided Synthesis of Polycrystalline Graphene on Silicon Dioxide Substrates. Journal of the American Chemical Society, 2011, 133, 17548-17551.	13.7	315

#	Article	IF	CITATIONS
57	Effects of domains in phonon conduction through hybrid boron nitride and graphene sheets. Physical Review B, 2011, 84, .	3.2	66
58	Polymer Brushes on Graphene. Journal of the American Chemical Society, 2011, 133, 10490-10498.	13.7	142
59	In Situ Characterization of Alloy Catalysts for Low-Temperature Graphene Growth. Nano Letters, 2011, 11, 4154-4160.	9.1	258
60	Universal Segregation Growth Approach to Wafer-Size Graphene from Non-Noble Metals. Nano Letters, 2011, 11, 297-303.	9.1	239
61	Rational design of a binary metal alloy for chemical vapour deposition growth of uniform single-layer graphene. Nature Communications, 2011, 2, 522.	12.8	223
62	Segregation Growth of Graphene on Cu–Ni Alloy for Precise Layer Control. Journal of Physical Chemistry C, 2011, 115, 11976-11982.	3.1	188
63	Effective mobility of single-layer graphene transistors as a function of channel dimensions. Journal of Applied Physics, 2011, 109, .	2.5	114
64	Graphene growth and stability at nickel surfaces. New Journal of Physics, 2011, 13, 025001.	2.9	107
65	Large-Area Graphene Single Crystals Grown by Low-Pressure Chemical Vapor Deposition of Methane on Copper. Journal of the American Chemical Society, 2011, 133, 2816-2819.	13.7	1,161
66	Direct Formation of Wafer Scale Graphene Thin Layers on Insulating Substrates by Chemical Vapor Deposition. Nano Letters, 2011, 11, 3612-3616.	9.1	302
67	Inorganic nanostructures grown on graphene layers. Nanoscale, 2011, 3, 3522.	5.6	78
68	Heat conduction in graphene flakes with inhomogeneous mass interface. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P10031.	2.3	14
69	Raman and optical characterization of multilayer turbostratic graphene grown via chemical vapor deposition. Journal of Applied Physics, 2011, 110, .	2.5	138
70	Direct growth of graphene pad on exfoliated hexagonal boron nitride surface. Nanoscale, 2011, 3, 3089.	5.6	91
71	Raman Measurements of Thermal Transport in Suspended Monolayer Graphene of Variable Sizes in Vacuum and Gaseous Environments. ACS Nano, 2011, 5, 321-328.	14.6	474
72	Ethanol-Assisted Graphene Oxide-Based Thin Film Formation at Pentane–Water Interface. Langmuir, 2011, 27, 9174-9181.	3.5	73
73	CMOS-Compatible Synthesis of Large-Area, High-Mobility Graphene by Chemical Vapor Deposition of Acetylene on Cobalt Thin Films. ACS Nano, 2011, 5, 7198-7204.	14.6	109
74	Influence of Copper Morphology in Forming Nucleation Seeds for Graphene Growth. Nano Letters, 2011, 11, 4144-4148.	9.1	373

#	Article	IF	CITATIONS
75	Engineering carbon nanomaterials for future applications: energy and bio-sensor. , 2011, , .		1
76	Graphenes Converted from Polymers. Journal of Physical Chemistry Letters, 2011, 2, 493-497.	4.6	158
77	Graphene/Cu (111) interface study: The density functional theory calculations. , 2011, , .		1
78	Effects of Polycrystalline Cu Substrate on Graphene Growth by Chemical Vapor Deposition. Nano Letters, 2011, 11, 4547-4554.	9.1	426
79	Surface refinement and electronic properties of graphene layers grown on copper substrate: An XPS, UPS and EELS study. Applied Surface Science, 2011, 257, 9785-9790.	6.1	185
80	Graphene Flash Memory. ACS Nano, 2011, 5, 7812-7817.	14.6	232
81	Formation of Graphene p–n Superlattices on Pb Quantum Wedged Islands. ACS Nano, 2011, 5, 3707-3713.	14.6	9
82	Efficient linear scaling method for computing the thermal conductivity of disordered materials. Physical Review B, 2011, 83, .	3.2	46
83	Low-Temperature Growth of Graphene by Chemical Vapor Deposition Using Solid and Liquid Carbon Sources. ACS Nano, 2011, 5, 3385-3390.	14.6	353
84	Graphene: Substrate preparation and introduction. Journal of Structural Biology, 2011, 174, 234-238.	2.8	84
85	Graphene Growth on Ni(111) by Transformation of a Surface Carbide. Nano Letters, 2011, 11, 518-522.	9.1	182
86	First-Principles Thermodynamics of Graphene Growth on Cu Surfaces. Journal of Physical Chemistry C, 2011, 115, 17782-17787.	3.1	317
87	Chemical Vapor Deposition of Boron Nitride Nanosheets on Metallic Substrates via Decaborane/Ammonia Reactions. Chemistry of Materials, 2011, 23, 4414-4416.	6.7	99
88	Direct Growth of Bilayer Graphene on SiO ₂ Substrates by Carbon Diffusion through Nickel. ACS Nano, 2011, 5, 8241-8247.	14.6	260
89	Role of Edge Chirality and Isotope Doping in Thermal Transport and Thermal Rectification in Graphene Nanoribbons. , 2011, , .		0
90	Control and characterization of individual grains and grain boundaries in graphene grown by chemical vapour deposition. Nature Materials, 2011, 10, 443-449.	27.5	1,356
91	Gas sensing properties of graphene synthesized by chemical vapor deposition. Materials Science and Engineering C, 2011, 31, 1405-1411.	7.3	117
92	Flame synthesis of graphene films in open environments. Carbon, 2011, 49, 5064-5070.	10.3	90

#	Article	IF	CITATIONS
93	Graphene CVD growth on copper and nickel: role of hydrogen in kinetics and structure. Physical Chemistry Chemical Physics, 2011, 13, 20836.	2.8	385
94	Role of Hydrogen in Chemical Vapor Deposition Growth of Large Single-Crystal Graphene. ACS Nano, 2011, 5, 6069-6076.	14.6	792
95	Graphene Chemistry: Synthesis and Manipulation. Journal of Physical Chemistry Letters, 2011, 2, 2425-2432.	4.6	237
96	Monolayer graphene as a saturable absorber in a mode-locked laser. Nano Research, 2011, 4, 297-307.	10.4	408
97	Synthesis of large area, homogeneous, single layer graphene films by annealing amorphous carbon on Co and Ni. Nano Research, 2011, 4, 531-540.	10.4	78
98	The origin of wrinkles on transferred graphene. Nano Research, 2011, 4, 996-1004.	10.4	211
99	CVD growth and processing of graphene for electronic applications. Physica Status Solidi (B): Basic Research, 2011, 248, 2604-2608.	1.5	31
100	Chemical Preparation of Grapheneâ€Based Nanomaterials and Their Applications in Chemical and Biological Sensors. Small, 2011, 7, 2413-2427.	10.0	245
101	Graphene as Transparent Electrode Material for Organic Electronics. Advanced Materials, 2011, 23, 2779-2795.	21.0	708
102	Equiangular Hexagonâ€Shapeâ€Controlled Synthesis of Graphene on Copper Surface. Advanced Materials, 2011, 23, 3522-3525.	21.0	173
103	Ethanol flame synthesis of highly transparent carbon thin films. Carbon, 2011, 49, 237-241.	10.3	24
104	Multilayer graphene grown by precipitation upon cooling of nickel on diamond. Carbon, 2011, 49, 1006-1012.	10.3	56
105	An all-graphene based transparent and flexible field emission device. Carbon, 2011, 49, 1614-1619.	10.3	98
106	The role of hydrocarbon concentration on the synthesis of large area few to multi-layer graphene structures. Chemical Physics Letters, 2011, 501, 390-395.	2.6	21
107	Characteristics of graphene FET directly transformed from a resist pattern through interfacial graphitization of liquid gallium. Microelectronic Engineering, 2011, 88, 2524-2526.	2.4	9
108	Graphene based materials: Past, present and future. Progress in Materials Science, 2011, 56, 1178-1271.	32.8	3,063
109	Electronic properties of grains and grain boundaries in graphene grown by chemical vapor deposition. Solid State Communications, 2011, 151, 1100-1104.	1.9	119
110	Graphitic carbon film formation under Ni templates by radio-frequency sputtering for transparent electrode applications. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, .	1.2	3

		CITATION	Report	
#	Article		IF	CITATIONS
111	Synthesis of graphene on gold. Applied Physics Letters, 2011, 98, .		3.3	145
112	High quality, transferrable graphene grown on single crystal Cu(111) thin films on basal sapphire. Applied Physics Letters, 2011, 98, .	-plane	3.3	113
113	Broadband microwave and time-domain terahertz spectroscopy of chemical vapor depo graphene. Journal of Applied Physics, 2011, 110, 083510.	sition grown	2.5	28
114	A study of graphene films synthesized on nickel substrates: existence and origin of sma peaks. Nanotechnology, 2011, 22, 045706.	l-base-area	2.6	27
115	\hat{I}_{\pm} -iron facet with enhanced carbon mobility. Physical Review B, 2011, 83, .		3.2	4
116	Transport Properties of Graphene with Nanoscale Lateral Resolution. Nanoscience and T 2011, , 247-285.	echnology,	1.5	9
117	Laser-based imaging of individual carbon nanostructures. NPG Asia Materials, 2011, 3, 9	1-99.	7.9	16
118	Communication: Stable carbon nanoarches in the initial stages of epitaxial growth of gr Cu(111). Journal of Chemical Physics, 2011, 134, 171105.	aphene on	3.0	80
119	Process Optimization for Synthesis of High-Quality Graphene Films by Low-Pressure Che Deposition. Japanese Journal of Applied Physics, 2012, 51, 06FD21.	emical Vapor	1.5	2
120	Growth of CVD graphene on copper by rapid thermal processing. Materials Research So Proceedings, 2012, 1451, 27-32.	ciety Symposia	0.1	2
121	Gate tunable graphene-silicon Ohmic/Schottky contacts. Applied Physics Letters, 2012,	101,.	3.3	40
122	Low-temperature grown graphene films by using molecular beam epitaxy. Applied Physi 101, .	cs Letters, 2012,	3.3	28
123	Argon-assisted growth of epitaxial graphene on Cu(111). Physical Review B, 2012, 86, .		3.2	41
124	Facet-insensitive graphene growth on copper. Physical Review B, 2012, 85, .		3.2	45
125	Probing the experimental phonon dispersion of graphene using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:msup> <m /> <mml:mn>12 </mml:mn> </m </mml:msup> C and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:msup> /> <mml:mn>13 </mml:mn> </mml:msup> C isotopes. Physical Review B, 20</mml:math </mml:math 	ml:mrow	3.2	27
126	Graphene Converted from the Photoresist Material on Polycrystalline Nickel Substrate. J Journal of Applied Physics, 2012, 51, 06FD17.		1.5	3
127	Graphene quilts for thermal management of high-power GaN transistors. Nature Comm 2012, 3, 827.	unications,	12.8	435
128	Atomistic Mechanism of Carbon Nanostructure Self-Assembly as Predicted by Nonequili Simulations. , 2012, , 103-172.	brium QM/MD		5

#	Article	IF	CITATIONS
129	Progress in studies of graphene growth mechanism on transition-metal surfaces. Chinese Science Bulletin, 2012, 57, 987-994.	0.7	1
130	Low-Temperature Graphene Growth Originating at Crystalline Facets of Catalytic Metal. Applied Physics Express, 2012, 5, 025101.	2.4	19
131	Different Characterization Techniques to Evaluate Graphene and Its Properties. , 2012, , 118-161.		0
132	High-Quality Large-Area Graphene from Dehydrogenated Polycyclic Aromatic Hydrocarbons. Chemistry of Materials, 2012, 24, 3906-3915.	6.7	119
133	Recent developments on graphene and graphene oxide based solid state gas sensors. Sensors and Actuators B: Chemical, 2012, 173, 1-21.	7.8	631
134	Large-Area Synthesis of Graphene on Palladium and Their Raman Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 16412-16420.	3.1	34
135	Personal perspectives on graphene: New graphene-related materials on the horizon. MRS Bulletin, 2012, 37, 1314-1318.	3.5	38
136	Nickel Carbide as a Source of Grain Rotation in Epitaxial Graphene. ACS Nano, 2012, 6, 3564-3572.	14.6	77
137	Synthesis of graphene-based nanomaterials and their application in energy-related and environmental-related areas. RSC Advances, 2012, 2, 9286.	3.6	226
138	Catalytic Growth of Graphene: Toward Large-Area Single-Crystalline Graphene. Journal of Physical Chemistry Letters, 2012, 3, 2228-2236.	4.6	136
139	Progress of graphene growth on copper by chemical vapor deposition: Growth behavior and controlled synthesis. Science Bulletin, 2012, 57, 2995-2999.	1.7	15
140	Molecular Dynamics Simulation of Chemical Vapor Deposition Graphene Growth on Ni (111) Surface. Journal of Physical Chemistry C, 2012, 116, 6097-6102.	3.1	104
141	Observations of Early Stage Graphene Growth on Copper. Electrochemical and Solid-State Letters, 2012, 15, K1.	2.2	33
142	Effects of alloying 30 at. % Ni using a Cu catalyst on the growth of bilayer graphene. Electronic Materials Letters, 2012, 8, 609-616.	2.2	4
143	AN IMPROVED METHOD FOR TRANSFERRING GRAPHENE GROWN BY CHEMICAL VAPOR DEPOSITION. Nano, 2012, 07, 1150001.	1.0	37
144	Direct Synthesis of Graphene on SiO ₂ Substrates by Transfer-Free Processes. Japanese Journal of Applied Physics, 2012, 51, 06FD12.	1.5	22
145	Few layer graphene synthesized by filtered vacuum arc system using solid carbon source. Current Applied Physics, 2012, 12, S131-S133.	2.4	9
146	Substrate grain size and orientation of Cu and Cu–Ni foils used for the growth of graphene films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	49

#	Article	IF	CITATIONS
147	Effect of <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"><mml:msup><mml:mrow></mml:mrow><mml:mn>13</mml:mn></mml:msup></mml:math> C isotope doping on the optical phonon modes in graphene: Localization and Raman spectroscopy. Physical Review B, 2012, 85, .	3.2	33
148	Direct growth of high-quality mono-layer graphene on insulating substrate by advanced plasma CVD. , 2012, , .		0
149	Growth selectivity of hexagonal-boron nitride layers on Ni with various crystal orientations. RSC Advances, 2012, 2, 111-115.	3.6	72
150	Suppression of Grain Boundaries in Graphene Growth on Superstructured Mn-Cu(111) Surface. Physical Review Letters, 2012, 109, 265507.	7.8	36
151	The Prospective Two-Dimensional Graphene Nanosheets: Preparation, Functionalization and Applications. Nano-Micro Letters, 2012, 4, 1-9.	27.0	133
152	The Role of Stable and Mobile Carbon Adspecies in Copper-Promoted Graphene Growth. Journal of Physical Chemistry C, 2012, 116, 5802-5809.	3.1	70
153	Role of Subsurface Diffusion and Ostwald Ripening in Catalyst Formation for Single-Walled Carbon Nanotube Forest Growth. Journal of the American Chemical Society, 2012, 134, 2148-2153.	13.7	113
154	Fabrication of Graphene with CuO Islands by Chemical Vapor Deposition. Langmuir, 2012, 28, 3489-3493.	3.5	41
155	Resonant Raman spectroscopy of graphene grown on copper substrates. Solid State Communications, 2012, 152, 1317-1320.	1.9	86
156	Kinetic Control of Catalytic CVD for High-Quality Graphene at Low Temperatures. ACS Nano, 2012, 6, 9996-10003.	14.6	159
157	Graphene transfer: key for applications. Nanoscale, 2012, 4, 5527.	5.6	405
158	On the nucleation of graphene by chemical vapor deposition. New Journal of Chemistry, 2012, 36, 73-77.	2.8	16
159	Role of Boundary Layer Diffusion in Vapor Deposition Growth of Chalcogenide Nanosheets: The Case of GeS. ACS Nano, 2012, 6, 8868-8877.	14.6	137
160	A first principles study of a piece of carbon nanoribbon on nickel along the zigzag edge. Applied Surface Science, 2012, 258, 5835-5840.	6.1	1
161	Theoretical approaches to graphene and graphene-based materials. Nano Today, 2012, 7, 180-200.	11.9	122
162	Growth of carbon clusters on a Ni(111) surface. Computational Materials Science, 2012, 63, 303-311.	3.0	13
163	The mechanics of graphene nanocomposites: A review. Composites Science and Technology, 2012, 72, 1459-1476.	7.8	1,076
164	Graphene: An Emerging Electronic Material. Advanced Materials, 2012, 24, 5782-5825.	21.0	718

		LFORT	
#	ARTICLE	IF	CITATIONS
165	Field Emission from an Individual Freestanding Graphene Edge. Small, 2012, 8, 3739-3745.	10.0	24
166	Controlled synthesis of bilayer graphene on nickel. Nanoscale Research Letters, 2012, 7, 437.	5.7	49
167	Mechanism of non-metal catalytic growth of graphene on silicon. Applied Physics Letters, 2012, 100, .	3.3	46
168	Surface-Enhanced Raman Scattering Study on Graphene-Coated Metallic Nanostructure Substrates. Journal of Physical Chemistry C, 2012, 116, 7249-7254.	3.1	97
169	Graphene and Its Synthesis. , 2012, , 415-438.		10
170	Heterogeneous catalysis model of growth mechanisms of carbon nanotubes, graphene and silicon nanowires. Journal of Materials Chemistry, 2012, 22, 19858.	6.7	53
171	Edge Structural Stability and Kinetics of Graphene Chemical Vapor Deposition Growth. ACS Nano, 2012, 6, 3243-3250.	14.6	179
172	Growth Mechanism and Controlled Synthesis of AB-Stacked Bilayer Graphene on Cu–Ni Alloy Foils. ACS Nano, 2012, 6, 7731-7738.	14.6	160
173	Two-dimensional phonon transport in graphene. Journal of Physics Condensed Matter, 2012, 24, 233203.	1.8	333
174	A facile method to observe graphene growth on copper foil. Nanotechnology, 2012, 23, 475705.	2.6	36
176	Graphene Growth by CVD Methods. , 2012, , 167-203.		7
177	Synthesis of large-scale undoped and nitrogen-doped amorphous graphene on MgO substrate by chemical vapor deposition. Journal of Materials Chemistry, 2012, 22, 19679.	6.7	48
178	Anisotropic Hydrogen Etching of Chemical Vapor Deposited Graphene. ACS Nano, 2012, 6, 126-132.	14.6	230
179	Graphene Thickness Control via Gas-Phase Dynamics in Chemical Vapor Deposition. Journal of Physical Chemistry C, 2012, 116, 10557-10562.	3.1	70
180	Lattice Mismatch Induced Nonlinear Growth of Graphene. Journal of the American Chemical Society, 2012, 134, 6045-6051.	13.7	88
181	Growth from below: bilayer graphene on copper by chemical vapor deposition. New Journal of Physics, 2012, 14, 093028.	2.9	150
182	Thermoelectric properties of disordered graphene antidot devices. , 2012, , .		0
183	Production and processing of graphene and 2d crystals. Materials Today, 2012, 15, 564-589.	14.2	866

#	Article	IF	CITATIONS
184	The Parameter Space of Graphene Chemical Vapor Deposition on Polycrystalline Cu. Journal of Physical Chemistry C, 2012, 116, 22492-22501.	3.1	155
185	Phononics in low-dimensional materials. Materials Today, 2012, 15, 266-275.	14.2	262
186	Tailoring Bimetallic Alloy Surface Properties by Kinetic Control of Self-Diffusion Processes at the Nanoscale. Journal of the American Chemical Society, 2012, 134, 16827-16833.	13.7	11
187	Comparison of the mechanism of low defect few-layer graphene fabricated on different metals by pulsed laser deposition. Diamond and Related Materials, 2012, 25, 98-102.	3.9	52
188	Direct imaging of copper catalyst migration inside helical carbon nanofibers. Nanotechnology, 2012, 23, 035702.	2.6	12
189	Monolayer graphene growth on Ni(111) by low temperature chemical vapor deposition. Applied Physics Letters, 2012, 100, .	3.3	169
190	Thinning Segregated Graphene Layers on High Carbon Solubility Substrates of Rhodium Foils by Tuning the Quenching Process. ACS Nano, 2012, 6, 10581-10589.	14.6	61
191	Synthesis of large-area graphene on molybdenum foils by chemical vapor deposition. Carbon, 2012, 50, 5226-5231.	10.3	47
192	Extraordinary epitaxial alignment of graphene islands on Au(111). New Journal of Physics, 2012, 14, 053008.	2.9	78
193	Direct Growth of Doping-Density-Controlled Hexagonal Graphene on SiO ₂ Substrate by Rapid-Heating Plasma CVD. ACS Nano, 2012, 6, 8508-8515.	14.6	99
194	Three dimensional nickel–graphene core–shell electrodes. Journal of Materials Chemistry, 2012, 22, 23749.	6.7	45
195	Laser-induced etching of few-layer graphene synthesized by Rapid-Chemical Vapour Deposition on Cu thin films. SpringerPlus, 2012, 1, 52.	1.2	9
196	Facile bottom-up synthesis of graphene nanofragments and nanoribbons by thermal polymerization of pentacenes. Nanoscale, 2012, 4, 6553.	5.6	14
197	Limitations of CVD graphene when utilised towards the sensing of heavy metals. RSC Advances, 2012, 2, 5385.	3.6	21
198	Growth of atomically thin hexagonal boron nitride films by diffusion through a metal film and precipitation. Journal Physics D: Applied Physics, 2012, 45, 385304.	2.8	44
199	Excitation of surface electromagnetic waves in a graphene-based Bragg grating. Scientific Reports, 2012, 2, 737.	3.3	97
200	Carbon isotope doping induced interfacial thermal resistance and thermal rectification in graphene. Applied Physics Letters, 2012, 100, .	3.3	80
201	Toward the Controlled Synthesis of Hexagonal Boron Nitride Films. ACS Nano, 2012, 6, 6378-6385.	14.6	295

# 202	ARTICLE Adsorption Behaviors of Graphene and Graphene-related Materials. , 2012, , 435-467.	IF	Citations
203	Chemical Vapor Deposition of Hexagonal Boron Nitride. E-Journal of Surface Science and Nanotechnology, 2012, 10, 133-138.	0.4	17
204	Chemical Approaches toward Grapheneâ€Based Nanomaterials and their Applications in Energyâ€Related Areas. Small, 2012, 8, 630-646.	10.0	368
205	The electrochemistry of CVD graphene: progress and prospects. Physical Chemistry Chemical Physics, 2012, 14, 8264.	2.8	148
206	Thermal conductivity of isotopically modifiedÂgraphene. Nature Materials, 2012, 11, 203-207.	27.5	846
207	Hydrothermal Synthesis of Graphene-TiO ₂ Nanotube Composites with Enhanced Photocatalytic Activity. ACS Catalysis, 2012, 2, 949-956.	11.2	863
208	Graphene-based transparent flexible electrodes for polymer solar cells. Journal of Materials Chemistry, 2012, 22, 24254.	6.7	103
209	Synthesis of Monolayer Hexagonal Boron Nitride on Cu Foil Using Chemical Vapor Deposition. Nano Letters, 2012, 12, 161-166.	9.1	1,057
210	Control of thickness uniformity and grain size in graphene films for transparent conductive electrodes. Nanotechnology, 2012, 23, 035603.	2.6	106
211	Graphene electrochemistry: fundamental concepts through to prominent applications. Chemical Society Reviews, 2012, 41, 6944.	38.1	540
212	Layerâ€Controlled and Waferâ€Scale Synthesis of Uniform and Highâ€Quality Graphene Films on a Polycrystalline Nickel Catalyst. Advanced Functional Materials, 2012, 22, 3153-3159.	14.9	93
213	Spongy Graphene as a Highly Efficient and Recyclable Sorbent for Oils and Organic Solvents. Advanced Functional Materials, 2012, 22, 4421-4425.	14.9	925
215	From Nanographene and Graphene Nanoribbons to Graphene Sheets: Chemical Synthesis. Angewandte Chemie - International Edition, 2012, 51, 7640-7654.	13.8	725
216	On the Mechanisms of Ni atalysed Graphene Chemical Vapour Deposition. ChemPhysChem, 2012, 13, 2544-2549.	2.1	90
217	Transformation of Roundâ€shaped Graphene Disks into Hexagonal Domains in CVD. Chemical Vapor Deposition, 2012, 18, 185-190.	1.3	1
218	Synthesis of monolithic graphene–graphite integrated electronics. Nature Materials, 2012, 11, 120-125.	27.5	208
219	Uniform hexagonal graphene flakes and films grown on liquid copper surface. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7992-7996.	7.1	417
220	Graphene monolayer rotation on Ni(111) facilitates bilayer graphene growth. Applied Physics Letters, 2012, 100, .	3.3	44

#	Article	IF	CITATIONS
221	Substrate considerations for graphene synthesis on thin copper films. Nanotechnology, 2012, 23, 135601.	2.6	34
222	Femtosecond energy relaxation in suspended graphene: phonon-assisted spreading of quasiparticle distribution. Applied Physics B: Lasers and Optics, 2012, 107, 131-136.	2.2	10
223	Synthesis of graphene ribbons using selective chemical vapor deposition. Current Applied Physics, 2012, 12, 1113-1117.	2.4	16
224	The effect of growth parameters on the intrinsic properties of large-area single layer graphene grown by chemical vapor deposition on Cu. Carbon, 2012, 50, 134-141.	10.3	92
225	Epitaxial growth of large-area single-layer graphene over Cu(1 1 1)/sapphire by atmospheric pressure CVD. Carbon, 2012, 50, 57-65.	10.3	252
226	Growth of graphene on Cu by plasma enhanced chemical vapor deposition. Carbon, 2012, 50, 869-874.	10.3	164
227	Rapid synthesis of few-layer graphene over Cu foil. Carbon, 2012, 50, 1546-1553.	10.3	72
228	Graphene layers produced from carbon nanotubes by friction. Carbon, 2012, 50, 1934-1941.	10.3	18
229	Synthesis, growth mechanism and thermal stability of copper nanoparticles encapsulated by multi-layer graphene. Carbon, 2012, 50, 2119-2125.	10.3	192
230	Effect of feed rate on the production of nitrogen-doped graphene from liquid acetonitrile. Carbon, 2012, 50, 3659-3665.	10.3	18
231	The control of graphene double-layer formation in copper-catalyzed chemical vapor deposition. Carbon, 2012, 50, 3682-3687.	10.3	120
232	A simple method to synthesize continuous large area nitrogen-doped graphene. Carbon, 2012, 50, 4476-4482.	10.3	139
233	Structural evolution and growth mechanism of graphene domains on copper foil by ambient pressure chemical vapor deposition. Chemical Physics Letters, 2012, 536, 123-128.	2.6	24
234	Chemical vapor deposition of boron- and nitrogen-containing graphene thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 233-238.	3.5	25
235	The surface science of graphene: Metal interfaces, CVD synthesis, nanoribbons, chemical modifications, and defects. Surface Science Reports, 2012, 67, 83-115.	7.2	746
236	Thermoresponsive graphene nanosheets by functionalization with polymer brushes. Polymer, 2012, 53, 316-323.	3.8	53
237	Autonomously Controlled Homogenous Growth of Waferâ€ S ized Highâ€Quality Graphene via a Smart Janus Substrate. Advanced Functional Materials, 2012, 22, 1033-1039.	14.9	41
238	Barrierâ€Guided Growth of Micro―and Nanoâ€Structured Graphene. Advanced Materials, 2012, 24, 1041-1045.	21.0	73

#	Article	IF	CITATIONS
239	Effects of hydrogen in the cooling step of chemical vapor deposition of graphene. Electronic Materials Letters, 2013, 9, 417-420.	2.2	7
240	Investigation of non-segregation graphene growth on Ni via isotope-labeled alcohol catalytic chemical vapor deposition. Nanoscale, 2013, 5, 6530.	5.6	17
241	Electrical and mechanical performance of graphene sheets exposed to oxidative environments. Nano Research, 2013, 6, 485-495.	10.4	41
242	Designed CVD Growth of Graphene via Process Engineering. Accounts of Chemical Research, 2013, 46, 2263-2274.	15.6	172
243	Role of substrate, temperature, and hydrogen on the flame synthesis of graphene films. Proceedings of the Combustion Institute, 2013, 34, 2163-2170.	3.9	36
244	Real-time optical diagnostics of graphene growth induced by pulsed chemical vapor deposition. Nanoscale, 2013, 5, 6507.	5.6	22
245	Applications of Nanomaterials in Sensors and Diagnostics. Springer Series on Chemical Sensors and Biosensors, 2013, , .	0.5	37
246	Ultra-fast synthesis of graphene by melt spinning. Carbon, 2013, 61, 299-304.	10.3	2
247	Rotated domains in chemical vapor deposition-grown monolayer graphene on Cu(111): an angle-resolved photoemission study. Nanoscale, 2013, 5, 8210.	5.6	33
248	Flexible Supercapacitors – Development of Bendable Carbon Architectures. ACS Symposium Series, 2013, , 101-141.	0.5	5
249	Low temperature growth of complete monolayer graphene films on Ni-doped copper and gold catalysts by a self-limiting surface reaction. Carbon, 2013, 64, 315-323.	10.3	33
250	Microscopic characterisation of suspended graphene grown by chemical vapour deposition. Nanoscale, 2013, 5, 9057.	5.6	10
251	<i>In Situ</i> Observations of the Atomistic Mechanisms of Ni Catalyzed Low Temperature Graphene Growth. ACS Nano, 2013, 7, 7901-7912.	14.6	163
253	Synthesis of Millimeter-Size Hexagon-Shaped Graphene Single Crystals on Resolidified Copper. ACS Nano, 2013, 7, 8924-8931.	14.6	178
254	Investigating the growth mechanism and optical properties of carbon-coated titanium dioxide nanoparticles. Materials Letters, 2013, 108, 134-138.	2.6	9
255	Crystal Structure Evolution of Individual Graphene Islands During CVD Growth on Copper Foil. Advanced Materials, 2013, 25, 6744-6751.	21.0	50
256	Recent progress in the development and properties of novel metal matrix nanocomposites reinforced with carbon nanotubes and graphene nanosheets. Materials Science and Engineering Reports, 2013, 74, 281-350.	31.8	918
257	The Role of Surface Oxygen in the Growth of Large Single-Crystal Graphene on Copper. Science, 2013, 342, 720-723.	12.6	977

ARTICLE IF CITATIONS # Solid-source growth and atomic-scale characterization of graphene on Ag(111). Nature 258 12.8 107 Communications, 2013, 4, . Growth Mechanism and Influences from Kinetic Factors on Carbon Materials with Cu and Silica 259 Substrates during Atmospheric Pressure Chemical Vapor Deposition. Journal of Physical Chemistry C, 3.1 9 2013, 117, 2517<u>5-251</u>84. Gold intercalation of boron-doped graphene on Ni(111): XPS and DFT study. Journal of Physics 260 1.8 12 Condensed Matter, 2013, 25, 445002. CVD Growth of Large Area Smooth-edged Graphene Nanomesh by Nanosphere Lithography. Scientific Reports, 2013, 3, 1238. Mn atomic layers under inert covers of graphene and hexagonal boron nitride prepared on Rh(111). 262 10.4 22 Nano Research, 2013, 6, 887-896. Kinetic study of graphene growth: Temperature perspective on growth rate and film thickness by chemical vapor deposition. Chemical Physics Letters, 2013, 580, 62-66. 2.6 Fabrication of graphene films with high transparent conducting characteristics. Nanoscale Research 264 5.7 20 Letters, 2013, 8, 440. Graphene bioelectronics. Biomedical Engineering Letters, 2013, 3, 201-208. 4.1 265 19 Towards the perfect graphene membrane? – Improvement and limits during formation of high quality 266 10.3 40 graphene grown on Ču-foils. Carbon, 2013, 64, 377-390. Ab initio molecular dynamics simulation of dissociation of methane on nickel(1 1 1) surface: Unravelling initial stage of graphene growth via a CVD technique. Chemical Physics Letters, 2013, 565, 2.6 54 92-97. Observing Graphene Grow: Catalyst–Graphene Interactions during Scalable Graphene Growth on 268 231 9.1 Polycrystalline Copper. Nano Letters, 2013, 13, 4769-4778. Bimetallic ruthenium–copper nanoparticles embedded in mesoporous carbon as an effective 5.6 hydrogenation catalyst. Nanoscale, 2013, 5, 11044. Controlling Thermal Conductivity of Few-Layer Graphene Nanoribbons by Using the Transversal 270 2.5 3 Pressure. Communications in Théoretical Physics, 2013, 60, 353-356. Three-Dimensional Graphene Nano-Networks with High Quality and Mass Production Capability via 271 3.3 124 Precursor-Assisted Chemical Vapor Deposition. Scientific Reports, 2013, 3, . pH Sensor Based on Chemical-Vapor-Deposition-Synthesized Graphene Transistor Array. Japanese 272 20 1.5 Journal of Applied Physics, 2013, 52, 06CK04. Time variant layer control in atmospheric pressure chemical vapor deposition based growth of graphene., 2013,,. Growth of graphene underlayers by chemical vapor deposition. AIP Advances, 2013, 3, . 274 1.313 Synthesis of carbon nanotubes and graphene for photonic applications., 2013, , 26-56.

#	Article	IF	CITATIONS
276	Towards intrinsic magnetism of graphene sheets with irregular zigzag edges. Scientific Reports, 2013, 3, 2599.	3.3	66
277	Deposition of few-layered graphene in a microcombustor on copper and nickel substrates. RSC Advances, 2013, 3, 7100.	3.6	10
278	Wafer-scale synthesis and transfer of monolayer graphene. , 2013, , .		2
279	Transfer-free synthesis of multilayer graphene using a single-step process in an evaporator and formation confirmation by laser mode-locking. Nanotechnology, 2013, 24, 365603.	2.6	11
280	On the growth mode of two-lobed curvilinear graphene domains at atmospheric pressure. Scientific Reports, 2013, 3, 2571.	3.3	8
281	Nanoscale charcoal powder induced saturable absorption and mode-locking of a low-gain erbium-doped fiber-ring laser. Laser Physics Letters, 2013, 10, 055105.	1.4	56
282	Graphene sheets fabricated from disposable paper cups as a catalyst support material for fuel cells. Journal of Materials Chemistry A, 2013, 1, 183-187.	10.3	49
283	Chemical vapor deposition of graphene on liquid metal catalysts. Carbon, 2013, 53, 321-326.	10.3	82
994	Andiantiana of Cranhana 2012 222 427		
284	Applications of Graphene. , 2013, , 333-437.		9
284	Growth of Adlayer Graphene on Cu Studied by Carbon Isotope Labeling. Nano Letters, 2013, 13, 486-490.	9.1	9 236
		9.1 2.1	
285	Growth of Adlayer Graphene on Cu Studied by Carbon Isotope Labeling. Nano Letters, 2013, 13, 486-490. Hydrogen Dissociation Catalyzed by Carbonâ€Coated Nickel Nanoparticles: Experiment and Theory.		236
285 286	Growth of Adlayer Graphene on Cu Studied by Carbon Isotope Labeling. Nano Letters, 2013, 13, 486-490. Hydrogen Dissociation Catalyzed by Carbonâ€Coated Nickel Nanoparticles: Experiment and Theory. ChemPhysChem, 2013, 14, 381-385.		236 26
285 286 287	Growth of Adlayer Graphene on Cu Studied by Carbon Isotope Labeling. Nano Letters, 2013, 13, 486-490. Hydrogen Dissociation Catalyzed by Carbonâ€Coated Nickel Nanoparticles: Experiment and Theory. ChemPhysChem, 2013, 14, 381-385. Methods for Obtaining Graphene. , 2013, , 129-228. DFT modeling of the covalent functionalization of graphene: from ideal to realistic models. RSC	2.1	236 26 13
285 286 287 288	Growth of Adlayer Graphene on Cu Studied by Carbon Isotope Labeling. Nano Letters, 2013, 13, 486-490. Hydrogen Dissociation Catalyzed by Carbonâ€Coated Nickel Nanoparticles: Experiment and Theory. ChemPhysChem, 2013, 14, 381-385. Methods for Obtaining Graphene. , 2013, , 129-228. DFT modeling of the covalent functionalization of graphene: from ideal to realistic models. RSC Advances, 2013, 3, 7150. Fabrication, Optimization, and Use of Graphene Field Effect Sensors. Analytical Chemistry, 2013, 85,	2.1 3.6	236 26 13 60
285 286 287 288 289	Growth of Adlayer Graphene on Cu Studied by Carbon Isotope Labeling. Nano Letters, 2013, 13, 486-490. Hydrogen Dissociation Catalyzed by Carbonâ€Coated Nickel Nanoparticles: Experiment and Theory. ChemPhysChem, 2013, 14, 381-385. Methods for Obtaining Graphene. , 2013, , 129-228. DFT modeling of the covalent functionalization of graphene: from ideal to realistic models. RSC Advances, 2013, 3, 7150. Fabrication, Optimization, and Use of Graphene Field Effect Sensors. Analytical Chemistry, 2013, 85, 509-521. Synthesis of a CdSe–graphene hybrid composed of CdSe quantum dot arrays directly grown on	2.1 3.6 6.5	 236 26 13 60 99
285 286 287 288 289 290	Growth of Adlayer Graphene on Cu Studied by Carbon Isotope Labeling. Nano Letters, 2013, 13, 486-490. Hydrogen Dissociation Catalyzed by Carbonâ€Coated Nickel Nanoparticles: Experiment and Theory. ChemPhysChem, 2013, 14, 381-385. Methods for Obtaining Graphene. , 2013, , 129-228. DFT modeling of the covalent functionalization of graphene: from ideal to realistic models. RSC Advances, 2013, 3, 7150. Fabrication, Optimization, and Use of Graphene Field Effect Sensors. Analytical Chemistry, 2013, 85, 509-521. Synthesis of a CdSe–graphene hybrid composed of CdSe quantum dot arrays directly grown on CVD-graphene and its ultrafast carrier dynamics. Nanoscale, 2013, 5, 1483.	2.1 3.6 6.5 5.6	 236 26 13 60 99 33

		CITATION REPORT		
#	Article		IF	CITATIONS
294	Review of <scp>CVD</scp> Synthesis of Graphene. Chemical Vapor Deposition, 2013, 19), 297-322.	1.3	468
295	Effects of three parameters on graphene synthesis by chemical vapor deposition. , 2013,	,.		10
296	CVD synthesis of mono- and few-layer graphene using alcohols at low hydrogen concent atmospheric pressure. Chemical Physics Letters, 2013, 584, 142-146.	ration and	2.6	43
297	Anisotropic graphene growth accompanied by step bunching on a dynamic copper surface Nanotechnology, 2013, 24, 025603.	ce.	2.6	47
298	Graphene Growth Dynamics on Epitaxial Copper Thin Films. Chemistry of Materials, 2013	3, 25, 871-877.	6.7	133
299	No Graphene Etching in Purified Hydrogen. Journal of Physical Chemistry Letters, 2013, 4	-, 1100-1103.	4.6	76
300	Influence of Gas Phase Equilibria on the Chemical Vapor Deposition of Graphene. ACS Na 3104-3117.	no, 2013, 7,	14.6	59
301	A growth mechanism for graphene deposited on polycrystalline Co film by plasma enhan vapor deposition. New Journal of Chemistry, 2013, 37, 1616.	ced chemical	2.8	23
302	Synthesis of Few-Layered Graphene Nanoballs with Copper Cores Using Solid Carbon Son Applied Materials & amp; Interfaces, 2013, 5, 2432-2437.	urce. ACS	8.0	62
303	Review of Chemical Vapor Deposition of Graphene and Related Applications. Accounts of Research, 2013, 46, 2329-2339.	Chemical	15.6	1,234
304	Probing the Synthesis of Twoâ€Dimensional Boron by Firstâ€Principles Computations. An - International Edition, 2013, 52, 3156-3159.	ngewandte Chemie	13.8	274
305	Graphene at the Atomicâ€Scale: Synthesis, Characterization, and Modification. Advanced Materials, 2013, 23, 2554-2564.	Functional	14.9	30
306	Progress, Challenges, and Opportunities in Two-Dimensional Materials Beyond Graphene 2013, 7, 2898-2926.	. ACS Nano,	14.6	4,062
307	Transformation of Carbon Monomers and Dimers to Graphene Islands on Co(0001): The and Kinetics. Journal of Physical Chemistry C, 2013, 117, 2952-2958.	modynamics	3.1	21
308	Rapid Identification of Stacking Orientation in Isotopically Labeled Chemical-Vapor Grow Graphene by Raman Spectroscopy. Nano Letters, 2013, 13, 1541-1548.	n Bilayer	9.1	146
309	Graphene-Based Chemical and Biosensors. Springer Series on Chemical Sensors and Bios 103-141.	ensors, 2013, ,	0.5	9
310	Graphene Domains Synthesized on Electroplated Copper by Chemical Vapor Deposition. Letters, 2013, 30, 028102.	Chinese Physics	3.3	3
311	Growth of large area monolayer graphene on 3C-SiC and a comparison with other SiC po Carbon, 2013, 57, 477-484.	lytypes.	10.3	100

#	Article	IF	CITATIONS
312	Graphene-based electrodes for electrochemical energy storage. Energy and Environmental Science, 2013, 6, 1388.	30.8	696
313	The effects of oxygen on controlling the number of carbon layers in the chemical vapor deposition of graphene on a nickel substrate. Nanotechnology, 2013, 24, 185603.	2.6	8
314	Mesoscale Scanning Electron and Tunneling Microscopy Study of the Surface Morphology of Thermally Annealed Copper Foils for Graphene Growth. Chemistry of Materials, 2013, 25, 1643-1648.	6.7	22
315	In situnitrogen-doped graphene grown from polydimethylsiloxane by plasma enhanced chemical vapor deposition. Nanoscale, 2013, 5, 600-605.	5.6	114
316	Two-Dimensional Nanocrystals: Structure, Properties and Applications. Arabian Journal for Science and Engineering, 2013, 38, 1289-1304.	1.1	6
317	Atomistic modelling of CVD synthesis of carbon nanotubes and graphene. Nanoscale, 2013, 5, 6662.	5.6	88
318	Evolutionary Kinetics of Graphene Formation on Copper. Nano Letters, 2013, 13, 967-974.	9.1	97
319	Formation of single layer graphene on nickel under far-from-equilibrium high flux conditions. Nanoscale, 2013, 5, 7250.	5.6	33
320	Formation and Healing of Vacancies in Graphene Chemical Vapor Deposition (CVD) Growth. Journal of the American Chemical Society, 2013, 135, 4476-4482.	13.7	91
321	Graphene Growth and Device Integration. Proceedings of the IEEE, 2013, 101, 1536-1556.	21.3	46
322	Microscopic View on a Chemical Vapor Deposition Route to Boron-Doped Graphene Nanostructures. Chemistry of Materials, 2013, 25, 1490-1495.	6.7	130
323	A brief review of graphene–metal oxide composites synthesis and applications in photocatalysis. Journal of the Chinese Advanced Materials Society, 2013, 1, 21-39.	0.7	135
324	Hydrogen Kinetics on Scalable Graphene Growth by Atmospheric Pressure Chemical Vapor Deposition with Acetylene. Journal of Physical Chemistry C, 2013, 117, 14348-14353.	3.1	72
325	Nucleation of Graphene Precursors on Transition Metal Surfaces: Insights from Theoretical Simulations. Journal of Physical Chemistry C, 2013, 117, 14858-14864.	3.1	39
326	Synthesis of carbon nanotubes and graphene for VLSI interconnects. Microelectronic Engineering, 2013, 107, 210-218.	2.4	15
327	Self-Limiting Chemical Vapor Deposition Growth of Monolayer Graphene from Ethanol. Journal of Physical Chemistry C, 2013, 117, 10755-10763.	3.1	92
328	Measurements of the adhesion energy of graphene to metallic substrates. Carbon, 2013, 59, 121-129.	10.3	123
329	Self-organized graphene crystal patterns. NPG Asia Materials, 2013, 5, e36-e36.	7.9	153

	CITATION R	EPORT	
#	Article	IF	Citations
330	Photo-thermal chemical vapor deposition of graphene on copper. Carbon, 2013, 62, 43-50.	10.3	32
332	Nanographite sheets derived from polyaniline nanocoating of cellulose nanofibers. Materials Research Bulletin, 2013, 48, 429-434.	5.2	9
333	A study of the key parameters, including the crucial role of H2 for uniform graphene growth on Ni foil. Journal of Molecular Catalysis A, 2013, 366, 303-314.	4.8	25
334	Hot-Wire Chemical Vapor Deposition of Few-Layer Graphene on Copper Substrates. Japanese Journal of Applied Physics, 2013, 52, 01AK02.	1.5	2
335	Raman spectroscopy investigation of defect occurrence in graphene grown on copper single crystals. Physica Status Solidi (B): Basic Research, 2013, 250, 2653-2658.	1.5	7
336	Ab initio Investigations of Carbon Atoms Adsorbed on α-Al2O3 Surfaces in Relation to Graphene Growth. Journal of the Physical Society of Japan, 2013, 82, 114709.	1.6	2
337	Graphene mediated domain formation in exchange coupled graphene/Co ₃ O ₄ (111)/Co(0001) trilayers. Journal of Physics Condensed Matter, 2013, 25, 472203.	1.8	7
338	Ferroelectric polymer-gated graphene memory with high speed conductivity modulation. Nanotechnology, 2013, 24, 175202.	2.6	30
339	Transfer-free fabrication of graphene field effect transistor arrays using solid-phase growth of graphene on a SiO2/Si substrate. Applied Physics Letters, 2013, 103, .	3.3	18
340	Microstructure and Growth Mechanism of Glucose-Carburized Nickel Substrates. Advanced Materials Research, 0, 716, 153-158.	0.3	0
341	The Unique Antimicrobial Effects of Trimolybdate Nanowires. Advanced Materials Research, 0, 647, 203-209.	0.3	0
342	Heat-Resistant Co–W Catalytic Metals for Multilayer Graphene Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2013, 52, 04CB04.	1.5	1
343	Synthesis and Biomedical Applications of Graphene: Present and Future Trends. , 0, , .		18
344	Key growth parameters affecting the domain structure of chemical vapor deposition (CVD)-grown graphene on nickel. RSC Advances, 2013, 3, 22909.	3.6	13
345	Passivating a transition-metal surface for more uniform growth of graphene: Effect of Au alloying on Ni(111). Physical Review B, 2013, 87, .	3.2	7
346	Preparation and characterization of Ni(111)/graphene/Y2O3(111) heterostructures. Journal of Applied Physics, 2013, 113, 194305.	2.5	17
347	Fabrication of Graphene-Based Films Using Microwave-Plasma-Enhanced Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2013, 52, 01AK04.	1.5	10
348	All-carbon graphene bioelectronics. , 2013, 2013, 5654-7.		2

#	Article	IF	Citations
349	GRAPHENE-BASED TRANSPARENT CONDUCTIVE FILMS. Nano, 2013, 08, 1330001.	1.0	52
350	Position-Controlled Direct Graphene Synthesis on Silicon Oxide Surfaces Using Laser Irradiation. Applied Physics Express, 2013, 6, 105101.	2.4	13
351	Electronic properties of graphene nanoribbons stacked on boron nitride nanoribbons. Journal of Applied Physics, 2013, 113, .	2.5	14
352	Graphene as an atomically thin interface for growth of vertically aligned carbon nanotubes. Scientific Reports, 2013, 3, 1891.	3.3	54
354	Catalystâ€free Direct Growth of a Single to a Few Layers of Graphene on a Germanium Nanowire for the Anode Material of a Lithium Battery. Angewandte Chemie - International Edition, 2013, 52, 5997-6001.	13.8	106
355	Micro- and nanoscale electrical characterization of large-area graphene transferred to functional substrates. Beilstein Journal of Nanotechnology, 2013, 4, 234-242.	2.8	28
356	Direct laser fabrication of large-area graphene: An engineering approach to nano-materials. , 2014, , .		0
357	Mechanism of Thin Layers Graphite Formation by 13C Implantation and Annealing. Applied Sciences (Switzerland), 2014, 4, 180-194.	2.5	8
358	Multi-layer graphene on Co(0001) by ethanol chemical vapor deposition. Materials Research Express, 2014, 1, 035601.	1.6	5
359	Fully reproducible, low-temperature synthesis of high-quality, few-layer graphene on nickel via preheating of gas precursors using atmospheric pressure chemical vapor deposition. Journal of Materials Chemistry A, 2014, 2, 19750-19758.	10.3	22
360	Techniques for Production of Large Area Graphene for Electronic and Sensor Device Applications. Graphene and 2D Materials, 2014, 1, .	2.0	0
361	Influence of reaction parameters on synthesis of high-quality single-layer graphene on Cu using chemical vapor deposition. Chinese Physics B, 2014, 23, 096803.	1.4	6
362	Phonon engineering in graphene and van der Waals materials. MRS Bulletin, 2014, 39, 817-823.	3.5	23
363	In situ observation of step-edge in-plane growth of graphene in a STEM. Nature Communications, 2014, 5, 4055.	12.8	55
364	Effect of copper surface pre-treatment on the properties of CVD grown graphene. AIP Advances, 2014, 4, .	1.3	29
365	Growth of graphene on copper and nickel foils via chemical vapour deposition using ethylene. Materials Research Innovations, 2014, 18, S4-706-S4-710.	2.3	16
366	Molecular beam epitaxy of graphene on ultra-smooth nickel: growth mode and substrate interactions. New Journal of Physics, 2014, 16, 093055.	2.9	16
367	A low contact resistance graphene field effect transistor with single-layer-channel and multi-layer-contact. , 2014, , .		2

		CITATION REI	PORT	
#	Article		IF	CITATIONS
368	Adsorption on epitaxial graphene on SiC(0001). Journal of Materials Research, 2014, 29, 447-458.		2.6	8
369	Field effect of in-plane gates with different gap sizes on the Fermi level tuning of graphene channe Applied Physics Letters, 2014, 104, 183503.	s.	3.3	0
370	Three-dimensional, flexible graphene bioelectronics. , 2014, 2014, 5268-71.			0
371	Evolution of Cu Surface Morphology and its Effect on Graphene Synthesized by Chemical Vapor Deposition. Advances in Science and Technology, 2014, 95, 17-22.		0.2	2
372	Nanotechnology's Wonder Material: Synthesis of Carbon Nanotubes. RSC Nanoscience and Nanotechnology, 2014, , 26-58.		0.2	2
373	Electronic transport in carbon nanotube–graphene contact. Micro and Nano Letters, 2014, 9, 62	26-629.	1.3	6
374	Growth of Reduced Graphene Oxide. Materials Research Society Symposia Proceedings, 2014, 170	12, 1.	0.1	0
375	Introduction to Graphene. , 2014, , 1-22.			4
376	Gold Nanoparticles as the Catalyst of Single-Walled Carbon Nanotube Synthesis. Catalysts, 2014, 38-48.	4,	3.5	19
377	2. Synthesis, characterisation and properties of graphene. , 2014, , 25-42.			0
378	Full-Layer Controlled Synthesis and Transfer of Large-Scale Monolayer Graphene for Nitrogen Dioxide and Ammonia Sensing. Analytical Letters, 2014, 47, 280-294.		1.8	15
379	Improvement of multilayer graphene quality by current stress during thermal CVD. Microelectronic Engineering, 2014, 120, 200-204.		2.4	16
380	Self-assembled graphene on dielectric micro- and nanostructures. Carbon, 2014, 70, 273-278.		10.3	15
381	Structural Diversity of Bulky Graphene Materials. Small, 2014, 10, 2200-2214.		10.0	41
382	Mechanisms of Graphene Growth on Metal Surfaces: Theoretical Perspectives. Small, 2014, 10, 2136-2150.		10.0	73
383	Mechanisms of graphene growth by chemical vapour deposition on transition metals. Carbon, 201 1-21.	4, 70,	10.3	284
384	Direct laser fabrication of large-area and patterned graphene at room temperature. Carbon, 2014, 784-790.	68,	10.3	52
385	Selfâ€Aligned Singleâ€Crystal Graphene Grains. Advanced Functional Materials, 2014, 24, 1664-16	570.	14.9	47

#	Article	IF	CITATIONS
386	Direct Integration of Polycrystalline Graphene into Light Emitting Diodes by Plasma-Assisted Metal-Catalyst-Free Synthesis. ACS Nano, 2014, 8, 2230-2236.	14.6	55
387	Selfâ€Assembly of Carbon Atoms on Transition Metal Surfaces—Chemical Vapor Deposition Growth Mechanism of Graphene. Advanced Materials, 2014, 26, 5488-5495.	21.0	52
388	Graphene: a new emerging lubricant. Materials Today, 2014, 17, 31-42.	14.2	1,115
389	Growth of epitaxial graphene: Theory and experiment. Physics Reports, 2014, 542, 195-295.	25.6	228
390	Structural analysis of graphene synthesized by chemical vapor deposition on copper foil using nematic liquid crystal texture. Carbon, 2014, 76, 113-122.	10.3	17
391	A multiscale approach to determine binding energy distribution on a strained surface. Nanoscale, 2014, 6, 4857.	5.6	0
392	In-situ Synthesis of Carbon Nanotube–Graphite Electronic Devices and Their Integrations onto Surfaces of Live Plants and Insects. Nano Letters, 2014, 14, 2647-2654.	9.1	98
393	Tuning the Selfâ€Assembly of Oligothiophenes on Chemical Vapor Deposition Graphene: Effect of Functional Group, Solvent, and Substrate. Chemistry - an Asian Journal, 2014, 9, 1888-1894.	3.3	8
394	The Role of the Gas Phase in Graphene Formation by <scp>CVD</scp> on Copper. Chemical Vapor Deposition, 2014, 20, 51-58.	1.3	15
395	Cooperative Island Growth of Large-Area Single-Crystal Graphene on Copper Using Chemical Vapor Deposition. ACS Nano, 2014, 8, 5657-5669.	14.6	91
396	Liquid Metal: An Innovative Solution to Uniform Graphene Films. Chemistry of Materials, 2014, 26, 3637-3643.	6.7	86
397	Synthesis of graphitic carbon nano-onions for dye sensitized solar cells. Solar Energy, 2014, 105, 236-242.	6.1	24
398	Role of Hydrogen in Graphene Chemical Vapor Deposition Growth on a Copper Surface. Journal of the American Chemical Society, 2014, 136, 3040-3047.	13.7	234
399	Graphene Nucleation from Amorphous Nickel Carbides: QM/MD Studies on the Role of Subsurface Carbon Density. Journal of Physical Chemistry C, 2014, 118, 11078-11084.	3.1	26
400	Experimentally determined model of atmospheric pressure CVD of graphene on Cu. Journal of Materials Chemistry C, 2014, 2, 744-755.	5.5	22
401	Kinetically enhanced pseudocapacitance of conducting polymer doped with reduced graphene oxide through a miscible electron transfer interface. Nano Energy, 2014, 3, 1-9.	16.0	24
402	Two selective growth modes for graphene on a Cu substrate using thermal chemical vapor deposition. Carbon, 2014, 68, 87-94.	10.3	22
403	Electrochemical properties of CVD grown pristine graphene: monolayer- vs. quasi-graphene. Nanoscale, 2014, 6, 1607-1621.	5.6	177

#	Article	IF	CITATIONS
404	Graphene–nickel interfaces: a review. Nanoscale, 2014, 6, 2548.	5.6	367
405	Conformational changes of graphene nanosheets induced by metal: melting metal can spin a graphene cocoon to encapsulate itself. Chemical Communications, 2014, 50, 1886.	4.1	9
406	Graphene–organic composites for electronics: optical and electronic interactions in vacuum, liquids and thin solid films. Journal of Materials Chemistry C, 2014, 2, 3129.	5.5	62
407	Electrical Transport in "Few-Layer Graphene―Film Prepared by the Hot-Spray Technique: The Effect of Thermal Treatment. Journal of Physical Chemistry C, 2014, 118, 873-880.	3.1	6
408	In Situ Scanning Electron Microscope Peeling To Quantify Surface Energy between Multiwalled Carbon Nanotubes and Graphene. ACS Nano, 2014, 8, 124-138.	14.6	37
409	Equilibrium Chemical Vapor Deposition Growth of Bernal-Stacked Bilayer Graphene. ACS Nano, 2014, 8, 11631-11638.	14.6	65
410	Graphene-based textured surface by pulsed laser deposition as a robust platform for surface enhanced Raman scattering applications. Applied Physics Letters, 2014, 104, 041912.	3.3	30
411	Quasi-Free-Standing Graphene Monolayer on a Ni Crystal through Spontaneous Na Intercalation. Physical Review X, 2014, 4, .	8.9	11
412	Toxicology of chemically modified graphene-based materials for medical application. Archives of Toxicology, 2014, 88, 1987-2012.	4.2	65
413	Epitaxial growth of graphene on silicon carbide (SiC). , 2014, , 3-26.		17
414	Carbon Segregation-Induced Highly Metallic Ni Nanoparticles for Electrocatalytic Oxidation of Hydrazine in Alkaline Media. ACS Applied Materials & Interfaces, 2014, 6, 18445-18449.	8.0	41
415	A low contact resistance graphene field effect transistor with single-layer-channel and multi-layer-contact. , 2014, , .		2
416	Preparation of Graphene with Large Area. , 2014, , 39-76.		3
417	Graphene based flexible electrochromic devices. Scientific Reports, 2014, 4, 6484.	3.3	92
418	Chemical vapor deposition (CVD) growth of graphene films. , 2014, , 27-49.		11
419	Growth mechanisms and mechanical properties of 3D carbon nanotube–graphene junctions: molecular dynamic simulations. RSC Advances, 2014, 4, 33848-33854.	3.6	15
420	Graphene film growth on sputtered thin Cu–Ni alloy film by inductively coupled plasma chemical vapor deposition. RSC Advances, 2014, 4, 63349-63353.	3.6	6
421	Quantum Carrier Reinvestment-Induced Ultrahigh and Broadband Photocurrent Responses in Graphene–Silicon Junctions. ACS Nano, 2014, 8, 10270-10279.	14.6	105

#	Article	IF	CITATIONS
422	Fabrication of free-standing Al2O3 nanosheets for high mobility flexible graphene field effect transistors. Journal of Materials Chemistry C, 2014, 2, 4759.	5.5	4
423	Theoretical Insights on the C2Hy Formation Mechanism During CH4 Dissociation on Cu(100) Surface. Journal of Physical Chemistry C, 2014, 118, 17662-17669.	3.1	3
424	Controllable seeding of single crystal graphene islands from graphene oxide flakes. Carbon, 2014, 79, 406-412.	10.3	27
425	Low-temperature remote plasma-enhanced atomic layer deposition of graphene and characterization of its atomic-level structure. Journal of Materials Chemistry C, 2014, 2, 7570-7574.	5.5	42
426	Extraordinary Macroscale Wear Resistance of One Atom Thick Graphene Layer. Advanced Functional Materials, 2014, 24, 6640-6646.	14.9	251
427	DFT study on the atomic-scale nucleation path of graphene growth on the Cu(111) surface. Physical Chemistry Chemical Physics, 2014, 16, 5213.	2.8	26
429	Copper oxide as a "self-cleaning―substrate for graphene growth. Journal of Materials Research, 2014, 29, 403-409.	2.6	50
430	Graphene's potential in materials science and engineering. RSC Advances, 2014, 4, 28987-29011.	3.6	60
431	Interface Engineering for CVD Graphene: Current Status and Progress. Small, 2014, 10, 4443-4454.	10.0	29
432	Bilayer Graphene Growth via a Penetration Mechanism. Journal of Physical Chemistry C, 2014, 118, 6201-6206.	3.1	44
433	Roles of H ₂ in annealing and growth times of graphene CVD synthesis over copper foil. Journal of Materials Chemistry A, 2014, 2, 16208-16216.	10.3	48
434	Significantly Enhanced Visible-Light-Induced Photocatalytic Performance of Hybrid Zn–Cr Layered Double Hydroxide/Graphene Nanocomposite and the Mechanism Study. Industrial & Engineering Chemistry Research, 2014, 53, 12943-12952.	3.7	78
435	The edge termination controlled kinetics in graphene chemical vapor deposition growth. Chemical Science, 2014, 5, 4639-4645.	7.4	41
436	Ageing mechanisms and reliability of graphene-based electrodes. Nano Research, 2014, 7, 1820-1831.	10.4	23
437	Effects of substrate defects on the carbon cluster formation in graphene growth on Ni(111) surface. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 3055-3059.	2.1	4
438	Twoâ€Dimensional Material Membranes: An Emerging Platform for Controllable Mass Transport Applications. Small, 2014, 10, 4521-4542.	10.0	115
439	The Structure and Stability of Magic Carbon Clusters Observed in Graphene Chemical Vapor Deposition Growth on Ru(0001) and Rh(111) Surfaces. Angewandte Chemie - International Edition, 2014, 53, 14031-14035.	13.8	37
440	Isotope effect of the phonons mean free path in graphene by micro-Raman measurement. Science China: Physics, Mechanics and Astronomy, 2014, 57, 1817-1821.	5.1	6

ARTICLE IF CITATIONS # CO₂ Enhanced Chemical Vapor Deposition Growth of Few-Layer Graphene over 441 14.6 24 NiO_{<i>x</i>}. ACS Nano, 2014, 8, 9224-9232. Raman spectroscopic investigation of polycrystalline structures of CVD-grown graphene by isotope labeling. Nanoscale, 2014, 6, 13838-13844. 442 5.6 Nitrogen-doped graphene interpenetrated 3D Ni-nanocages: efficient and stable water-to-dioxygen 443 5.6 33 electrocatalysts. Nanoscale, 2014, 6, 13179-13187. Effects of metal elements in catalytic growth of carbon nanotubes/graphene: A first principles DFT 444 6.1 study. Applied Surface Science, 2014, 317, 923-928. Large-Area Monolayer Hexagonal Boron Nitride on Pt Foil. ACS Nano, 2014, 8, 8520-8528. 445 14.6 200 Graphene growth process modeling: a physical–statistical approach. Applied Physics A: Materials Science and Processing, 2014, 116, 1747-1756. 2.3 Comparative study on graphene growth mechanism using Ni films, Ni/Mo sheets, and Pt substrates. 447 2.3 16 Applied Physics A: Materials Science and Processing, 2014, 116, 15-24. Graphene nucleation on a surface-molten copper catalyst: quantum chemical molecular dynamics 448 7.4 simulations. Chemical Science, 2014, 5, 3493-3500. Low reactivity of methane on copper surface during graphene synthesis via CVD process: Ab initio 449 2.6 19 molecular dynamics simulation. Chemical Physics Letters, 2014, 610-611, 33-38. A Thermally Conductive Composite with a Silica Gel Matrix and Carbon-Encapsulated Copper 2.2 14 Nanoparticles as Filler. Journal of Electronic Materials, 2014, 43, 2759-2769. Graphene: The Thinnest Known Coating for Corrosion Protection. Jom, 2014, 66, 637-642. 451 100 1.9 Carbon isotope labelling in graphene research. Nanoscale, 2014, 6, 6363. 5.6 38 Bottom-Up Synthesis of Anatase Nanoparticles with Graphene Domains. ACS Applied Materials & amp; 453 8.0 27 Interfaces, 2014, 6, 10638-10648. Revealing the surface and bulk regimes of isothermal graphene nucleation and growth on Ni with in situ kinetic measurements and modeling. Carbon, 2014, 79, 256-264. 454 16 Plasma-assisted nitrogen doping of graphene-encapsulated Pt nanocrystals as efficient fuel cell 455 10.3 44 catalysts. Journal of Materials Chemistry A, 2014, 2, 472-477. Asymmetric Growth of Bilayer Graphene on Copper Enclosures Using Low-Pressure Chemical Vapor 14.6 113 Deposition. ACS Nano, 2014, 8, 6491-6499. Synthesis and characterization of graphene: influence of synthesis variables. Physical Chemistry 457 2.8 40 Chemical Physics, 2014, 16, 2962. Bond dissociation mechanism of ethanol during carbon nanotube synthesis via alcohol catalytic CVD technique: Ab initio molecular dynamics simulation. Chemical Physics Letters, 2014, 595-596, 185-191.

#	Article	IF	CITATIONS
459	Artificially controlled synthesis of graphene intramolecular heterojunctions for phonon engineering. Physica Status Solidi - Rapid Research Letters, 2014, 8, 692-697.	2.4	15
460	Graphene synthesis via droplet CVD AND its photonic applications. , 2014, , .		3
461	Direct graphene synthesis on a Si/SiO ₂ substrate by a simple annealing process. Materials Research Express, 2014, 1, 025028.	1.6	12
462	The Handbook of Graphene Electrochemistry. , 2014, , .		151
463	Enhanced performance of graphene by using gold film for transfer and masking process. Current Applied Physics, 2014, 14, 1045-1050.	2.4	13
464	Nonisothermal Synthesis of AB-Stacked Bilayer Graphene on Cu Foils by Atmospheric Pressure Chemical Vapor Deposition. Journal of Physical Chemistry C, 2014, 118, 14655-14661.	3.1	32
465	Fast and simultaneous growth of graphene, intermetallic compounds, and silicate on Cu–Ni alloy foils. Materials Chemistry and Physics, 2014, 147, 452-460.	4.0	2
466	Growth of Epitaxial Graphene on SiC. , 2014, , 47-78.		0
467	Applications of Graphene in Lithium Ion Batteries. , 2014, , 78-149.		0
469	Homogeneous Optical and Electronic Properties of Graphene Due to the Suppression of Multilayer Patches During CVD on Copper Foils. Advanced Functional Materials, 2014, 24, 964-970.	14.9	71
470	Growth of Hexagonal Boron Nitride on Microelectronic Compatible Substrates. Materials Research Society Symposia Proceedings, 2015, 1781, 1-10.	0.1	2
471	Large area preparation of multilayered graphene films by chemical vapour deposition with high electrocatalytic activity toward hydrogen peroxide. Materials Technology, 2015, 30, 121-126.	3.0	8
472	High Quality Monolayer Graphene Synthesized by Resistive Heating Cold Wall Chemical Vapor Deposition. Advanced Materials, 2015, 27, 4200-4206.	21.0	132
473	Fracture of polycrystalline graphene membranes by <i>in situ</i> nanoindentation in a scanning electron microscope. Physica Status Solidi - Rapid Research Letters, 2015, 9, 564-569.	2.4	25
474	Scattering of phonons by high-concentration isotopic impurities in ultrathin graphite. Physical Review B, 2015, 91, .	3.2	16
475	Probing carbon isotope effects on the Raman spectra of graphene with different <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi mathvariant="normal">C<mml:mprescripts></mml:mprescripts><mml:none /><mml:mrow><mml:mn>13</mml:mn></mml:mrow></mml:none </mml:mi </mml:mmultiscripts></mml:mrow>concentra</mml:math 	3.2 itions.	20
476	Physical Review 8, 2013, 92, . Crystalline Ni3C as both carbon source and catalyst for graphene nucleation: a QM/MD study. Scientific Reports, 2015, 5, 12091.	3.3	35
478	Synthesis of Extended Atomically Perfect Zigzag Graphene - Boron Nitride Interfaces. Scientific Reports, 2015, 5, 16741.	3.3	33

#	Article	IF	CITATIONS
479	Large-scale epitaxial growth kinetics of graphene: A kinetic Monte Carlo study. Journal of Chemical Physics, 2015, 143, 084109.	3.0	23
480	Selective exfoliation of single-layer graphene from non-uniform graphene grown on Cu. Nanotechnology, 2015, 26, 455304.	2.6	6
482	Growth Characteristics of Graphene Film by Chemical Vapor Deposition Method Using Nozzle Gas Injection. E-Journal of Surface Science and Nanotechnology, 2015, 13, 265-268.	0.4	0
483	Low Density Growth of Graphene by Air Introduction in Atmospheric Pressure Chemical Vapor Deposition. E-Journal of Surface Science and Nanotechnology, 2015, 13, 404-409.	0.4	17
485	Epitaxial growth of graphene thin film by pulsed laser deposition. Micro and Nano Letters, 2015, 10, 649-652.	1.3	5
486	Utilizing research into electrical double layers as a basis for the development of label-free biosensors based on nanomaterial transistors. Nanobiosensors in Disease Diagnosis, 2015, , 1.	0.0	8
487	Spectral Monitoring CH/C ₂ Ratio of Methane Plasma for Growing Single-Layer Graphene on Cu. Journal of Nanomaterials, 2015, 2015, 1-5.	2.7	8
488	DFT Investigations on the CVD Growth of Graphene. , 0, , .		0
489	Electromagnetic induction heating for single crystal graphene growth: morphology control by rapid heating and quenching. Scientific Reports, 2015, 5, 9034.	3.3	20
490	Comprehensive nucleation mechanisms of quasi-monolayer graphene grown on Cu by chemical vapor deposition. Journal of Crystal Growth, 2015, 424, 55-61.	1.5	8
491	Influence of lattice orientation on growth and structure of graphene on Cu(0 0 1). Carbon, 2015, 90, 284-290.	10.3	11
492	Biosensors for Food Toxin Detection: Carbon Nanotubes and Graphene. Materials Research Society Symposia Proceedings, 2015, 1725, 24.	0.1	15
493	High-quality, single-layered epitaxial graphene fabricated on 6H-SiC (0001) by flash annealing in Pb atmosphere and mechanism. Nanotechnology, 2015, 26, 105708.	2.6	15
494	Quantum Chemical Molecular Dynamics Studies of Bilayer Graphene Growth on a Ni(111) Surface. Journal of Physical Chemistry C, 2015, 119, 12643-12650.	3.1	13
495	Carbon Dimers as the Dominant Feeding Species in Epitaxial Growth and Morphological Phase Transition of Graphene on Different Cu Substrates. Physical Review Letters, 2015, 114, 216102.	7.8	73
496	Synthesis and characterization of few layers graphene films for potential applications in electronics. , 2015, , .		2
497	Selfâ€supporting graphene films and their applications. IET Circuits, Devices and Systems, 2015, 9, 420-427.	1.4	9
498	Engineering electrical properties of graphene: chemical approaches. 2D Materials, 2015, 2, 042001.	4.4	46

#	Article	IF	CITATIONS
499	Chemical Vapor Deposition Growth of Graphene and Related Materials. Journal of the Physical Society of Japan, 2015, 84, 121013.	1.6	24
500	A review of large-area bilayer graphene synthesis by chemical vapor deposition. Nanoscale, 2015, 7, 20335-20351.	5.6	70
501	Performance of a CVD grown graphene-based planar device for a hydrogen gas sensor. Measurement Science and Technology, 2015, 26, 115104.	2.6	19
502	Spectroscopic characterization of nitrogen- and boron-doped graphene layers. Japanese Journal of Applied Physics, 2015, 54, 115101.	1.5	4
503	Facet-dependent study of efficient growth of graphene on copper by ethanol-CVD. Bulletin of Materials Science, 2015, 38, 1723-1729.	1.7	3
504	Graphene growth under Knudsen molecular flow on a confined catalytic metal coil. Nanoscale, 2015, 7, 1314-1324.	5.6	17
505	The growth of Fe clusters over graphene/Cu(111). 2D Materials, 2015, 2, 014001.	4.4	4
506	<i>Ab Initio</i> Molecular Dynamics Simulation of Ethylene Reaction on Nickel (111) Surface. Journal of Physical Chemistry C, 2015, 119, 3210-3216.	3.1	22
507	Application of tungsten as a carbon sink for synthesis of large-domain uniform monolayer graphene free of bilayers/multilayers. Nanoscale, 2015, 7, 4929-4934.	5.6	12
508	Characterization of graphene films grown on CuNi foil substrates. Surface Science, 2015, 634, 16-24.	1.9	15
509	Room temperature dry processing of patterned CVD graphene devices. Carbon, 2015, 86, 256-263.	10.3	22
510	Effect of vapor-phase oxygen on chemical vapor deposition growth of graphene. Applied Physics Express, 2015, 8, 035101.	2.4	22
511	Insights on Defect-Mediated Heterogeneous Nucleation of Graphene on Copper. Journal of Physical Chemistry C, 2015, 119, 2513-2522.	3.1	29
512	Controllable nâ€Type Doping on CVDâ€Grown Single†and Doubleâ€Layer Graphene Mixture. Advanced Materials, 2015, 27, 1619-1623.	21.0	43
513	Growth of graphene films on Cu catalyst in hydrogen plasma using polymethylmethacrylate as carbon source. Catalysis Today, 2015, 256, 209-214.	4.4	7
514	Microstructure and properties of carbon nanosheet/copper composites processed by particle-assisted shear exfoliation. RSC Advances, 2015, 5, 19321-19328.	3.6	20
516	The Essential Role of Cu Vapor for the Self-Limit Graphene via the Cu Catalytic CVD Method. Journal of Physical Chemistry C, 2015, 119, 6835-6842.	3.1	22
517	The Study on the Medium-Sized Carbon Islands on Ru(0001) Surface. Journal of Cluster Science, 2015, 26, 347-360.	3.3	10

#	ARTICLE Atomistic mechanisms for bilayer growth of graphene on metal substrates. Physical Review B, 2015, 91,	IF 3.2	Citations 33
518	Silver nanowires for transparent conductive electrode to GaN-based light-emitting diodes. Applied Physics Letters, 2015, 106, .	3.3	28
520	Three-Dimensional Monolayer Graphene and TiO ₂ Hybrid Architectures for High-Efficiency Electrochemical Photovoltaic Cells. Journal of Physical Chemistry C, 2015, 119, 6880-6885.	3.1	28
521	Frontiers of Graphene and Carbon Nanotubes. , 2015, , .		34
522	Tuning thermal contact conductance at graphene–copper interface <i>via</i> surface nanoengineering. Nanoscale, 2015, 7, 6286-6294.	5.6	85
523	High apparent strengthening efficiency for reduced graphene oxide in copper matrix composites produced by molecule-lever mixing and high-shear mixing. RSC Advances, 2015, 5, 51193-51200.	3.6	52
524	Control of layer stacking in CVD graphene under quasi-static condition. Physical Chemistry Chemical Physics, 2015, 17, 22304-22310.	2.8	19
525	Transferring-free and large-area graphitic carbon film growth by using molecular beam epitaxy at low growth temperature. Journal of Crystal Growth, 2015, 425, 177-180.	1.5	1
526	Vertical and Lateral Copper Transport through Graphene Layers. ACS Nano, 2015, 9, 8361-8367.	14.6	31
527	Comparison of graphene growth on arbitrary non-catalytic substrates using low-temperature PECVD. Carbon, 2015, 93, 393-399.	10.3	64
528	Large area CVD growth of graphene. Synthetic Metals, 2015, 210, 95-108.	3.9	182
529	A nickel nanoparticle/carbon quantum dot hybrid as an efficient electrocatalyst for hydrogen evolution under alkaline conditions. Journal of Materials Chemistry A, 2015, 3, 18598-18604.	10.3	87
530	Simple Graphene Synthesis via Chemical Vapor Deposition. Journal of Chemical Education, 2015, 92, 1903-1907.	2.3	57
531	Synthesis and Development of Graphene–Inorganic Semiconductor Nanocomposites. Chemical Reviews, 2015, 115, 8294-8343.	47.7	227
532	Effects of annealing on copper substrate surface morphology and graphene growth by chemical vapor deposition. Carbon, 2015, 94, 369-377.	10.3	67
533	Bottom-up fabrication of graphene on Ru(0001) via molecular self-assembly. Nanotechnology, 2015, 26, 295601.	2.6	5
534	Carbon deposition behaviour in metal-infiltrated gadolinia doped ceria electrodes for simulated biogas upgrading in solid oxide electrolysis cells. Journal of Power Sources, 2015, 293, 912-921.	7.8	26
535	Synthesis of few-layer graphene by lamp ablation. Carbon, 2015, 94, 349-351.	10.3	10

ARTICLE IF CITATIONS # Protecting carbon steel from corrosion by laser in situ grown graphene films. Carbon, 2015, 94, 536 10.3 76 326-334. Growth, Quantitative Growth Analysis and Applications of Graphene on Î³-Al2O3 catalysts. Scientific 3.3 24 Reports, 2015, 5, 11839. Self-assembly and continuous growth of hexagonal graphene flakes on liquid Cu. Nanoscale, 2015, 7, 538 5.6 31 12820-12827. Tailoring the Growth Rate and Surface Facet for Synthesis of High-Quality Continuous Graphene Films from CH₄ at 750 °C via Chemical Vapor Deposition. Journal of Physical Chemistry C, 2015, 119, 11516-11523. Ba0.95La0.05FeO3â[^]–multi-layer graphene as a low-cost and synergistic catalyst for oxygen evolution 540 10.3 29 reaction. Carbon, 2015, 90, 122-129. Towards weighing individual atoms by high-angle scattering of electrons. Ultramicroscopy, 2015, 151, 23-30. Effects of H2 annealing on polycrystalline copper substrates for graphene growth during low 542 2.6 17 pressure chemical vapor deposition. Materials Letters, 2015, 153, 132-135. CH4 dehydrogenation on Cu(111), Cu@Cu(111), Rh@Cu(111) and RhCu(111) surfaces: A comparison studies 6.1 of catalytic activity. Applied Surface Science, 2015, 341, 100-108. A Simple Approach to the Fabrication of Graphene-Carbon Nanotube Hybrid Films on Copper Substrate 544 10.7 46 by Chemical Vapor Deposition. Journal of Materials Science and Technology, 2015, 31, 479-483. Graphene-enhanced Raman spectroscopy of thymine adsorbed on single-layer graphene. Nanoscale 545 5.7 Research Letters, 2015, 10, 163. Doped graphene: synthesis, properties and bioanalysis. RSC Advances, 2015, 5, 49521-49533. 546 49 3.6 Fracture Characteristics of Monolayer CVD-Graphene. Scientific Reports, 2014, 4, 4439. 3.3 Mechanical and tribological properties of self-lubricating metal matrix nanocomposites reinforced 548 12.0 696 by carbon nanotubes (CNTs) andÂgraphene– A review. Composites Part B: Engineering, 2015, 77, 402-420. Graphene Single Crystals: Size and Morphology Engineering. Advanced Materials, 2015, 27, 2821-2837. 549 21.0 99 Towards Wafer-Scale Monocrystalline Graphene Growth and Characterization. Small, 2015, 11, 550 10.0 54 3512-3528. Low temperature synthesis of graphite on Ni films using inductively coupled plasma enhanced CVD. 34 Journal of Materials Chemistry C, 2015, 3, 5192-5198. Expeditious low-temperature sintering of copper nanoparticles with thin defective carbon shells. 552 5.6 36 Nanoscale, 2015, 7, 6627-6635. Ultrafast Graphene Growth on Insulators via Metal-Catalyzed Crystallization by a Laser Irradiation Process: From Laser Selection, Thickness Control to Direct Patterned Graphene Utilizing Controlled Layer Segregation Process. Small, 2015, 11, 3017-3027.

#	Article	IF	CITATIONS
554	Flexible transparent electrodes for organic light-emitting diodes. Journal of Information Display, 2015, 16, 71-84.	4.0	43
555	Insights into carbon nanotube and graphene formation mechanisms from molecular simulations: a review. Reports on Progress in Physics, 2015, 78, 036501.	20.1	93
556	Radiation-mode optical microscopy on the growth of graphene. Nature Communications, 2015, 6, 6834.	12.8	39
557	Nanoscale friction properties of graphene and graphene oxide. Diamond and Related Materials, 2015, 54, 91-96.	3.9	108
558	Controlled Lithium Dendrite Growth by a Synergistic Effect of Multilayered Graphene Coating and an Electrolyte Additive. Chemistry of Materials, 2015, 27, 2780-2787.	6.7	177
559	Design of catalytic substrates for uniform graphene films: from solid-metal to liquid-metal. Nanoscale, 2015, 7, 9105-9121.	5.6	47
560	A more reliable measurement method for metal/graphene contact resistance. Nanotechnology, 2015, 26, 405706.	2.6	9
561	Synthesis of few layer single crystal graphene grains on platinum by chemical vapour deposition. Progress in Natural Science: Materials International, 2015, 25, 291-299.	4.4	30
562	Communication: Surface-to-bulk diffusion of isolated versus interacting C atoms in Ni(111) and Cu(111) substrates: A first principle investigation. Journal of Chemical Physics, 2015, 142, 061101.	3.0	13
563	First-principles investigation of the dissociation and coupling of methane on small copper clusters: Interplay of collision dynamics and geometric and electronic effects. Journal of Chemical Physics, 2015, 142, 184308.	3.0	10
564	Non-vacuum growth of graphene films using solid carbon source. Applied Physics Letters, 2015, 106, 221604.	3.3	8
565	Structural and optical properties of cobalt slanted nanopillars conformally coated with few-layer graphene. Applied Physics Letters, 2015, 106, 231901.	3.3	8
566	Effects of Carbide Formation in Graphene Growth. Chinese Journal of Chemical Physics, 2015, 28, 65-69.	1.3	3
567	Controlled growth of large area multilayer graphene on copper by chemical vapour deposition. Physical Chemistry Chemical Physics, 2015, 17, 23081-23087.	2.8	25
568	Laser Controllable Growth of Graphene via Ni-Cu Alloy Composition Modulation. Lasers in Manufacturing and Materials Processing, 2015, 2, 219-230.	2.2	4
569	Large-area synthesis of high-quality and uniform monolayer WS2 on reusable Au foils. Nature Communications, 2015, 6, 8569.	12.8	336
570	Gas-phase dynamics in graphene growth by chemical vapour deposition. Physical Chemistry Chemical Physics, 2015, 17, 22832-22836.	2.8	48
571	Synthesis of high quality two-dimensional materials via chemical vapor deposition. Chemical Science, 2015, 6, 6705-6716.	7.4	206

#	Article	IF	Citations
572	Graphene decorated microelectrodes for simultaneous detection of ascorbic, dopamine, and folic acids by means of chemical vapor deposition. Journal Physics D: Applied Physics, 2015, 48, 375301.	2.8	2
573	Precise control of chemical vapor deposition graphene layer thickness using Ni _x Cu _{1â^'x} alloys. Journal of Materials Chemistry C, 2015, 3, 1463-1467.	5.5	19
574	A facile novel preparation of three-dimensional Ni@graphene by catalyzed glucose blowing for high-performance supercapacitor electrodes. RSC Advances, 2015, 5, 74463-74466.	3.6	10
575	Synthesis and Exploration of Graphene Bubbles for Supercapacitor Electrodes. Electrochimica Acta, 2015, 180, 53-63.	5.2	11
576	Graphene Growth on Pre-patterned Copper Film with Nickel as a Buffer Layer. Journal of Electronic Materials, 2015, 44, 4182-4186.	2.2	3
577	Optimisation of copper catalyst by the addition of chromium for the chemical vapour deposition growth of monolayer graphene. Carbon, 2015, 95, 789-793.	10.3	1
578	Few- and multi-layer graphene on carbon fibers: synthesis and application. RSC Advances, 2015, 5, 81266-81274.	3.6	19
579	Revealing unusual chemical bonding in planar hyper-coordinate Ni ₂ Ge and quasi-planar Ni ₂ Si two-dimensional crystals. Physical Chemistry Chemical Physics, 2015, 17, 26043-26048.	2.8	95
580	The effects of growth time on the quality of graphene synthesized by LPCVD. Bulletin of Materials Science, 2015, 38, 707-710.	1.7	9
581	First principles calculation of CH4 decomposition on nickel (111) surface. European Physical Journal B, 2015, 88, 1.	1.5	14
582	Influence of buffer layers on Ni thin film structure and graphene growth by CVD. Journal Physics D: Applied Physics, 2015, 48, 455302.	2.8	5
583	Direct Growth of Ultrafast Transparent Single-Layer Graphene Defoggers. Small, 2015, 11, 1840-1846.	10.0	92
584	What are the active carbon species during graphene chemical vapor deposition growth?. Nanoscale, 2015, 7, 1627-1634.	5.6	89
585	Study on the Diffusion Mechanism of Graphene Grown on Copper Pockets. Small, 2015, 11, 1418-1422.	10.0	53
586	Direct synthesis of few- and multi-layer graphene films on dielectric substrates by "etching-precipitation―method. Carbon, 2015, 82, 254-263.	10.3	31
587	Elementary Process for CVD Graphene on Cu(110): Size-selective Carbon Clusters. Scientific Reports, 2014, 4, 4431.	3.3	30
588	Graphene and carbon nanotube (CNT) in MEMS/NEMS applications. Microelectronic Engineering, 2015, 132, 192-206.	2.4	191
589	Chemical Vapor Deposition of Two-Dimensional Crystals. , 2015, , 785-833.		2

#	Article	IF	CITATIONS
590	Hollow reduced graphene oxide microspheres as a high-performance anode material for Li-ion batteries. Electrochimica Acta, 2015, 153, 540-545.	5.2	24
591	Influence of the transfer and chemical treatment of monolayer graphene grown for flexible transparent electrodes. Carbon, 2015, 81, 458-464.	10.3	15
592	Fabrication of nanoporous graphene by chemical vapor deposition (CVD) and its application in oil spill removal as a recyclable nanosorbent. Journal of Industrial and Engineering Chemistry, 2015, 22, 8-18.	5.8	59
593	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. Nanoscale, 2015, 7, 4598-4810.	5.6	2,452
595	Effect of a Balanced Concentration of Hydrogen on Graphene CVD Growth. Journal of Nanomaterials, 2016, 2016, 1-10.	2.7	24
596	Epitaxial Graphene on SiC: A Review of Growth and Characterization. Crystals, 2016, 6, 53.	2.2	169
598	Graphene growth on silicon carbide: A review. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2277-2289.	1.8	188
599	Influence of Gas Mixture and Temperature on AP VD Synthesis of Graphene on Copper Foil. Advanced Materials Interfaces, 2016, 3, 1500823.	3.7	23
600	Direct CVD Graphene Growth on Semiconductors and Dielectrics for Transferâ€Free Device Fabrication. Advanced Materials, 2016, 28, 4956-4975.	21.0	113
601	Investigation of graphene layers on electrodeposited polycrystalline metals. Surface and Interface Analysis, 2016, 48, 456-460.	1.8	7
602	Facetâ€Mediated Growth of Highâ€Quality Monolayer Graphene on Arbitrarily Rough Copper Surfaces. Advanced Materials, 2016, 28, 2010-2017.	21.0	31
603	Carbonâ€Passivated Ni Electrodes for Charge Injection in Organic Semiconductors. Advanced Materials Interfaces, 2016, 3, 1500501.	3.7	4
604	Visualization of Graphene on Various Substrates Based on Water Wetting Behavior. Advanced Materials Interfaces, 2016, 3, 1500674.	3.7	14
605	Stretchable conductive films based on carbon nanomaterials prepared by spray coating. Journal of Applied Polymer Science, 2016, 133, .	2.6	22
606	Distinct photoluminescence and Raman spectroscopy signatures for identifying highly crystalline WS ₂ monolayers produced by different growth methods. Journal of Materials Research, 2016, 31, 931-944.	2.6	95
607	Graphene oxide nanocomposites for potential wearable solar cells—A review. Journal of Materials Research, 2016, 31, 1633-1647.	2.6	8
608	Synthesis of Graphene Films on Copper Foils by Chemical Vapor Deposition. Advanced Materials, 2016, 28, 6247-6252.	21.0	266
609	Improved synthesis and growth of graphene oxide for field effect transistor biosensors. Biomedical Microdevices, 2016, 18, 61.	2.8	6

#	Article	IF	CITATIONS
610	Oxidativeâ€Etchingâ€Assisted Synthesis of Centimeterâ€Sized Singleâ€Crystalline Graphene. Advanced Materials, 2016, 28, 3152-3158.	21.0	81
611	Effect of current stress during thermal CVD of multilayer graphene on cobalt catalytic layer. Japanese Journal of Applied Physics, 2016, 55, 04EC13.	1.5	11
612	Iron CVD from iron pentacarbonyl: Growth inhibition by CO dissociation and use of ammonia to restore constant growth. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	14
613	Electronic properties and strain sensitivity of CVD-grown graphene with acetylene. Japanese Journal of Applied Physics, 2016, 55, 04EP05.	1.5	20
614	The closed-environment CVD method for preparing three-dimensional defect controllable graphene foam with a conductive interconnected network for lithium-ion battery applications. RSC Advances, 2016, 6, 75414-75419.	3.6	9
615	Acoustic carrier transportation induced by surface acoustic waves in graphene in solution. Applied Physics Express, 2016, 9, 045104.	2.4	21
616	Selective LPCVD growth of graphene on patterned copper and its growth mechanism. Applied Physics Letters, 2016, 109, .	3.3	6
617	Epitaxial growth and electrochemical transfer of graphene on Ir(111)/α-Al2O3(0001) substrates. Applied Physics Letters, 2016, 109, .	3.3	17
618	Facile fabrication of properties-controllable graphene sheet. Scientific Reports, 2016, 6, 24525.	3.3	16
619	Molecular dynamic simulation of layered graphene clusters formation from polyimides under extreme conditions. Carbon, 2016, 104, 47-55.	10.3	92
620	Influence of the tensile strain on CH4 dissociation on Cu(1 0 0) surface: A theoretical study. Applied Surface Science, 2016, 360, 826-832.	6.1	5
621	An etching phenomenon exhibited by chemical vapor deposited graphene on a copper pocket. Carbon, 2016, 106, 279-283.	10.3	11
622	Formation of hexagonal boron nitride on graphene-covered copper surfaces. Journal of Materials Research, 2016, 31, 945-958.	2.6	17
623	Growth of large-area aligned pentagonal graphene domains on high-index copper surfaces. Nano Research, 2016, 9, 2182-2189.	10.4	44
624	Control of the nucleation and quality of graphene grown by low-pressure chemical vapor deposition with acetylene. Applied Surface Science, 2016, 366, 219-226.	6.1	22
625	Graphene water transfer printing for 3D surface. , 2016, , .		6
626	An <i>ab initio</i> study of the nickel-catalyzed transformation of amorphous carbon into graphene in rapid thermal processing. Nanoscale, 2016, 8, 9746-9755.	5.6	25
627	Core–Shell Sn–Ni–Cu-Alloy@Carbon Nanorods to Array as Three-Dimensional Anode by Nanoelectrodeposition for High-Performance Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 12221-12227.	8.0	51

#	Article	IF	CITATIONS
628	Low-temperature quantum transport in CVD-grown single crystal graphene. Nano Research, 2016, 9, 1823-1830.	10.4	15
629	Large-area layer-by-layer controlled and fully bernal stacked synthesis of graphene. Carbon, 2016, 105, 205-213.	10.3	18
630	Enhanced electrochemical performance promoted by monolayer graphene and void space in silicon composite anode materials. Nano Energy, 2016, 27, 647-657.	16.0	61
631	Effect of crystalline structure and pore geometry of silica based supported materials on the catalytic behavior of metallic nickel particles during methane decomposition to CO -free hydrogen and carbon nanomaterials. International Journal of Hydrogen Energy, 2016, 41, 16890-16902.	7.1	51
632	Controlling Nucleation Density While Simultaneously Promoting Edge Growth Using Oxygen-Assisted Fast Synthesis of Isolated Large-Domain Graphene. Chemistry of Materials, 2016, 28, 6511-6519.	6.7	19
634	The growth modes of graphene in the initial stage of a chemical vapor-deposition process. RSC Advances, 2016, 6, 91157-91162.	3.6	4
635	Direct transfer of multilayer graphene grown on a rough metal surface using PDMS adhesion engineering. Nanotechnology, 2016, 27, 365705.	2.6	5
636	Stranski–Krastanov and Volmer–Weber CVD Growth Regimes To Control the Stacking Order in Bilayer Graphene. Nano Letters, 2016, 16, 6403-6410.	9.1	95
638	Unraveling the Influence of Metal Substrates on Graphene Nucleation from First-Principles Study. Journal of Physical Chemistry C, 2016, 120, 23239-23245.	3.1	20
639	Highly conductive, monolayer and large-area reduced graphene oxide films fabricated by electrical connection at the two-dimensional boundaries between the tiled graphene oxide flakes. Thin Solid Films, 2016, 615, 247-255.	1.8	11
640	Synthesis Methods for Graphene. , 2016, , 49-64.		0
641	Low temperature synthesis of graphene-encapsulated copper nanoparticles from kraft lignin. Materials Letters, 2016, 185, 131-134.	2.6	25
642	Single-Layer Graphene Synthesis on a Al2O3(0001)/Cu(111) Template Using Chemical Vapor Deposition. ECS Journal of Solid State Science and Technology, 2016, 5, Q3060-Q3066.	1.8	8
643	Crumpled nitrogen- and boron-dual-self-doped graphene sheets as an extraordinary active anode material for lithium ion batteries. Journal of Materials Chemistry A, 2016, 4, 14155-14162.	10.3	32
644	Nanostructured transparent conductive films: Fabrication, characterization and applications. Materials Science and Engineering Reports, 2016, 109, 1-101.	31.8	104
645	Understanding and Controlling Cu-Catalyzed Graphene Nucleation: The Role of Impurities, Roughness, and Oxygen Scavenging. Chemistry of Materials, 2016, 28, 8905-8915.	6.7	128
646	Spatially Controlled Nucleation of Single-Crystal Graphene on Cu Assisted by Stacked Ni. ACS Nano, 2016, 10, 11196-11204.	14.6	43
647	Transfer-Free Growth of Multilayer Graphene Using Self-Assembled Monolayers. ACS Applied Materials & Interfaces, 2016, 8, 27115-27121.	8.0	24

	CHATION R		
#	Article	IF	CITATIONS
648	Segregation growth of epitaxial graphene overlayers on Ni(111). Science Bulletin, 2016, 61, 1536-1542.	9.0	15
649	Towards wafer-size strictly monolayer graphene on copper via cyclic atmospheric chemical vapor deposition. Carbon, 2016, 110, 384-389.	10.3	9
650	Three-dimensional macro-structures of two-dimensional nanomaterials. Chemical Society Reviews, 2016, 45, 5541-5588.	38.1	280
651	Fabrication Methods of Graphene Nanoribbons. , 2016, , 151-166.		0
652	Electrophoretic Deposition of Graphene-Based Materials and Their Energy-Related Applications. , 2016, , 191-204.		1
653	Synthesis Strategies for Graphene. , 2016, , 73-114.		0
654	Synthesis of integrated graphene films with self-assembled single-layer channels and multi-layer electrodes via a single process. Carbon, 2016, 107, 837-843.	10.3	0
655	Fullerenic particles for the growth of carbon nanowall-like flowers on multilayer graphene. Nanotechnology, 2016, 27, 175603.	2.6	1
656	Isotropic Growth of Graphene toward Smoothing Stitching. ACS Nano, 2016, 10, 7189-7196.	14.6	47
657	Hydrophobic Surface Treatment and Interrupted Atomic Layer Deposition for Highly Resistive Al ₂ O ₃ Films on Graphene. ACS Applied Materials & Interfaces, 2016, 8, 29637-29641.	8.0	16
658	High surface area graphene foams by chemical vapor deposition. 2D Materials, 2016, 3, 045013.	4.4	53
659	Manipulation of defect density and nitrogen doping on few-layer graphene sheets using the plasma methodology for electrochemical applications. Electrochimica Acta, 2016, 221, 144-153.	5.2	13
660	Wafer-scale fabrication and growth dynamics of suspended graphene nanoribbon arrays. Nature Communications, 2016, 7, 11797.	12.8	43
661	Molecular dynamics simulation of graphene on Cu (111) with different Lennard-Jones parameters. European Physical Journal B, 2016, 89, 1.	1.5	14
662	Growth of conformal graphene cages on micrometre-sized silicon particles as stable battery anodes. Nature Energy, 2016, 1, .	39.5	609
663	Isotope analysis in the transmission electron microscope. Nature Communications, 2016, 7, 13040.	12.8	64
664	Correlation of p-doping in CVD Graphene with Substrate Surface Charges. Scientific Reports, 2016, 6, 22858.	3.3	77
665	Growth of Continuous Monolayer Graphene with Millimeter-sized Domains Using Industrially Safe Conditions. Scientific Reports, 2016, 6, 21152.	3.3	48

		CITATION REPORT		
#	Article		IF	Citations
666	Templating for hierarchical structure control in carbon materials. Nanoscale, 2016, 8, 1	8828-18848.	5.6	34
667	Birch-Type Hydrogenation of Few-Layer Graphenes: Products and Mechanistic Implicati the American Chemical Society, 2016, 138, 14980-14986.	ons. Journal of	13.7	27
668	Graphene growth from reduced graphene oxide by chemical vapour deposition: seeded accompanied by restoration. Scientific Reports, 2016, 6, 22653.	growth	3.3	15
669	<i>In</i> - <i>Situ </i> RHEED Study on Graphene Growth During Chemical Vapor Depos Surface Science and Nanotechnology, 2016, 14, 39-42.	ition. E-Journal of	0.4	1
671	Growth and low-energy electron microscopy characterizations of graphene and hexage nitride. Progress in Crystal Growth and Characterization of Materials, 2016, 62, 155-17	inal boron '6.	4.0	20
672	Cooling Growth of Millimeter-Size Single-Crystal Bilayer Graphene at Atmospheric Press of Physical Chemistry C, 2016, 120, 13596-13603.	sure. Journal	3.1	14
673	Spanning the "Parameter Space―of Chemical Vapor Deposition Graphene Growth Chemical Simulations. Journal of Physical Chemistry C, 2016, 120, 13851-13864.	with Quantum	3.1	14
674	Electrochemistry of acetylide anion and anodic formation of carbon films in a LiCl–KG melt. Electrochemistry Communications, 2016, 64, 1-4.	Cl–CaCl2–CaC2	4.7	22
675	Graphene device array using transfer-free patterned growth on insulator for an electrol sensor. Thin Solid Films, 2016, 612, 87-90.	yte-gated	1.8	5
676	Effective Elastic Properties of a Novel Continuous Fuzzy Fiber-Reinforced Composite w Carbon Nanotubes. , 2016, , 33-56.	ith Wavy		0
677	Local property change of graphene induced by a Cu nanoparticle. Carbon, 2016, 98, 66	56-670.	10.3	6
678	In situ chemical vapor deposition of graphene and hexagonal boron nitride heterostruc Current Applied Physics, 2016, 16, 1175-1191.	tures.	2.4	42
679	Ultra-thin Graphitic Film: Synthesis and Physical Properties. Nanoscale Research Letters	s, 2016, 11, 54.	5.7	15
680	Formation of 3D graphene foams on soft templated metal monoliths. Nanoscale, 2016	, 8, 13303-13310.	5.6	27
681	Rapid Growth of Large Singleâ€Crystalline Graphene via Second Passivation and Multis Supply. Advanced Materials, 2016, 28, 4671-4677.	tage Carbon	21.0	69
682	Significantly improved thickness uniformity of graphene monolayers grown by chemica deposition by texture and morphology control of the copper foil substrate. Carbon, 20	l vapor 16, 100, 441-449.	10.3	30
683	Probing weak localization in chemical vapor deposition graphene wide constriction usin gate microscopy. Nanotechnology, 2016, 27, 075601.	ng scanning	2.6	6
684	QM/MD studies on graphene growth from small islands on the Ni(111) surface. Nanoso 3067-3074.	cale, 2016, 8,	5.6	20

#	ARTICLE	IF	CITATIONS
685	The formation of the smallest fullerene-like carbon cages on metal surfaces. Nanoscale, 2016, 8, 2561-2567.	5.6	6
686	Mesoscale design of multifunctional 3D graphene networks. Materials Today, 2016, 19, 428-436.	14.2	60
687	Nickel-enhanced graphitic ordering of carbon ad-atoms during physical vapor deposition. Carbon, 2016, 100, 656-663.	10.3	19
688	Controlling Catalyst Bulk Reservoir Effects for Monolayer Hexagonal Boron Nitride CVD. Nano Letters, 2016, 16, 1250-1261.	9.1	114
689	Edge morphology evolution of graphene domains during chemical vapor deposition cooling revealed through hydrogen etching. Nanoscale, 2016, 8, 4145-4150.	5.6	16
690	Epitaxial Al ₂ O ₃ (0001)/Cu(111) Template Development for CVD Graphene Growth. Journal of Physical Chemistry C, 2016, 120, 297-304.	3.1	51
691	Effects of thermally-induced changes of Cu grains on domain structure and electrical performance of CVD-grown graphene. Nanoscale, 2016, 8, 930-937.	5.6	5
692	Synthesis of graphene. International Nano Letters, 2016, 6, 65-83.	5.0	516
693	The characterization of graphene prepared using a nickel film catalyst pre-deposited to fused silica. RSC Advances, 2016, 6, 22244-22249.	3.6	6
694	Graphene-based materials with tailored nanostructures for energy conversion and storage. Materials Science and Engineering Reports, 2016, 102, 1-72.	31.8	221
695	Top or underneath? Revealing the structure of multilayer graphene domains with atomic force microscopy and theoretical analysis. Carbon, 2016, 99, 131-137.	10.3	7
696	Surface Engineering of Copper Foils for Growing Centimeter-Sized Single-Crystalline Graphene. ACS Nano, 2016, 10, 2922-2929.	14.6	89
697	Direct preparation of high quality graphene on dielectric substrates. Chemical Society Reviews, 2016, 45, 2057-2074.	38.1	88
698	Oxygen-activated growth and bandgap tunability of large single-crystal bilayer graphene. Nature Nanotechnology, 2016, 11, 426-431.	31.5	287
699	Organic Photovoltaic Cells based on Graphene Interfacial Anode Electrodes. Materials Today: Proceedings, 2016, 3, 788-795.	1.8	3
700	Recent progress in fabrication techniques of graphene nanoribbons. Materials Horizons, 2016, 3, 186-207.	12.2	127
701	Low-Temperature in Situ Growth of Graphene on Metallic Substrates and Its Application in Anticorrosion. ACS Applied Materials & amp; Interfaces, 2016, 8, 502-510.	8.0	78
702	Towards a general growth model for graphene CVD on transition metal catalysts. Nanoscale, 2016, 8, 2149-2158.	5.6	114

#	Article	IF	CITATIONS
703	Mesoporous TiO2 and Co-doped TiO2 Nanotubes/Reduced Graphene Oxide Composites as Electrodes for Supercapacitors. Electrochimica Acta, 2016, 190, 104-117.	5.2	81
704	Thermally anisotropic composite heat spreaders for enhanced thermal management of high-performance microprocessors. International Journal of Thermal Sciences, 2016, 100, 213-228.	4.9	16
705	Interactions between C and Cu atoms in single-layer graphene: direct observation and modelling. Nanoscale, 2016, 8, 529-535.	5.6	21
706	CVD growth of 1D and 2D sp2 carbon nanomaterials. Journal of Materials Science, 2016, 51, 640-667.	3.7	70
707	Suppressing graphene nucleation during CVD on polycrystalline Cu by controlling the carbon content of the support foils. Carbon, 2016, 96, 153-165.	10.3	67
708	Progress update on failure mechanisms of advanced thermal barrier coatings: A review. Progress in Organic Coatings, 2016, 90, 54-82.	3.9	216
709	Transforming waste into carbon-based nanomaterials. Carbon, 2016, 96, 105-115.	10.3	176
710	Sequential synthesis of free-standing high quality bilayer graphene from recycled nickel foil. Carbon, 2016, 96, 268-275.	10.3	32
711	Modelling of graphene functionalization. Physical Chemistry Chemical Physics, 2016, 18, 6351-6372.	2.8	190
712	Hydrogen induced contrasting modes of initial nucleations of graphene on transition metal surfaces. Journal of Chemical Physics, 2017, 146, 034704.	3.0	4
713	Single-step ambient-air synthesis of graphene from renewable precursors as electrochemical genosensor. Nature Communications, 2017, 8, 14217.	12.8	122
714	Fast growth of large single-crystalline graphene assisted by sequential double oxygen passivation. Carbon, 2017, 116, 133-138.	10.3	24
715	A molecular dynamics simulation of the graphene growth on Cu(1 1 1) surface. Computational Materials Science, 2017, 130, 10-15.	3.0	20
716	Self-Terminating Confinement Approach for Large-Area Uniform Monolayer Graphene Directly over Si/SiO _x by Chemical Vapor Deposition. ACS Nano, 2017, 11, 1946-1956.	14.6	108
717	Growth of Molybdenum Carbide–Graphene Hybrids from Molybdenum Disulfide Atomic Layer Template. Advanced Materials Interfaces, 2017, 4, 1600866.	3.7	14
718	Review—Critical Considerations of High Quality Graphene Synthesized by Plasma-Enhanced Chemical Vapor Deposition for Electronic and Energy Storage Devices. ECS Journal of Solid State Science and Technology, 2017, 6, M3035-M3048.	1.8	30
719	Synthesis of well-dispersed TiO 2 @reduced graphene oxide (rGO) nanocomposites and their photocatalytic properties. Materials Research Bulletin, 2017, 90, 125-130.	5.2	94
720	Effects of deposition power of IGZO film and graphene layer in IGZO/graphene + Ni/SiO2/Si wafer specimens on the mechanical and electrical properties in tribotests. Surface and Coatings Technology, 2017, 315, 44-60.	4.8	0

#	Article	IF	CITATIONS
721	Tailoring the thermal and electrical transport properties of graphene films by grain size engineering. Nature Communications, 2017, 8, 14486.	12.8	154
722	Review of the synthesis, transfer, characterization and growth mechanisms of single and multilayer graphene. RSC Advances, 2017, 7, 15644-15693.	3.6	263
723	Enhanced Sensitivity of Patterned Graphene Strain Sensors Used for Monitoring Subtle Human Body Motions. ACS Applied Materials & Interfaces, 2017, 9, 11176-11183.	8.0	75
724	Atomistic mechanisms of van der <scp>Waals</scp> epitaxy and property optimization of layered materials. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2017, 7, e1300.	14.6	14
725	Mechanics-driven patterning of CVD graphene for roll-based manufacturing process. 2D Materials, 2017, 4, 024003.	4.4	9
726	Graphene coating for anti-corrosion and the investigation of failure mechanism. Journal Physics D: Applied Physics, 2017, 50, 114001.	2.8	28
727	An investigation of growth mechanism of coal derived graphene films. Materials Today Communications, 2017, 11, 147-155.	1.9	27
728	Hierarchical structure graphitic-like/MoS2 film as superlubricity material. Applied Surface Science, 2017, 413, 381-386.	6.1	57
729	Review on mechanism of directly fabricating wafer-scale graphene on dielectric substrates by chemical vapor deposition. Nanotechnology, 2017, 28, 284001.	2.6	16
730	Graphene: Synthesis and Functionalization. Nanostructure Science and Technology, 2017, , 101-132.	0.1	2
731	Graphene growth with â€~no' feedstock. 2D Materials, 2017, 4, 025089.	4.4	17
732	Atomic Layer Deposition on 2D Materials. Chemistry of Materials, 2017, 29, 3809-3826.	6.7	182
733	Study of Cooling Rate on the Growth of Graphene via Chemical Vapor Deposition. Chemistry of Materials, 2017, 29, 4202-4208.	6.7	24
734	Graphene-Al2O3-silicon heterojunction solar cells on flexible silicon substrates. Journal of Applied Physics, 2017, 121, .	2.5	34
735	Graphene-based flexible electronic devices. Materials Science and Engineering Reports, 2017, 118, 1-43.	31.8	194
736	Nucleation site in CVD graphene growth investigated by radiation-mode optical microscopy. Applied Physics Express, 2017, 10, 055502.	2.4	10
737	3D Graphene–Ni Foam as an Advanced Electrode for High-Performance Nonaqueous Redox Flow Batteries. ACS Applied Materials & Interfaces, 2017, 9, 22502-22508.	8.0	32
738	Graphene and related two-dimensional materials: Structure-property relationships for electronics and optoelectronics. Applied Physics Reviews, 2017, 4, .	11.3	476

#	Article	IF	CITATIONS
739	Effect of grain boundaries in Cu foil on CVD growth of graphene. Applied Physics Express, 2017, 10, 075503.	2.4	4
740	Feasibility study of in-situ grown nanocrystalline graphene for humidity sensing. , 2017, , .		1
741	Kirkendall Effect in Creating Three-Dimensional Metal Catalysts for Hierarchically Porous Ultrathin Graphite with Unique Properties. Chemistry of Materials, 2017, 29, 4991-4998.	6.7	10
742	Carbon-assisted chemical vapor deposition of hexagonal boron nitride. 2D Materials, 2017, 4, 025117.	4.4	54
743	The Way towards Ultrafast Growth of Singleâ€Crystal Graphene on Copper. Advanced Science, 2017, 4, 1700087.	11.2	40
744	Three-Dimensional Printed Graphene Foams. ACS Nano, 2017, 11, 6860-6867.	14.6	172
745	Concurrent fast growth of sub-centimeter single-crystal graphene with controlled nucleation density in a confined channel. Nanoscale, 2017, 9, 9631-9640.	5.6	17
746	Ultrahigh capacity and superior stability of three-dimensional porous graphene networks containing in situ grown carbon nanotube clusters as an anode material for lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 7595-7602.	10.3	42
747	One step GO/DTES co-deposition on steels: Electro-induced fabrication and characterization of thickness-controlled coatings. Chemical Engineering Journal, 2017, 320, 588-607.	12.7	14
748	Effects of graphene defects on gas sensing properties towards NO ₂ detection. Nanoscale, 2017, 9, 6085-6093.	5.6	78
749	Growth of Carbon Nanostructures on Cu Nanocatalysts. Journal of Physical Chemistry C, 2017, 121, 7232-7239.	3.1	5
750	Sodide and Organic Halides Effect Covalent Functionalization of Single-Layer and Bilayer Graphene. Journal of the American Chemical Society, 2017, 139, 4202-4210.	13.7	27
751	Graphene-Based Nanomaterials for Catalysis. Industrial & Engineering Chemistry Research, 2017, 56, 3477-3502.	3.7	234
752	Electrical properties of bilayer graphene synthesized using surface wave microwave plasma techniques at low temperature. Nanotechnology, 2017, 28, 025705.	2.6	2
753	Evolution effects of the copper surface morphology on the nucleation density and growth of graphene domains at different growth pressures. Applied Surface Science, 2017, 399, 542-550.	6.1	13
754	Graphene Ingestion and Regrowth on "Carbon-Starved―Metal Electrodes. ACS Nano, 2017, 11, 10575-10582.	14.6	2
755	Synthesis of High-Density Graphene Foams Using Nanoparticle Templates. Carbon Nanostructures, 2017, , 185-196.	0.1	3
756	High-rate synthesis of graphene by a lower cost chemical vapor deposition route. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	11

#	Article	IF	CITATIONS
757	Past and future of graphene/silicon heterojunction solar cells: a review. Journal of Materials Chemistry C, 2017, 5, 10701-10714.	5.5	48
758	Growth of NiO nanorods, SiC nanowires and monolayer graphene <i>via</i> a CVD method. Green Chemistry, 2017, 19, 5599-5607.	9.0	22
759	Catalytic CVD synthesis of boron nitride and carbon nanomaterials – synergies between experiment and theory. Physical Chemistry Chemical Physics, 2017, 19, 26466-26494.	2.8	24
760	CVD Synthesis of Graphene. , 2017, , 19-56.		9
761	Theoretical Studies on the Growth Mechanism of Chemical Vapor Deposition of Graphene on Metal Surface. , 2017, , 205-241.		0
762	Low temperature growth of fully covered single-layer graphene using a CoCu catalyst. Nanoscale, 2017, 9, 14467-14475.	5.6	11
763	Direct growth of graphene on rigid and flexible substrates: progress, applications, and challenges. Chemical Society Reviews, 2017, 46, 6276-6300.	38.1	81
764	Effect of graphene-substrate conformity on the in-plane thermal conductivity of supported graphene. Carbon, 2017, 125, 39-48.	10.3	24
765	2D material integrated macroporous electrodes for Li-ion batteries. RSC Advances, 2017, 7, 32737-32742.	3.6	12
766	A new method for few-layer graphene preparation via plasma-assisted ball milling. Journal of Alloys and Compounds, 2017, 728, 578-584.	5.5	86
767	Continuous Production of Graphite Nanosheets by Bubbling Chemical Vapor Deposition Using Molten Copper. Chemistry of Materials, 2017, 29, 8404-8411.	6.7	40
768	Understanding the Reaction Kinetics to Optimize Graphene Growth on Cu by Chemical Vapor Deposition. Annalen Der Physik, 2017, 529, 1700029.	2.4	16
769	Regulating Surficial Catalysis Mechanism of Copper Metal by Manipulating Reactive Intermediate for Growth of Homogenous Bernal‧tacked Bilayer Graphene. Advanced Materials Interfaces, 2017, 4, 1700415.	3.7	3
770	Degradation of graphene coated copper in simulated proton exchange membrane fuel cell environment: Electrochemical impedance spectroscopy study. Journal of Power Sources, 2017, 362, 366-372.	7.8	47
771	Adhesion energy of as-grown graphene on copper foil with a blister test. Carbon, 2017, 123, 243-249.	10.3	41
772	Study of the impact of chemical etching on Cu surface morphology, graphene growth and transfer on SiO2/Si substrate. Carbon, 2017, 123, 402-414.	10.3	19
773	Graphitization of self-assembled monolayers using patterned nickel-copper layers. Applied Physics Letters, 2017, 111, 043102.	3.3	0
774	Synthesis and characterization of three-dimensional graphene foams by chemical vapor deposition. , 2017, , .		1

#	Article	IF	CITATIONS
775	Probing the Gas-Phase Dynamics of Graphene Chemical Vapour Deposition using in-situ UV Absorption Spectroscopy. Scientific Reports, 2017, 7, 6183.	3.3	6
776	Layer-selective synthesis of bilayer graphene via chemical vapor deposition. 2D Materials, 2017, 4, 035023.	4.4	10
777	The effects of acid pretreatment and surface stresses on the evolution of impurity clusters and graphene formation on Cu foil. Applied Surface Science, 2017, 425, 873-878.	6.1	9
778	Growth and characterization of ultrathin carbon films on electrodeposited Cu and Ni. Surface and Interface Analysis, 2017, 49, 1088-1094.	1.8	7
779	Domain size, layer number and morphology control for graphene grown by chemical vapor deposition. Functional Materials Letters, 2017, 10, 1730003.	1.2	8
781	Magnetron Sputtering Deposition Cu@Onion-like N–C as High-Performance Electrocatalysts for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2017, 9, 41945-41954.	8.0	19
782	Catalytic substrates for graphene growth. MRS Bulletin, 2017, 42, 819-824.	3.5	11
783	Unique Transformation from Graphene to Carbide on Re(0001) Induced by Strong Carbon–Metal Interaction. Journal of the American Chemical Society, 2017, 139, 17574-17581. Identification of <mml:math< td=""><td>13.7</td><td>38</td></mml:math<>	13.7	38
784	xmlns:mml="http://www.w3.org/1998/Math/MathML"> <mml:mrow><mml:msub><mml:mi>Ni</mml:mi><mml:m mathvariant="normal">C</mml:m </mml:msub></mml:mrow> electronic states in graphene-Ni(111) growth through resonant and dichroic angle-resolved photoemission at the C <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>K</mml:mi> -edge. Physical</mml:math 	nn>23.2	ll:mn>3
785	Review B, 2017, 96, . Nanocarbon materials fabricated using plasmas. Reviews of Modern Plasma Physics, 2017, 1, 1.	4.1	28
786	Chemical Vapor Deposition of Bernalâ€Stacked Graphene on a Cu Surface by Breaking the Carbon Solubility Symmetry in Cu Foils. Advanced Materials, 2017, 29, 1700753.	21.0	24
787	Initial stage of hexagonal boron nitride growth in diffusion and precipitation method. Japanese Journal of Applied Physics, 2017, 56, 06GE06.	1.5	2
788	Low-temperature synthesis of graphene by chemical vapor deposition and its applications. FlatChem, 2017, 5, 40-49.	5.6	55
789	Repeatable growth of graphene from "no―precursor. Carbon, 2017, 123, 628-634.	10.3	4
790	Graphene and Polymer Composites for Supercapacitor Applications: a Review. Nanoscale Research Letters, 2017, 12, 387.	5.7	218
791	The transition metal surface dependent methane decomposition in graphene chemical vapor deposition growth. Nanoscale, 2017, 9, 11584-11589.	5.6	76
792	Graphene/Mo2C heterostructure directly grown by chemical vapor deposition. Chinese Physics B, 2017, 26, 067901.	1.4	28
793	Visualizing fast growth of large single-crystalline graphene by tunable isotopic carbon source. Nano Research, 2017, 10, 355-363.	10.4	30

#	Article	IF	CITATIONS
794	Metal-free synthesis of nanocrystalline graphene on insulating substrates by carbon dioxide-assisted chemical vapor deposition. Carbon, 2017, 112, 201-207.	10.3	38
795	Challenge and Opportunities of Carbon Nanotubes. , 2017, , 433-476.		9
796	Chemical vapor deposition of graphene on platinum: Growth and substrate interaction. Carbon, 2017, 111, 733-740.	10.3	49
797	Deposition Methods of Graphene as Electrode Material for Organic Solar Cells. Advanced Energy Materials, 2017, 7, 1601393.	19.5	56
798	Time evolution of the growth of single graphene crystals and high resolution isotope labeling. Carbon, 2017, 111, 173-181.	10.3	6
799	Two-dimensional hexagonal CrN with promising magnetic and optical properties: A theoretical prediction. Nanoscale, 2017, 9, 621-630.	5.6	66
800	Current relation of single energy level Graphene through considering defects and energy broadening. Materials Today: Proceedings, 2017, 4, 10390-10394.	1.8	0
801	Synthesis of Graphene by Magnetron-Plasma-Enhanced Chemical Vapor Deposition on Different Substrate Materials. Journal of the Vacuum Society of Japan, 2017, 60, 459-462.	0.3	1
802	Local growth of graphene on Cu and Cu0.88Ni0.12 foil substrates. , 2017, , .		0
803	4. Controlled Chemical Synthesis in CVD Graphene. , 2017, , .		1
804	Suppression of Graphene Nucleation by Turning Off Hydrogen Supply Just before Atmospheric Pressure Chemical Vapor Deposition Growth. Coatings, 2017, 7, 206.	2.6	12
805	Graphene Coated Nanoprobes: A Review. Crystals, 2017, 7, 269.	2.2	15
806	Controlled Chemical Synthesis in CVD Graphene. ChemistrySelect, 2017, 2, .	1.5	7
807	Nano-Architecture of nitrogen-doped graphene films synthesized from a solid CN source. Scientific Reports, 2018, 8, 3247.	3.3	72
808	Isotopic graphene–isolated-Au-nanocrystals with cellular Raman-silent signals for cancer cell pattern recognition. Chemical Science, 2018, 9, 2842-2849.	7.4	51
809	Synthesis of different types of carbon nanohybrid and their effects in polymer composites. Research on Chemical Intermediates, 2018, 44, 1905-1918.	2.7	1
810	Quantum engineering of transistors based on 2D materials heterostructures. Nature Nanotechnology, 2018, 13, 183-191.	31.5	319
811	In-situ fabrication of graphene-nickel matrix composites. Materials Letters, 2018, 220, 178-181.	2.6	74

#	Article	IF	CITATIONS
812	<i>In situ</i> fabrication of a graphene-coated three-dimensional nickel oxide anode for high-capacity lithium-ion batteries. RSC Advances, 2018, 8, 7414-7421.	3.6	11
813	Uniformly coated highly porous graphene/MnO ₂ foams for flexible asymmetric supercapacitors. Nanotechnology, 2018, 29, 225402.	2.6	18
814	Evaluation of wetting transparency and surface energy of pristine and aged graphene through nanoscale friction. Carbon, 2018, 132, 749-759.	10.3	32
815	Insulator-to-Metallic Spin-Filtering in 2D-Magnetic Tunnel Junctions Based on Hexagonal Boron Nitride. ACS Nano, 2018, 12, 4712-4718.	14.6	88
816	A Novel Approach to the Layer-Number-Controlled and Grain-Size-Controlled Growth of High Quality Graphene for Nanoelectronics. ACS Applied Nano Materials, 2018, 1, 1502-1512.	5.0	20
817	Digital Isotope Coding to Trace the Growth Process of Individual Single-Walled Carbon Nanotubes. ACS Nano, 2018, 12, 3994-4001.	14.6	17
818	Graphene laminated Cu nanoparticle arrays by spontaneous formation through dewetting. Journal of Industrial and Engineering Chemistry, 2018, 64, 367-372.	5.8	3
819	Comparative analysis of graphene grown on copper and nickel sheet by microwave plasma chemical vapor deposition. Vacuum, 2018, 153, 48-52.	3.5	9
820	Structural evolution dynamics in fusion of sumanenes and corannulenes: defects formation and self-healing mechanism. Nano Futures, 2018, 2, 025001.	2.2	0
821	High temperature oxidation resistance of electrodeposited Reduced Graphene Oxide (RGO) reinforced copper coating. Surface and Coatings Technology, 2018, 345, 140-151.	4.8	16
822	Ambient air synthesis of multi-layer CVD graphene films for low-cost, efficient counter electrode material in dye-sensitized solar cells. FlatChem, 2018, 8, 1-8.	5.6	7
823	Low temperature growth of three-dimensional network of graphene for high-performance supercapacitor electrodes. Materials Letters, 2018, 218, 90-94.	2.6	16
824	Enzymatic and non-enzymatic electrochemical glucose sensor based on carbon nano-onions. Applied Surface Science, 2018, 442, 332-341.	6.1	93
825	Exploring Two-Dimensional Materials toward the Next-Generation Circuits: From Monomer Design to Assembly Control. Chemical Reviews, 2018, 118, 6236-6296.	47.7	410
826	Highly efficient computer algorithm for identifying layer thickness of atomically thin 2D materials. Journal Physics D: Applied Physics, 2018, 51, 11LT03.	2.8	6
827	A critical review on the contributions of chemical and physical factors toward the nucleation and growth of large-area graphene. Journal of Materials Science, 2018, 53, 7095-7111.	3.7	41
828	A review of theoretical study of graphene chemical vapor deposition synthesis on metals: nucleation, growth, and the role of hydrogen and oxygen. Reports on Progress in Physics, 2018, 81, 036501.	20.1	43
829	Controllable Synthesis of Circular Graphene Domains by Atmosphere Pressure Chemical Vapor Deposition. Journal of Physical Chemistry C, 2018, 122, 13572-13578.	3.1	8

#	Article	IF	CITATIONS
830	Raman spectroscopy of graphene-based materials and its applications in related devices. Chemical Society Reviews, 2018, 47, 1822-1873.	38.1	1,274
831	Formation of 3D graphene–Ni foam heterostructures with enhanced performance and durability for bipolar plates in a polymer electrolyte membrane fuel cell. Journal of Materials Chemistry A, 2018, 6, 1504-1512.	10.3	49
832	Decreasing graphene synthesis temperature by catalytic metal engineering and thermal processing. RSC Advances, 2018, 8, 1477-1480.	3.6	3
833	THz photonics in two dimensional materials and metamaterials: properties, devices and prospects. Journal of Materials Chemistry C, 2018, 6, 1291-1306.	5.5	124
834	Graphene Grown on Ni Foam: Molecular Sensing, Graphene-Enhanced Raman Scattering, and Galvanic Exchange for Surface-Enhanced Raman Scattering Applications. Journal of Physical Chemistry C, 2018, 122, 9152-9161.	3.1	15
835	Fast synthesis of high-quality large-area graphene by laser CVD. Applied Surface Science, 2018, 445, 204-210.	6.1	22
836	Controlling defects in fine-grained sputtered nickel catalyst for graphene growth. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, .	1.2	3
837	Single- to Few-Layered, Graphene-Based Separation Membranes. Annual Review of Chemical and Biomolecular Engineering, 2018, 9, 17-39.	6.8	24
838	CVD-graphene for low equivalent series resistance in rGO/CVD-graphene/Ni-based supercapacitors. Nanotechnology, 2018, 29, 195404.	2.6	17
839	Mechanisms and criteria for failure in polycrystalline graphene. International Journal of Solids and Structures, 2018, 143, 232-244.	2.7	4
840	A review on corrosion protection with single-layer, multilayer, and composites of graphene. Corrosion Reviews, 2018, 36, 155-225.	2.0	31
841	Recent trends in graphene materials synthesized by CVD with various carbon precursors. Journal of Materials Science, 2018, 53, 851-879.	3.7	45
842	Stable-isotope Raman microspectroscopy for the analysis of soil organic matter. Analytical and Bioanalytical Chemistry, 2018, 410, 923-931.	3.7	10
843	In situ carbon nanotube clusters grown from three-dimensional porous graphene networks as efficient sulfur hosts for high-rate ultra-stable Li–S batteries. Nano Research, 2018, 11, 1731-1743.	10.4	45
844	Facile preparation of pristine graphene using urea/glycerol as efficient stripping agents. Nano Research, 2018, 11, 820-830.	10.4	22
845	The influence of hydrogen on transition metal - Catalysed graphene nucleation. Carbon, 2018, 128, 215-223.	10.3	11
846	CNT and Graphene Growth: Growing, Quality Control, Thermal Expansion and Chiral Dispersion. Lecture Notes in Nanoscale Science and Technology, 2018, , 207-251.	0.8	2
847	Applications of Phosphorene and Black Phosphorus in Energy Conversion and Storage Devices. Advanced Energy Materials, 2018, 8, 1702093.	19.5	385

#	Article	IF	CITATIONS
848	Direct Growth of Graphene on Silicon by Metal-Free Chemical Vapor Deposition. Nano-Micro Letters, 2018, 10, 20.	27.0	57
849	Lowâ€Temperature and Rapid Growth of Large Singleâ€Crystalline Graphene with Ethane. Small, 2018, 14, 1702916.	10.0	39
850	Development of Cu Substrate Preparation Techniques for Graphene Synthesis. , 2018, , .		0
851	Green and facile production of high-quality graphene from graphite by the combination of hydroxyl radical and electrical exfoliation. RSC Advances, 2018, 8, 40621-40631.	3.6	6
852	Direct Growth of Graphene on Flexible Substrates toward Flexible Electronics: A Promising Perspective. , 0, , .		10
853	Near Perfect Neural Critic from Motor Cortical Activity Toward an Autonomously Updating Brain Machine Interface. , 2018, 2018, 73-76.		19
854	Secondary-Transferring Graphene Electrode for Stable FOLED. Nanoscale Research Letters, 2018, 13, 352.	5.7	1
855	Graphene Nanomaterials: Synthesis, Biocompatibility, and Cytotoxicity. International Journal of Molecular Sciences, 2018, 19, 3564.	4.1	293
856	Wafer Scale Graphene Field Effect Transistors on Thin Thermal Oxide. ECS Transactions, 2018, 86, 51-57.	0.5	0
857	2D Material Membranes for Operando Atmospheric Pressure Photoelectron Spectroscopy. Topics in Catalysis, 2018, 61, 2085-2102.	2.8	26
858	Graphene Nucleation Preference at CuO Defects Rather Than Cu ₂ O on Cu(111): A Combination of DFT Calculation and Experiment. ACS Applied Materials & Interfaces, 2018, 10, 43156-43165.	8.0	16
859	Enhanced Dispersion of Graphene in Epoxy-Acrylic Waterborne Anticorrosion Coating: Bifunctional Ligands Linking Graphene to SiO2. International Journal of Electrochemical Science, 2018, 13, 11867-11881.	1.3	13
860	Carbon Nanotubes and Related Nanomaterials: Critical Advances and Challenges for Synthesis toward Mainstream Commercial Applications. ACS Nano, 2018, 12, 11756-11784.	14.6	388
861	Controllable Growth of Graphene on Liquid Surfaces. Advanced Materials, 2019, 31, e1800690.	21.0	47
862	Spontaneous Nucleation and Growth of Graphene Flakes on Copper Foil in the Absence of External Carbon Precursor in Chemical Vapor Deposition. ACS Omega, 2018, 3, 12575-12583.	3.5	7
863	Atomic Coupling Growth of Graphene on Carbon Steel for Exceptional Anti-Icing Performance. ACS Sustainable Chemistry and Engineering, 2018, 6, 17359-17367.	6.7	7
864	Preparation of Ultra-Smooth Cu Surface for High-Quality Graphene Synthesis. Nanoscale Research Letters, 2018, 13, 340.	5.7	8
865	Selectively Patterned Regrowth of Bilayer Graphene for Self-Integrated Electronics by Sequential Chemical Vapor Deposition. ACS Applied Materials & Amp; Interfaces, 2018, 10, 40014-40023.	8.0	14

#	Article	IF	CITATIONS
866	Chemical Vapor Deposition Growth of Bernal-Stacked Bilayer Graphene by Edge-Selective Etching with H ₂ O. Chemistry of Materials, 2018, 30, 7852-7859.	6.7	17
867	Laser-Induced Reduction of Graphene Oxide by Intensity-Modulated Line Beam for Supercapacitor Applications. ACS Applied Materials & amp; Interfaces, 2018, 10, 39777-39784.	8.0	56
868	Controllable Fabrication of Graphene and Related Two-Dimensional Materials on Liquid Metals via Chemical Vapor Deposition. Accounts of Chemical Research, 2018, 51, 2839-2847.	15.6	60
869	Concentric and Spiral Few-Layer Graphene: Growth Driven by Interfacial Nucleation vs Screw Dislocation. Chemistry of Materials, 2018, 30, 6858-6866.	6.7	21
870	Bridging the Gap between Reality and Ideal in Chemical Vapor Deposition Growth of Graphene. Chemical Reviews, 2018, 118, 9281-9343.	47.7	260
871	Liquid catalysts: an innovative solution to 2D materials in CVD processes. Materials Horizons, 2018, 5, 1021-1034.	12.2	19
872	Lattice vibrations of single and multi-layer isotopologic graphene. Carbon, 2018, 140, 449-457.	10.3	4
873	Flatlands in the Holy Land: The Evolution of Layered Materials Research in Israel. Advanced Materials, 2018, 30, e1706581.	21.0	7
874	Experimental study on the generation of carbonaceous dust formed by chemical vapor deposition in HTGR. Nuclear Engineering and Design, 2018, 335, 172-177.	1.7	2
875	Study on the formation of graphene by ion implantation on Cu, Ni and CuNi alloy. Applied Surface Science, 2018, 451, 162-168.	6.1	14
876	Concentric dopant segregation in CVD-grown N-doped graphene single crystals. Applied Surface Science, 2018, 454, 121-129.	6.1	5
877	Progress, Mechanisms and Applications of Liquidâ€Metal Catalyst Systems. Chemistry - A European Journal, 2018, 24, 17616-17626.	3.3	62
878	Experimental Demonstration of Microwave Absorber Using Large-Area Multilayer Graphene-Based Frequency Selective Surface. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 3807-3816.	4.6	82
879	A Controlled Carburization Process to Obtain Graphene–Fe ₃ C–Fe Composites. Advanced Materials Interfaces, 2018, 5, 1800599.	3.7	17
880	One Second Formation of Large Area Graphene on a Conical Tip Surface via Direct Transformation of Surface Carbide. Small, 2018, 14, e1801288.	10.0	3
881	Size dependence of electronic property in CVD-grown single-crystal graphene. Materials Research Express, 2018, 5, 075005.	1.6	3
882	Research Progress of Gas Sensor Based on Graphene and Its Derivatives: A Review. Applied Sciences (Switzerland), 2018, 8, 1118.	2.5	155
883	Lowâ€Temperature Carbideâ€Mediated Growth of Bicontinuous Nitrogenâ€Doped Mesoporous Graphene as an Efficient Oxygen Reduction Electrocatalyst. Advanced Materials, 2018, 30, e1803588.	21.0	73

		CITATION REPORT		
#	Article		IF	Citations
884	Temperature effect on the nucleation of graphene on Cu (111). RSC Advances, 2018,	8, 27825-27831.	3.6	3
885	Realization of Graphene on the Surface of Electroless Ni–P Coating for Short-Term C Prevention. Coatings, 2018, 8, 130.	lorrosion	2.6	3
886	A Review of Carbon Nanomaterialsâ $€$ [™] Synthesis via the Chemical Vapor Deposition (Materials, 2018, 11, 822.	CVD) Method.	2.9	315
887	Conductivity Maximum in 3D Graphene Foams. Small, 2018, 14, e1801458.		10.0	25
888	High Temperature Growth of Graphene from Cobalt Volume: Effect on Structural Prop Materials, 2018, 11, 257.	erties.	2.9	25
889	A simple method to examine room-temperature corrosion of graphene-coated copper for 2.5 years. Materials Research Express, 2018, 5, 105016.	foil after stored	1.6	4
890	Thermal Growth of Graphene: A Review. Coatings, 2018, 8, 40.		2.6	47
891	Computational Understanding of the Growth of 2D Materials. Advanced Theory and Si 1, 1800085.	mulations, 2018,	2.8	30
892	Fabricating robust and repairable superhydrophobic surface on carbon steel by nanose texturing for corrosion protection. Applied Surface Science, 2018, 455, 748-757.	cond laser	6.1	96
893	Microstructure engineering of graphene towards highly thermal conductive composite Part A: Applied Science and Manufacturing, 2018, 112, 216-238.	rs. Composites	7.6	106
894	Growth of graphene on tantalum and its protective properties. Carbon, 2018, 139, 29	-34.	10.3	5
895	Surface structures of single-crystal graphene on Cu/Ni(111) and Ge(110) substrates st tunneling microscopy. Journal of Applied Physics, 2019, 126, .	udied by scanning	2.5	2
896	Survey of graphene-based nanotechnologies. , 2019, , 23-39.			6
897	Nitrogen cluster doping for high-mobility/conductivity graphene films with millimeter-s Science Advances, 2019, 5, eaaw8337.	ized domains.	10.3	77
898	Synthesis of Graphene-based Materials for Surface-Enhanced Raman Scattering Applic of Surface Science and Nanotechnology, 2019, 17, 71-82.	ations. E-Journal	0.4	2
899	Highly uniform monolayer graphene synthesis <i>via</i> a facile pretreatment of copp substrates using an ammonium persulfate solution. RSC Advances, 2019, 9, 20871-20	er catalyst 878.	3.6	6
900	Recent progress in the synthesis of graphene and derived materials for next generation high performance lithium ion batteries. Progress in Energy and Combustion Science, 2	1 electrodes of 019, 75, 100786.	31.2	379
901	Design of carbon sources: starting point for chemical vapor deposition of graphene. 21 2019, 6, 042003.	D Materials,	4.4	8

#	Article	IF	Citations
902	Large-Area Synthesis and Growth Mechanism of Graphene by Chemical Vapor Deposition. , 0, , .		11
903	Kinetic modulation of graphene growth by fluorine through spatially confined decomposition of metal fluorides. Nature Chemistry, 2019, 11, 730-736.	13.6	82
904	Hydrogen Induced Etching Features of Wrinkled Graphene Domains. Nanomaterials, 2019, 9, 930.	4.1	4
905	A review on synthesis of graphene, h-BN and MoS2 for energy storage applications: Recent progress and perspectives. Nano Research, 2019, 12, 2655-2694.	10.4	283
906	Direct growth of large area uniform bi-layer graphene films on silicon substrates by chemical vapor deposition. Materials Research Express, 2019, 6, 095611.	1.6	4
907	Effect of High-Temperature Annealing on Graphene with Nickel Contacts. Condensed Matter, 2019, 4, 21.	1.8	8
908	Nitrogen as a Suitable Replacement for Argon within Methaneâ€Based Hotâ€Wall Graphene Chemical Vapor Deposition. Physica Status Solidi (B): Basic Research, 2019, 256, 1900240.	1.5	2
909	Synthesis of turbostratic graphene by direct carbon ions implantation on LiNbO3. Applied Surface Science, 2019, 493, 1255-1259.	6.1	13
910	Graphene synthesis on SiO2 using pulsed laser deposition with bilayer predominance. Materials Chemistry and Physics, 2019, 238, 121905.	4.0	13
911	Adlayerâ€Free Largeâ€Area Single Crystal Graphene Grown on a Cu(111) Foil. Advanced Materials, 2019, 31, e1903615.	21.0	89
912	Effect of hydrogen on chemical vapor deposition growth of graphene on Au substrates. Japanese Journal of Applied Physics, 2019, 58, SIIB17.	1.5	6
913	Primary Nucleation-Dominated Chemical Vapor Deposition Growth for Uniform Graphene Monolayers on Dielectric Substrate. Journal of the American Chemical Society, 2019, 141, 11004-11008.	13.7	52
914	A New Model to Predict Optimum Conditions for Growth of 2D Materials on a Substrate. Nanomaterials, 2019, 9, 978.	4.1	10
915	Low-temperature synthesis of sp2 carbon nanomaterials. Science Bulletin, 2019, 64, 1817-1829.	9.0	18
916	Periodic table of elements and nanotechnology. Mendeleev Communications, 2019, 29, 479-485.	1.6	15
917	State-of-the-art advancements in studies and applications of graphene: a comprehensive review. Materials Today Sustainability, 2019, 6, 100026.	4.1	8
918	Top-down bottom-up graphene synthesis. Nano Futures, 2019, 3, 042003.	2.2	39
923	Effect of Local Terrace on Structure and Mechanics of Graphene Grain Boundary. Journal of Physical Chemistry C, 2019, 123, 28460-28468.	3.1	4

#	Article	IF	CITATIONS
924	Real-time observation on hot-filament-assisted CVD growth of graphene. Japanese Journal of Applied Physics, 2019, 58, SIIB24.	1.5	2
926	Improved Damping and High Strength of Graphene-Coated Nickel Hybrid Foams. ACS Applied Materials & Interfaces, 2019, 11, 42690-42696.	8.0	21
927	Facile synthesis and supercapacitance performance of nickel oxide decorated carbon nanotube arrays on graphene-protected copper. Materials Research Express, 2019, 6, 115630.	1.6	2
928	AlGaN Nanowires Grown on SiO ₂ /Si (100) Using Graphene as a Buffer Layer. Crystal Growth and Design, 2019, 19, 5516-5522.	3.0	16
929	An Overview of the Recent Developments in Metal Matrix Nanocomposites Reinforced by Graphene. Materials, 2019, 12, 2823.	2.9	61
930	Graphene-based wearable sensors. Nanoscale, 2019, 11, 18923-18945.	5.6	98
931	Visualization of CVD-grown graphene on Cu film using area-selective ALD for quality management. Applied Surface Science, 2019, 496, 143614.	6.1	5
932	Large-scale chemical vapor deposition of graphene on polycrystalline nickel films: Effect of annealing conditions. Thin Solid Films, 2019, 690, 137565.	1.8	8
933	Exploring 1-butanol as a potential liquid precursor for graphene synthesis via chemical vapour deposition and enhanced catalyzed growth methodology. Journal of Nanoparticle Research, 2019, 21, 1.	1.9	3
934	Barrier-assisted ion beam synthesis of transfer-free graphene on an arbitrary substrate. Applied Physics Letters, 2019, 115, .	3.3	5
935	Enhanced Performance of an Electric Double Layer Microsupercapacitor Based on Novel Carbon-Encapsulated Cu Nanowire Network Structure As the Electrode. ACS Applied Materials & Interfaces, 2019, 11, 40481-40489.	8.0	40
936	Nanotechnology Facets of the Periodic Table of Elements. ACS Nano, 2019, 13, 10879-10886.	14.6	26
937	Nonvolatile Memories Based on Graphene and Related 2D Materials. Advanced Materials, 2019, 31, e1806663.	21.0	230
938	Solid-diffusion-facilitated cleaning of copper foil improves the quality of CVD graphene. Scientific Reports, 2019, 9, 257.	3.3	6
939	Excellent corrosion resistance of graphene coating on copper due to the low defect overlapping structure. Surface Topography: Metrology and Properties, 2019, 7, 015014.	1.6	7
940	Controlled Island Formation of Large-Area Graphene Sheets by Atmospheric Chemical Vapor Deposition: Role of Natural Camphor. ACS Omega, 2019, 4, 8758-8766.	3.5	15
941	Direct synthesis of high-quality graphene on Cu powders from adsorption of small aromatic hydrocarbons: A route to high strength and electrical conductivity for graphene/Cu composite. Journal of Alloys and Compounds, 2019, 798, 403-413.	5.5	46
942	Growth of U-Shaped Graphene Domains on Copper Foil by Chemical Vapor Deposition. Materials, 2019, 12, 1887.	2.9	2

#	Article	IF	CITATIONS
943	Graphene as a Transparent and Conductive Electrode for Organic Optoelectronic Devices. Advanced Electronic Materials, 2019, 5, 1900247.	5.1	40
944	Interlayer epitaxy of wafer-scale high-quality uniform AB-stacked bilayer graphene films on liquid Pt3Si/solid Pt. Nature Communications, 2019, 10, 2809.	12.8	43
945	Durable degradation resistance of graphene coated nickel and Monel-400 as bi-polar plates for proton exchange membrane fuel cell. Carbon, 2019, 151, 68-75.	10.3	14
946	Graphene to improve the physicomechanical properties and bioactivity of the cements. , 2019, , 599-614.		0
947	On the Dynamics of Intrinsic Carbon in Copper during the Annealing Phase of Chemical Vapor Deposition Growth of Graphene. ACS Omega, 2019, 4, 9629-9635.	3.5	6
948	Direct growth of large area uniform double layer graphene films on MgO(100) substrates by chemical vapor deposition. Materials Chemistry and Physics, 2019, 233, 213-219.	4.0	6
949	A first-principles study of the effect of surface oxygen during the early stage of graphene growth on a Cu(1â€1â€1) surface. Computational Materials Science, 2019, 168, 17-24.	3.0	8
950	Graphene as a material for energy generation and control: Recent progress in the control of graphene thermal conductivity by graphene defect engineering. Materials Today Energy, 2019, 12, 431-442.	4.7	76
951	Defective graphene as a high-efficiency Raman enhancement substrate. Journal of Materials Science and Technology, 2019, 35, 1996-2002.	10.7	13
952	Towards super-clean graphene. Nature Communications, 2019, 10, 1912.	12.8	133
953	Copper-Containing Carbon Feedstock for Growing Superclean Graphene. Journal of the American Chemical Society, 2019, 141, 7670-7674.	13.7	47
954	Effect of epitaxial graphene morphology on adsorption of ambient species. Applied Surface Science, 2019, 486, 239-248.	6.1	17
955	Multi-layer graphene coating for corrosion resistance of Monel 400 alloy in chloride environment. Surface and Coatings Technology, 2019, 370, 227-234.	4.8	28
956	Substrate free synthesis of graphene nanoflakes by atmospheric pressure chemical vapour deposition using Ni powder as a catalyst. Bulletin of Materials Science, 2019, 42, 1.	1.7	12
957	Surface-engineered mesoporous silicon microparticles as high-Coulombic-efficiency anodes for lithium-ion batteries. Nano Energy, 2019, 61, 404-410.	16.0	134
958	Ultrafast Transition of Nonuniform Graphene to High-Quality Uniform Monolayer Films on Liquid Cu. ACS Applied Materials & Interfaces, 2019, 11, 17629-17636.	8.0	10
959	Scalable and ultrafast epitaxial growth of single-crystal graphene wafers for electrically tunable liquid-crystal microlens arrays. Science Bulletin, 2019, 64, 659-668.	9.0	66
960	Graphene: An Effective Lubricant for Tribological Applications. Lecture Notes in Mechanical Engineering, 2019, , 239-258.	0.4	4

#	Article	IF	CITATIONS
961	Immobilizing copper-supported graphene with surface hydrogenation or hydroxylation: A first-principle study. Chemical Physics, 2019, 523, 183-190.	1.9	2
962	Experimental carbonatite/graphite carbon isotope fractionation and carbonate/graphite geothermometry. Geochimica Et Cosmochimica Acta, 2019, 253, 290-306.	3.9	15
963	Valueâ€Added Recycling of Inexpensive Carbon Sources to Graphene and Carbon Nanotubes. Advanced Sustainable Systems, 2019, 3, 1800016.	5.3	20
964	Graphene synthesis by microwave plasma chemical vapor deposition: analysis of the emission spectra and modeling. Plasma Sources Science and Technology, 2019, 28, 045001.	3.1	13
965	3D Hierarchical Porous Graphene-Based Energy Materials: Synthesis, Functionalization, and Application in Energy Storage and Conversion. Electrochemical Energy Reviews, 2019, 2, 332-371.	25.5	82
966	Water-assisted rapid growth of monolayer graphene films on SiO2/Si substrates. Carbon, 2019, 148, 241-248.	10.3	35
967	Insight into the rapid growth of graphene single crystals on liquid metal via chemical vapor deposition. Science China Materials, 2019, 62, 1087-1095.	6.3	37
968	Edge-Epitaxial Growth of Graphene on Cu with a Hydrogen-Free Approach. Chemistry of Materials, 2019, 31, 2555-2562.	6.7	19
969	Current Review on Synthesis, Composites and Multifunctional Properties of Graphene. Topics in Current Chemistry, 2019, 377, 10.	5.8	95
970	Controlling Nitrogen Doping in Graphene with Atomic Precision: Synthesis and Characterization. Nanomaterials, 2019, 9, 425.	4.1	67
971	Analysis of Defect Recovery in Reduced Graphene Oxide and Its Application as a Heater for Self-Healing Polymers. ACS Applied Materials & Interfaces, 2019, 11, 16804-16814.	8.0	19
972	Electrical Property of Graphene and Its Application to Electrochemical Biosensing. Nanomaterials, 2019, 9, 297.	4.1	88
973	Suppression of graphene nucleation by plasma treatment of Cu foil for the rapid growth of large-size single-crystal graphene. Carbon, 2019, 147, 51-57.	10.3	24
974	Criteria for the growth of large-area adlayer-free monolayer graphene films by chemical vapor deposition. Journal of Materiomics, 2019, 5, 463-470.	5.7	20
975	Bioelectronics and Interfaces Using Monolayer Graphene. ChemElectroChem, 2019, 6, 31-59.	3.4	46
976	Continuous Growth of Highly Reproducible Single-Layer Graphene Deposition on Cu Foil by Indigenously Developed LPCVD Setup. ACS Omega, 2019, 4, 2893-2901.	3.5	8
977	Graphene on Groupâ€IV Elementary Semiconductors: The Direct Growth Approach and Its Applications. Advanced Materials, 2019, 31, e1803469.	21.0	21
978	Chemical vapor deposition synthesis of graphene films. APL Materials, 2019, 7, .	5.1	22

	CITATION	CITATION REPORT	
#	Article	IF	Citations
979	Fundamentals of Fascinating Graphene Nanosheets: A Comprehensive Study. Nano, 2019, 14, 1930003.	1.0	13
980	Direct formation of continuous multilayer graphene films with controllable thickness on dielectric substrates. Thin Solid Films, 2019, 675, 136-142.	1.8	5
981	Controlling the number of layers in graphene using the growth pressure. Nanotechnology, 2019, 30, 235602.	2.6	17
982	Layer-by-layer synthesis of bilayer and multilayer graphene on Cu foil utilizing the catalytic activity of cobalt nano-powders. Carbon, 2019, 146, 549-556.	10.3	9
983	Plasma-Enhanced Chemical Vapor Deposition of Acetylene on Codeposited Bimetal Catalysts Increasing Graphene Sheet Continuity Under Low-Temperature Growth Conditions. Nanoscale Research Letters, 2019, 14, 335.	5.7	7
984	Application of graphene in metal corrosion protection. IOP Conference Series: Materials Science and Engineering, 0, 493, 012020.	0.6	7
985	Formation of thin layer graphite wrapped meso-porous SiOx and its lithium storage application. Ceramics International, 2019, 45, 24707-24716.	4.8	7
986	Hard-template synthesis of three-dimensional interconnected carbon networks: Rational design, hybridization and energy-related applications. Nano Today, 2019, 29, 100796.	11.9	64
987	The Growth of Graphene on Ni–Cu Alloy Thin Films at a Low Temperature and Its Carbon Diffusion Mechanism. Nanomaterials, 2019, 9, 1633.	4.1	9
988	Three dimensional nanosuperstructures made of two-dimensional materials by design: Synthesis, properties, and applications. Nano Today, 2019, 29, 100799.	11.9	23
989	Fabricating Fe nanocrystals via encapsulation at the graphite surface. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, 061403.	2.1	14
990	Scalable synthesis of gyroid-inspired freestanding three-dimensional graphene architectures. Nanoscale Advances, 2019, 1, 3870-3882.	4.6	17
991	Epitaxial stabilization <i>versus</i> interdiffusion: synthetic routes to metastable cubic HfO ₂ and HfV ₂ O ₇ from the core–shell arrangement of precursors. Nanoscale, 2019, 11, 21354-21363.	5.6	5
992	The Mo catalyzed graphitization of amorphous carbon: an <i>in situ</i> TEM study. RSC Advances, 2019, 9, 34377-34381.	3.6	5
993	Effect of Different Amount of Precursor on Graphene Synthesis from Waste Cooking Palm Oil. , 2019, ,		2
994	In situ catalytic growth 3D multi-layers graphene sheets coated nano-silicon anode for high performance lithium-ion batteries. Chemical Engineering Journal, 2019, 356, 895-903.	12.7	131
995	Toward Mass Production of CVD Graphene Films. Advanced Materials, 2019, 31, e1800996.	21.0	218
996	Enhancement C H bond activation of methane via doping Pd, Pt, Rh and Ni on Cu(1â€ ⁻ 1â€ ⁻ 1) surface: A DFT study. Chemical Physics Letters, 2019, 715, 323-329.	2.6	27

#	Article	IF	CITATIONS
997	Raman Spectroscopy of Two-Dimensional Materials. Springer Series in Materials Science, 2019, , .	0.6	18
998	Recent progress in synthesis, properties, and applications of hexagonal boron nitride-based heterostructures. Nanotechnology, 2019, 30, 074003.	2.6	31
999	Graphene and Anticorrosive Properties. Interface Science and Technology, 2019, , 303-337.	3.3	43
1000	Revealing the Role of Gold in the Growth of Twoâ€Dimensional Molybdenum Disulfide by Surface Alloy Formation. Chemistry - A European Journal, 2019, 25, 2337-2344.	3.3	6
1001	Synthesis of high-quality monolayer graphene by low-power plasma. Current Applied Physics, 2019, 19, 44-49.	2.4	4
1002	Transfer-free synthesis of multilayer graphene on silicon nitride using reusable gallium catalyst. Diamond and Related Materials, 2019, 91, 112-118.	3.9	5
1003	Atmospheric Pressure Chemical Vapor Deposition of Graphene. , 2019, , .		6
1004	Raman Imaging of Two Dimensional Materials. Springer Series in Materials Science, 2019, , 231-261.	0.6	0
1005	Two-Dimensional Anode Materials for Non-lithium Metal-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 932-955.	5.1	83
1006	Low-Temperature Graphene Growth by Forced Convection of Plasma-Excited Radicals. Nano Letters, 2019, 19, 739-746.	9.1	37
1007	Re-nucleation and Etching of Graphene During the Cooling Stage of Chemical Vapor Deposition. Journal of Electronic Materials, 2019, 48, 1740-1745.	2.2	2
1008	Direct deposition of multilayer graphene on dielectrics via solid-phase precipitation from carbon-doped cobalt with a copper capping layer. Japanese Journal of Applied Physics, 2019, 58, 026501.	1.5	7
1009	Studying the reduction of graphene oxide with magnetic measurements. Carbon, 2019, 142, 373-378.	10.3	32
1010	Preparation and photoluminescence properties of graphene quantum dots by decomposition of graphene-encapsulated metal nanoparticles derived from Kraft lignin and transition metal salts. Journal of Luminescence, 2019, 206, 403-411.	3.1	23
1011	Corrosion mechanism of graphene coating with different defect levels. Journal of Alloys and Compounds, 2019, 777, 135-144.	5.5	73
1012	Catalyst-free synthesis of few-layer graphene films on silicon dioxide/Si substrates using ethylene glycol by chemical vapor deposition. Materials Research Express, 2019, 6, 035602.	1.6	2
1013	Synthesis of interconnected graphene framework with two-dimensional protective layers for stable lithium metal anodes. Energy Storage Materials, 2019, 17, 341-348.	18.0	26
1014	Carbon nanotube- and graphene-based nanomaterials and applications in high-voltage supercapacitor: A review. Carbon, 2019, 141, 467-480.	10.3	610

#	Article	IF	CITATIONS
1015	SYNTHESES OF LARGE-SIZED SINGLE CRYSTAL GRAPHENE: A REVIEW OF RECENT DEVELOPMENTS. Surface Review and Letters, 2019, 26, 1830007.	1,1	4
1016	Graphene and MXene-based transparent conductive electrodes and supercapacitors. Energy Storage Materials, 2019, 16, 102-125.	18.0	313
1017	Understanding the processing-structure-performance relationship of graphene and its variants as anode material for Li-ion batteries: A critical review. Carbon, 2020, 156, 130-165.	10.3	41
1018	Direct growth of mm-size twisted bilayer graphene by plasma-enhanced chemical vapor deposition. Carbon, 2020, 156, 212-224.	10.3	34
1019	Grapheneâ€Based Devices for Thermal Energy Conversion and Utilization. Advanced Functional Materials, 2020, 30, 1903888.	14.9	30
1020	Controlled Growth of Singleâ€Crystal Graphene Films. Advanced Materials, 2020, 32, e1903266.	21.0	95
1021	Fabrication of vertical van der Waals gap array using single-and multi-layer graphene. Nanotechnology, 2020, 31, 035304.	2.6	2
1022	Toward Sustainable Chemical Processing With Graphene-Based Materials. , 2020, , 195-229.		0
1023	Nickel-catalyzed direct growth of graphene on bearing steel (GCr15) by thermal chemical vapor deposition and its tribological behavior. Applied Surface Science, 2020, 502, 144135.	6.1	16
1024	Review of photoreduction and synchronous patterning of graphene oxide toward advanced applications. Journal of Materials Science, 2020, 55, 480-497.	3.7	16
1025	Properties and applications of graphene membranes grown on Co. Materials Today: Proceedings, 2020, 20, 1-6.	1.8	1
1026	Scanning tunneling microscopic investigations for studying conformational change of underlying Cu(111) and Ni(111) during graphene growth. Surface Science, 2020, 693, 121526.	1.9	6
1027	Covalently bonded 3D rebar graphene foam for ultrahigh-areal-capacity lithium-metal anodes by in-situ loose powder metallurgy synthesis. Carbon, 2020, 158, 536-544.	10.3	22
1028	Metal-oxide semiconductors for carbon monoxide (CO) gas sensing: A review. Applied Materials Today, 2020, 18, 100483.	4.3	151
1029	Crystalline transformation from ta-C to graphene induced by a catalytic Ni layer during annealing. Diamond and Related Materials, 2020, 101, 107556.	3.9	5
1030	Surface crystallographic structure insensitive growth of oriented graphene domains on Cu substrates. Materials Today, 2020, 36, 10-17.	14.2	20
1031	Electrical, Transport, and Optical Properties of Multifunctional Graphitic Films Synthesized on Dielectric Surfaces by Nickel Nanolayer-Assisted Pyrolysis. ACS Applied Materials & Interfaces, 2020, 12, 6226-6233.	8.0	5
1032	The formation mechanism of hexagonal Mo ₂ C defects in CVD graphene grown on liquid copper. Physical Chemistry Chemical Physics, 2020, 22, 2176-2180.	2.8	13

#	Article	IF	CITATIONS
1033	Controllable preparation of graphene-based film deposited on cemented carbides by chemical vapor deposition. Journal of Materials Science, 2020, 55, 4251-4264.	3.7	9
1034	Nickelâ€Catalyzed Synthesis of 3D Edgeâ€Curled Graphene for Highâ€Performance Lithiumâ€lon Batteries. Advanced Functional Materials, 2020, 30, 1904645.	14.9	32
1035	Probing the Reaction Mechanism in CO ₂ Hydrogenation on Bimetallic Ni/Cu(100) with Near-Ambient Pressure X-Ray Photoelectron Spectroscopy. ACS Applied Materials & Interfaces, 2020, 12, 2548-2554.	8.0	9
1036	Optimisation of graphene grown from solid waste using CVD method. International Journal of Advanced Manufacturing Technology, 2020, 106, 211-218.	3.0	12
1037	Thermal Conductivity Enhancement and Shape Stabilization of Phase-Change Materials Using Three-Dimensional Graphene and Graphene Powder. Energy & Fuels, 2020, 34, 2435-2444.	5.1	25
1038	Low-temperature deposition of multilayer graphene with continuous morphology and few defects. Journal of Materials Science: Materials in Electronics, 2020, 31, 5807-5813.	2.2	5
1039	Hybrid ionic liquid-3D graphene-Ni foam for on-line preconcentration and separation of Hg species in water with atomic fluorescence spectrometry detection. Talanta, 2020, 210, 120614.	5.5	26
1040	A Strategy To Prepare High-Quality Monocrystalline Graphene: Inducing Graphene Growth with Seeding Chemical Vapor Deposition and Its Mechanism. ACS Applied Materials & Interfaces, 2020, 12, 1306-1314.	8.0	7
1041	Bilayer Graphene: From Stacking Order to Growth Mechanisms. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900605.	2.4	4
1042	Studies on directly grown few layer graphene processed using tape-peeling method. Carbon, 2020, 158, 749-755.	10.3	12
1043	Specific stacking angles of bilayer graphene grown on atomic-flat and -stepped Cu surfaces. Npj 2D Materials and Applications, 2020, 4, .	7.9	13
1044	Recent progress on thermally conductive and electrical insulating rubber composites: Design, processing and applications. Composites Communications, 2020, 22, 100430.	6.3	60
1045	Surface alloys in nanochemistry: catalysis and synthesis. New Journal of Chemistry, 2020, 44, 18525-18529.	2.8	3
1046	Sodium hydroxide mediated alumina nanoparticles from waste aluminum foil sheets – Biological impact and photo-catalytic efficacy on commercial dyes. Materials Today: Proceedings, 2020, 33, 2366-2374.	1.8	2
1047	Large scale structures in chemical vapor deposition-grown graphene on Ni thin films. Thin Solid Films, 2020, 709, 138225.	1.8	8
1048	Impact of Grain Boundaries on the Elastic Behavior of Transferred Polycrystalline Graphene. Chemistry of Materials, 2020, 32, 6078-6084.	6.7	12
1049	High-quality bilayer graphene grown on softened copper foils by atmospheric pressure chemical vapor deposition. Science China Materials, 2020, 63, 1973-1982.	6.3	11
1050	Adhesive graphene grown on bioceramics with photothermal property. Materials Today Chemistry, 2020, 17, 100322.	3.5	5

#	Article	IF	Citations
1051	Carbon nanomaterials: synthesis, functionalization, and properties. , 2020, , 137-179.		4
1052	A review of graphene synthesisatlow temperatures by CVD methods. New Carbon Materials, 2020, 35, 193-208.	6.1	70
1053	Millimeter sized graphene domains through in situ oxidation/reduction treatment of the copper substrate. Carbon, 2020, 169, 403-415.	10.3	8
1054	One-pot synthesis of two-dimensional multilayered graphitic carbon nanosheets by low-temperature hydrothermal carbonization using the <i>in situ</i> formed copper as a template and catalyst. Chemical Communications, 2020, 56, 11645-11648.	4.1	9
1055	Strain relaxation in different shapes of single crystal graphene grown by chemical vapor deposition on copper. Carbon, 2020, 168, 684-690.	10.3	8
1056	Adlayer-free large-area single-crystal CVD graphene growth on copper. Journal of Materials Science: Materials in Electronics, 2020, 31, 21821-21831.	2.2	1
1057	Tribology of 2D Nanomaterials: A Review. Coatings, 2020, 10, 897.	2.6	49
1058	Research on rapid growth of monolayer graphene by vertical cold-wall CVD method. Journal of Experimental Nanoscience, 2020, 15, 417-426.	2.4	2
1059	Plasticized Polystyrene by Addition of -Diene Based Molecules for Defect-Less CVD Graphene Transfer. Polymers, 2020, 12, 1839.	4.5	4
1060	3D Graphene Materials: From Understanding to Design and Synthesis Control. Chemical Reviews, 2020, 120, 10336-10453.	47.7	319
1061	Chemical Vapour Deposition of Graphene—Synthesis, Characterisation, and Applications: A Review. Molecules, 2020, 25, 3856.	3.8	155
1062	Enhancing the photoelectrical performance of graphene/4H-SiC/graphene detector by tuning a Schottky barrier by bias. Applied Physics Letters, 2020, 117, .	3.3	11
1063	The synthesis mechanism of Mo ₂ C on Ag-Cu alloy substrates by chemical vapor deposition and the impact of substrate choice. 2D Materials, 2020, 7, 035022.	4.4	10
1064	Isothermal Growth and Stacking Evolution in Highly Uniform Bernal-Stacked Bilayer Graphene. ACS Nano, 2020, 14, 6834-6844.	14.6	28
1065	Universal mechanical exfoliation of large-area 2D crystals. Nature Communications, 2020, 11, 2453.	12.8	394
1066	BEOL-compatible synthesis of multi-layer graphene by carbon ion implantation on cobalt thin films. Applied Surface Science, 2020, 524, 146537.	6.1	0
1067	Multiple growth of graphene from a pre-dissolved carbon source. Nanotechnology, 2020, 31, 345601.	2.6	5
1068	Multilayer graphene sheets converted directly from anthracite in the presence of molten iron and their applications as anode for lithium ion batteries. Synthetic Metals, 2020, 263, 116364.	3.9	6

ARTICLE IF CITATIONS Low-temperature synthesis of multilayer graphene directly on SiO2by current-enhanced solid-phase 1069 1.5 7 deposition using Ni catalyst. Japanese Journal of Applied Physics, 2020, 59, 066501. Gr–Al composite reinforced with Si3N4 and SiC particles for enhanced microhardness and reduced 1070 thermal expansion. SN Applied Sciences, 2020, 2, 1. Transition metal impurities in carbon-based materials: Pitfalls, artifacts and deleterious effects. 1071 10.3 102 Carbon, 2020, 168, 748-845. Recent breakthroughs in two-dimensional van der Waals magnetic materials and emerging 11.9 applications. Nano Today, 2020, 34, 100902. Chemical vapour deposition of graphene on copper–nickel alloys: the simulation of a thermodynamic 1073 5.6 13 and kinetic approach. Nanoscale, 2020, 12, 15283-15294. Theoretical Insights into the Thermodynamics and Kinetics of Graphene Growth on Copper Surfaces. Journal of Physical Chemistry C, 2020, 124, 16233-16247. 1074 3.1 In Situ Friction-Induced Graphene Originating from Methanol at the Sliding Interface between the WC 1075 3.5 22 Self-Mated Tribo-Pair and Its Tribological Performance. Langmuir, 2020, 36, 3887-3893. Sustained and Controlled Release of Volatile Precursors for Chemical Vapor Deposition of Graphene 3.3 at Atmospheric Pressure. Chemistry - A European Journal, 2020, 26, 7463-7469. Graphene-Based Thermoacoustic Sound Source. ACS Nano, 2020, 14, 3779-3804. 14.6 1077 33 Local Probes of Graphene Lattice Dynamics. Small Methods, 2020, 4, 1900817. 8.6 On-site growth method of 3D structured multi-layered graphene on silicon nanowires. Nanoscale 1079 4.6 5 Advances, 2020, 2, 1718-1725. Growth of Single-Layer and Multilayer Graphene on Cu/Ni Alloy Substrates. Accounts of Chemical 15.6 Research, 2020, 53, 800-811. Simultaneous Detection and Photocatalysis Performed on a 3D Graphene/ZnO Hybrid Platform. 1081 3.5 15 Langmuir, 2020, 36, 2231-2239. Three-dimensional graphene-wrapped porous carbon/sulfur composite for cathode of lithium–sulfur 1082 battery. SN Applied Sciences, 2020, 2, 1. Cooling rate dependence of Ni-catalyzed transformation of amorphous carbon into graphene in rapid 1083 thermal processing: An experimental and reactive molecular dynamics study. Applied Surface Science, 2 6.1 2020, 529, 147042. Combined effect of 13C isotope and vacancies on the phonon properties in AB stacked bilayer graphene. 1084 Carbon, 2020, 168, 22-31. Synthesis of Three-Dimensional Nanocarbon Hybrids by Chemical Vapor Deposition., 0, , . 1085 0 Application of organic field-effect transistors in memory. Materials Chemistry Frontiers, 2020, 4, 2845-2862.

#	Article	IF	CITATIONS
1087	Tuning the alignment of pentacene on copper substrate by annealing-assistant surface functionalization*. Chinese Physics B, 2020, 29, 076801.	1.4	2
1088	Simulation to fabrication—understanding the effect of NiAuCu alloy catalysts for controlled growth of graphene at reduced temperature. Materials Research Express, 2020, 7, 015603.	1.6	3
1089	Low-dimensional saturable absorbers for ultrafast photonics in solid-state bulk lasers: status and prospects. Nanophotonics, 2020, 9, 2603-2639.	6.0	24
1090	Extraordinary macroscale lubricity of sonication-assisted fabrication of MoS2 nano-ball and investigation of in situ formation mechanism of graphene induced by tribochemical reactions. Applied Surface Science, 2020, 510, 145456.	6.1	24
1091	Preparation and characterization of graphene. , 2020, , 51-90.		1
1092	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	4.4	333
1093	Rapid growth mechanism of graphene fabricated by high-power laser irradiation. Materials Today Communications, 2020, 24, 101132.	1.9	4
1094	Catalytic methane technology for carbon nanotubes and graphene. Reaction Chemistry and Engineering, 2020, 5, 991-1004.	3.7	16
1095	Optical properties of various graphitic structures deposited by PECVD. Optical and Quantum Electronics, 2020, 52, 1.	3.3	3
1096	Synthesis of graphene from solid carbon sources: A focused review. Materials Chemistry and Physics, 2020, 248, 122924.	4.0	38
1097	In-situ deposition of three-dimensional graphene on selective laser melted copper scaffolds for high performance applications. Composites Part A: Applied Science and Manufacturing, 2020, 135, 105904.	7.6	22
1098	Flexible graphene-assisted van der Waals epitaxy growth of crack-free AlN epilayer on SiC by lattice engineering. Applied Surface Science, 2020, 520, 146358.	6.1	14
1099	Morphological effect and conductivity tunability of different regions in a single graphene film by surface steps. Carbon, 2020, 165, 1-8.	10.3	0
1100	Structure and properties of graphene. , 2020, , 5-26.		0
1101	Dissolution-precipitation growth of uniform and clean two dimensional transition metal dichalcogenides. National Science Review, 2021, 8, nwaa115.	9.5	42
1102	Epitaxial Growth of Main Group Monoelemental 2D Materials. Advanced Functional Materials, 2021, 31, 2006997.	14.9	37
1103	Preparation of single-crystal metal substrates for the growth of high-quality two-dimensional materials. Inorganic Chemistry Frontiers, 2021, 8, 182-200.	6.0	15
1104	Ordered Mesoporous Carbons with Graphitic Tubular Frameworks by Dual Templating for Efficient Electrocatalysis and Energy Storage, Angewandte Chemie, 2021, 133, 1461-1469.	2.0	5

#	Article	IF	CITATIONS
1105	Ordered Mesoporous Carbons with Graphitic Tubular Frameworks by Dual Templating for Efficient Electrocatalysis and Energy Storage. Angewandte Chemie - International Edition, 2021, 60, 1441-1449.	13.8	40
1106	Synthesis of large-area graphene films on rolled-up Cu foils by a "breathing―method. Chemical Engineering Journal, 2021, 405, 127014.	12.7	18
1107	Unidirectional growth of graphene nano-islands from carbon cluster seeds on Ge(1 1 0). Applied Surface Science, 2021, 536, 147722.	6.1	3
1108	Cuâ€Phosphorus Eutectic Solid Solution for Growth of Multilayer Graphene with Widely Tunable Doping. Advanced Functional Materials, 2021, 31, 2006499.	14.9	3
1109	Recent Advances in Growth of Large‧ized 2D Single Crystals on Cu Substrates. Advanced Materials, 2021, 33, e2003956.	21.0	26
1110	Introducing a novel nanocomposite consisting of TiO2 nanoparticles@copper oxide/reduced graphene oxide for the electrocatalytic sensing of ascorbic acid. Journal of the Iranian Chemical Society, 2021, 18, 1329-1341.	2.2	8
1111	Synthesis of Large-Area Single-Crystal Graphene. Trends in Chemistry, 2021, 3, 15-33.	8.5	27
1112	Growth of high-quality wafer-scale graphene on dielectric substrate for high-response ultraviolet photodetector. Carbon, 2021, 175, 155-163.	10.3	10
1113	Etching Characteristic of Graphite and Metal Substrates by Hydrocarbon Plasma in Closed Cavity. Plasma Chemistry and Plasma Processing, 2021, 41, 691-705.	2.4	1
1114	Alloy/graphene 3D TPMS porous scaffold. , 2021, , 131-148.		0
1115	Heat Transport Control and Thermal Characterization of Low-Dimensional Materials: A Review. Nanomaterials, 2021, 11, 175.	4.1	20
1116	Catalytic graphitization: A bottom-up approach to graphene and quantum dots derived therefrom – A review. Materials Today: Proceedings, 2021, 46, 3069-3074.	1.8	4
1117	Probing the Influence of the Substrate Hole Shape on the Interaction between Helium Ions and Suspended Monolayer Graphene with Raman Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 2202-2211.	3.1	4
1119	Chemical vapour deposition. Nature Reviews Methods Primers, 2021, 1, .	21.2	244
1120	Sequential growth and twisted stacking of chemical-vapor-deposited graphene. Nanoscale Advances, 2021, 3, 983-990.	4.6	5
1121	Recent Trends in the Use of Three-Dimensional Graphene Structures for Supercapacitors. ACS Applied Electronic Materials, 2021, 3, 574-596.	4.3	19
1122	Design, Fabrication, and Mechanism of Nitrogenâ€Đoped Grapheneâ€Based Photocatalyst. Advanced Materials, 2021, 33, e2003521.	21.0	324
1123	Synergistic photocatalytic activity of a combination of carbon nanotubes-graphene-nickel foam nanocomposites enhanced by dielectric barrier discharge plasma technology for water purification. Water Science and Technology, 2021, 83, 2762-2777.	2.5	4

#	ARTICLE Microscopic origin of graphene nanosheets derived from coal-tar pitch by treating Al4C3 as the	IF 2.8	CITATIONS 2
1125	intermediate. Physical Chemistry Chemical Physics, 2021, 23, 12449-12455. Development and application of vapor deposition technology in atomic manufacturing. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 028101-028101.	0.5	2
1126	Recent advances on graphene microstructure engineering for <scp>propellantâ€related</scp> applications. Journal of Applied Polymer Science, 2021, 138, 50474.	2.6	11
1127	Chemical vapor deposition (CVD) growth of graphene films. , 2021, , 199-222.		4
1128	First-Principles Study of the Electronic Properties and Thermal Expansivity of a Hybrid 2D Carbon and Boron Nitride Material. Journal of Carbon Research, 2021, 7, 5.	2.7	1
1129	Bandgap oupled Template Autocatalysis toward the Growth of Highâ€Purity sp ² Nanocarbons. Advanced Science, 2021, 8, 2003078.	11.2	8
1130	A review of performance improvement strategies for graphene oxide-based and graphene-based membranes in water treatment. Journal of Materials Science, 2021, 56, 9545-9574.	3.7	52
1131	Substrate Engineering for CVD Growth of Single Crystal Graphene. Small Methods, 2021, 5, e2001213.	8.6	25
1132	Plasma-Enhanced Chemical Vapor Deposition of Two-Dimensional Materials for Applications. Accounts of Chemical Research, 2021, 54, 1011-1022.	15.6	63
1133	Morphology Effects of Graphene Seeds on the Quality of Graphene Nucleation: Quantum Chemical Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2021, 125, 5056-5065.	3.1	5
1134	Nikel Folyo Üzerinde Büyüme Süresi ve Metan Akışının Grafen Sentezi Üzerindeki Etkisinin İno Journal of Polytechnic, 0, , .	celenmesi. 0.7	0
1135	Toward the perfect membrane material for environmental x-ray photoelectron spectroscopy. Journal Physics D: Applied Physics, 2021, 54, 234001.	2.8	6
1136	Chemical vapor deposition of graphene on thin-metal films. Cell Reports Physical Science, 2021, 2, 100372.	5.6	44
1137	Polymer nanocomposites with aligned two-dimensional materials. Progress in Polymer Science, 2021, 114, 101360.	24.7	39
1138	Directly Synthesized Graphene-Based Photonics and Optoelectronics Devices. Applied Sciences (Switzerland), 2021, 11, 2768.	2.5	4
1139	Chemical Vapor Deposition Synthesis of Graphene over Sapphire Substrates. ChemNanoMat, 2021, 7, 515-525.	2.8	16
1140	High Facets on Nanowrinkled Cu via Chemical Vapor Deposition Graphene Growth for Efficient CO ₂ Reduction into Ethanol. ACS Catalysis, 2021, 11, 5658-5665.	11.2	46
1141	Crumpled Graphene-Storage Media for Hydrogen and Metal Nanoclusters. Materials, 2021, 14, 2098.	2.9	7

ARTICLE IF CITATIONS # Fast growth of centimeter-scale single-crystal copper foils with high-index planes by the edge-incision 1142 4.4 2 effect. 2D Materials, 2021, 8, 035019. A review of biomass-derived graphene and graphene-like carbons for electrochemical energy storage 1143 6.1 29 and conversion. New Carbon Materials, 2021, 36, 350-372. Characterization of the interaction between graphene and copper substrate by time-of-flight 1144 7 6.1 secondary ion mass spectrometry. Applied Surface Science, 2021, 544, 148950. Large-Area Bernal-Stacked Bilayer Graphene Film on a Uniformly Rough Cu Surface via Chemical Vapor 1145 Deposition. ACS Applied Electronic Materials, 2021, 3, 2497-2503. Graphene-Based Materials for Supercapacitor., 0,,. 1146 0 The Emergence and Evolution of Borophene. Advanced Science, 2021, 8, 2001801. 11.2 Bilayer and three dimensional conductive network composed by SnCl2 reduced rGO with CNTs and GO 1148 3.3 5 applied in transparent conductive films. Scientific Reports, 2021, 11, 9891. Fabrication of Graphene Nanomesh FET Terahertz Detector. Micromachines, 2021, 12, 641. 1149 2.9 Strategies, Status, and Challenges in Wafer Scale Single Crystalline Two-Dimensional Materials 1150 47.7 96 Synthesis. Chemical Reviews, 2021, 121, 6321-6372. Multistep Fractionation of Coal and Application for Graphene Synthesis. ACS Omega, 2021, 6, 3.5 16573-16583. Structural engineering of graphene for highâ€resolution cryoâ€electron microscopy. SmartMat, 2021, 2, 1152 10.7 24 202-212. Effect of copper pretreatment on optical and electrical properties of camphor-based graphene by 2.2 chemical vapour deposition. Journal of Materials Science: Materials in Electronics, 2022, 33, 8397-8408. Quasi-graphitic carbon shell-induced Cu confinement promotes electrocatalytic CO2 reduction 1154 12.8 99 toward C2+ products. Nature Communications, 2021, 12, 3765. Graphene nanocomposites: A review on processes, properties, and applications. Journal of Industrial Textiles, 2022, 51, 3718S-3766S. 2.4 Chemical Vapor Deposition of Graphene on Cu-Ni Alloys: The Impact of Carbon Solubility. Coatings, 1157 2.6 3 2021, 11, 892. Magnetoresistance effect in vertical NiFe/graphene/NiFe junctions. Chinese Physics B, O, , . 1.4 The way towards for ultraflat and superclean graphene. Nano Select, 2022, 3, 485-504. 1159 3.7 2 Atomistic insights into the protection failure of the graphene coating under the hyperthermal impacts of reactive oxygen species: ReaxFF-based molecular dynamics simulations. Applied Surface 6.1 Science, 2021, 554, 149606.

#	Article	IF	CITATIONS
1161	Low-Temperature Graphene Growth and Shrinkage Dynamics from Petroleum Asphaltene on CuO Nanoparticle. Industrial & Engineering Chemistry Research, 2021, 60, 12001-12010.	3.7	0
1162	Flow characteristics of low pressure chemical vapor deposition in the micro-channel. Physics of Fluids, 2021, 33, 082012.	4.0	2
1163	Growth of wrinkle-free and ultra-flat Bi-layer graphene on sapphire substrate using Cu sacrificial layer. Nanotechnology, 2021, 32, 475603.	2.6	2
1164	Initial Steps in CH ₄ Pyrolysis on Cu and Ni. Journal of Physical Chemistry C, 2021, 125, 18665-18672.	3.1	4
1165	A Review on the Production Methods and Applications of Graphene-Based Materials. Nanomaterials, 2021, 11, 2414.	4.1	34
1166	Using silkworm excrement and spent lead paste to prepare additives for improving the cycle life of lead-acid batteries. Journal of Energy Storage, 2021, 41, 102785.	8.1	16
1167	A Review of Graphene: Material Synthesis from Biomass Sources. Waste and Biomass Valorization, 2022, 13, 1385-1429.	3.4	34
1168	Development of Graphene-Based Polymeric Nanocomposites: A Brief Overview. Polymers, 2021, 13, 2978.	4.5	28
1169	Copper acetate-facilitated transfer-free growth of high-quality graphene for hydrovoltaic generators. National Science Review, 2022, 9, .	9.5	8
1170	Immobilization of Photocatalytic Material on the Suitable Substrate. Green Chemistry and Sustainable Technology, 2022, , 445-473.	0.7	2
1171	Mixed-dimensional niobium disulfide-graphene foam heterostructures as an efficient catalyst for hydrogen production. International Journal of Hydrogen Energy, 2021, 46, 33679-33688.	7.1	10
1172	Modulating carbon growth kinetics enables electrosynthesis of graphite derived from CO2 via a liquid–solid–solid process. Carbon, 2021, 184, 426-436.	10.3	17
1173	In situ kinetic studies of CVD graphene growth by reflection spectroscopy. Chemical Engineering Journal, 2021, 421, 129434.	12.7	10
1174	The role of etching on growth of adlayer graphene by chemical vapor deposition. Diamond and Related Materials, 2021, 119, 108549.	3.9	2
1175	Single nucleotide discrimination with sub-two nanometer monolayer graphene pore. Sensors and Actuators B: Chemical, 2021, 349, 130792.	7.8	3
1177	Synthesis of Carbon Nanotube/Graphene Hybrids by Chemical Vapor Deposition. , 2021, , 53-76.		0
1179	Review of Graphene-Based Textile Strain Sensors, with Emphasis on Structure Activity Relationship. Polymers, 2021, 13, 151.	4.5	44
1180	Emergent 2D materials for combating infectious diseases: the potential of MXenes and MXene–graphene composites to fight against pandemics. Materials Advances, 2021, 2, 2892-2905.	5.4	65

#	Article	IF	CITATIONS
1181	Graphene adlayer growth between nonepitaxial graphene and the Ni(111) substrate: a theoretical study. Physical Chemistry Chemical Physics, 2021, 23, 2222-2228.	2.8	7
1182	Electron-phonon coupling origin of the graphene π* -band kink via isotope effect. Physical Review B, 2021, 103, .	3.2	3
1183	Recycling of Plastics into Advance Carbon Nanomaterials and Their Application in Energy Storage System. Composites Science and Technology, 2021, , 259-281.	0.6	1
1186	Laser Interactions for the Synthesis and In Situ Diagnostics of Nanomaterials. Springer Series in Materials Science, 2014, , 143-173.	0.6	4
1187	Spatial Confinement Approach Using Ni to Modulate Local Carbon Supply for the Growth of Uniform Transfer-Free Graphene Monolayers. Journal of Physical Chemistry C, 2020, 124, 23094-23105.	3.1	7
1188	Green and facile production of high-quality graphene from graphite by the combination of hydroxyl radicals and electrical exfoliation in different electrolyte systems. RSC Advances, 2019, 9, 3693-3703.	3.6	40
1189	Transfer-Free Graphene Growth on Dielectric Substrates: A Review of the Growth Mechanism. Critical Reviews in Solid State and Materials Sciences, 2019, 44, 157-209.	12.3	17
1190	Humidity effect on peeling of monolayer graphene and hexagonal boron nitride. Nanotechnology, 2021, 32, 025302.	2.6	3
1191	Batch production of uniform graphene films via controlling gas-phase dynamics in confined space. Nanotechnology, 2021, 32, 105603.	2.6	9
1192	Magnetoresistance effect in a vertical spin valve fabricated with a dry-transferred CVD graphene and a resist-free process. Materials Research Express, 2020, 7, 085603.	1.6	2
1193	Ambient-pressure CVD of graphene on low-index Ni surfaces using methane: A combined experimental and first-principles study. Physical Review Materials, 2018, 2, .	2.4	12
1194	Effect of catalyst metal species for the synthesis of graphene using chemical vapor deposition method: A review. Malaysian Journal of Fundamental and Applied Sciences, 2019, 15, 508-515.	0.8	2
1195	Tribological Performance of Steel With Multi-Layer Graphene Grown by Low-Pressure Chemical Vapor Deposition. Journal of Tribology, 2020, 142, .	1.9	10
1196	Effects of Process Parameters on Graphene Growth Via Low-Pressure Chemical Vapor Deposition. Journal of Micro and Nano-Manufacturing, 2020, 8, .	0.7	10
1198	Research Progress in Preparation Technology of Graphene. Material Sciences, 2016, 06, 346-360.	0.0	1
1200	Synthesis of Graphene Flakes over Recovered Copper Etched in Ammonium Persulfate Solution. Sains Malaysiana, 2017, 46, 1039-1045.	0.5	2
1202	The Prospective Two-Dimensional Graphene Nanosheets: Preparation, Functionalization and Applications. , 2012, 4, 1.		12
1203	CVD-graphene growth on different polycrystalline transition metals. AIMS Materials Science, 2017, 4, 194-208.	1.4	11

#	Article	IF	CITATIONS
1204	Synthesis, characterization and ethanol vapor sensing performance of SnO2/Graphene composite film. Sri Lankan Journal of Physics, 2015, 15, 1.	0.9	8
1205	Direct Growth of Graphene at Low Temperature for Future Device Applications. Journal of the Korean Ceramic Society, 2018, 55, 203-223.	2.3	8
1206	Effects of Plasma Treatment on Contact Resistance and Sheet Resistance of Graphene FET. Journal of the Korean Institute of Surface Engineering, 2016, 49, 152-158.	0.1	1
1207	Synthesis and applications of graphene electrodes. Carbon Letters, 2012, 13, 1-16.	5.9	33
1208	Comprehensive review on synthesis and adsorption behaviors of graphene-based materials. Carbon Letters, 2012, 13, 73-87.	5.9	39
1209	Parametric Study of Methanol Chemical Vapor Deposition Growth for Graphene. Carbon Letters, 2012, 13, 205-211.	5.9	15
1210	Graphene growth from polymers. Carbon Letters, 2013, 14, 145-151.	5.9	5
1211	Overlook of current chemical vapor deposition-grown large single-crystal graphene domains. Carbon Letters, 2014, 15, 151-161.	5.9	3
1212	Direct Synthesis of Graphene on SiO ₂ Substrates by Transfer-Free Processes. Japanese Journal of Applied Physics, 2012, 51, 06FD12.	1.5	19
1213	Graphene Converted from the Photoresist Material on Polycrystalline Nickel Substrate. Japanese Journal of Applied Physics, 2012, 51, 06FD17.	1.5	6
1214	Process Optimization for Synthesis of High-Quality Graphene Films by Low-Pressure Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2012, 51, 06FD21.	1.5	5
1215	Synthesis Methods for Carbon-Based Materials. Indian Institute of Metals Series, 2021, , 367-420.	0.3	0
1216	Large-scale and clean preparation of low-defect few-layered graphene from commercial graphite <i>via</i> hydroxyl radical exfoliation in an acidic medium. Reaction Chemistry and Engineering, 2022, 7, 333-345.	3.7	1
1217	Utilizing laser scribing for graphene ablation. AIP Advances, 2021, 11, 105305.	1.3	1
1218	Defective/Doped Grapheneâ€Based Materials as Cathodes for Metal–Air Batteries. Energy and Environmental Materials, 2022, 5, 1103-1116.	12.8	16
1219	A time-space conversion method for material synthesis research. IScience, 2021, 24, 103340.	4.1	0
1220	The roles of graphene and its derivatives in perovskite solar cells: A review. Materials and Design, 2021, 211, 110170.	7.0	29
1222	Graphene Formation on Ni/SiO2/Si Substrate Using Carbon Atoms Activated by Inductively-Coupled Plasma Chemical Vapor Deposition. Korean Journal of Materials Research, 2013, 23, 47-52.	0.2	1

		CITATION RE	PORT	
#	Article		IF	Citations
1223	Catalyst-Free Growth of High-Quality Graphene by High-Temperature Plasma Reaction. Technology Open Access, 2013, 1, .	Nanoscience &	0.3	0
1224	Process in preparation of metal-catalyzed graphene. Wuli Xuebao/Acta Physica Sinica,	2013, 62, 028201.	0.5	6
1225	Graphene. , 2013, , 1-30.			0
1226	Effect of Microwave Irradiation on Exfoliation of Graphene Oxide. Korean Journal of Ma Research, 2013, 23, 708-713.	iterials	0.2	0
1227	Epitaxial growth of graphene on silicon carbide (SiC). , 2014, , 177-198.			6
1228	Direct mass production technique of graphene by supuercritical fluid. Tanso, 2014, 20	14, 19-24.	0.1	1
1229	Inductively-Coupled Plasma Chemical Vapor Growth Characteristics of Graphene Deper Various Metal Substrates. Korean Journal of Materials Research, 2014, 24, 694-699.	nding on	0.2	0
1230	Graphene Direct Growth on Si/SiO2 Substrates. , 2015, , 29-35.			0
1231	Graphene Laser Irradiation CVD Growth. , 2015, , 21-27.			0
1232	Synthesis, Modification and Characterization of Nanocarbon Electrodes for Determinat Nucleic Acids. , 2015, , 1-35.	tion of		0
1234	Synthesis, Modification, and Characterization of Nanocarbon Electrodes for Determina Nucleic Acids. , 2016, , 241-281.	ition of		0
1236	Tunneling Transport Between Transition Metal Dichalcogenides. Springer Theses, 2017	7, , 49-64.	0.1	0
1237	Growth of graphene on Al2O3 (0001) surface. Wuli Xuebao/Acta Physica Sinica, 2017,	, 66, 217101.	0.5	1
1238	Synthesis of bilayer graphene via chemical vapor deposition and its optoelectronic dev Xuebao/Acta Physica Sinica, 2017, 66, 218101.	ices. Wuli	0.5	0
1239	Research progress of direct synthesis of graphene on dielectric layer. Wuli Xuebao/Acta Sinica, 2017, 66, 216804.	a Physica	0.5	1
1240	Characterization of Nanocarbons: From Graphene to Graphene Nanoribbons (GNRs) ar Dots (GQDs). , 2017, , 315-338.	nd Quantum		0
1241	Defect Characterization and Metrology. , 2017, , 631-678.			0
1243	Graphene Coating and Nanocrystalline Alloy Structure: Two Novel Nanotechnology Ap Remarkable Corrosion Resistance. , 0, 1, 1003.	proaches for		0

#	Article	IF	CITATIONS
1244	A study of initial stages for formation of carbon condensates on copper. Eastern-European Journal of Enterprise Technologies, 2018, 4, 49-55.	0.5	1
1245	Graphene Synthesis by Chemical Vapour Deposition (CVD): A Review on Growth Mechanism and Techniques. International Journal of Engineering Research & Technology, 2019, V8, .	0.2	2
1246	Graphene Growth and Characterization: Advances, Present Challenges and Prospects. Journal of Materials Science Research, 2020, 8, 37.	0.1	4
1247	<i>In-situ</i> Optical Microscopy of Crystal Growth of Graphene Using Thermal Radiation. Vacuum and Surface Science, 2019, 62, 629-634.	0.1	1
1248	Research Progress on Anti-Corrosive Properties of Graphene Modified Coatings. Materials Science Forum, 0, 993, 1140-1147.	0.3	1
1249	Role of transferred graphene on atomic interaction of GaAs for remote epitaxy. Journal of Applied Physics, 2021, 130, .	2.5	23
1250	The effect of catalytic copper pretreatments on CVD graphene growth at different stages. Nanotechnology, 2021, 32, 095607.	2.6	1
1251	Preparation of three-dimensional graphene foam with controllable defects by closed-environment chemical vapor deposition method and composite electrode electrochemical performance. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 148101.	0.5	0
1252	Correlation between the optical absorption and twisted angle of bilayer graphene observed by high-resolution reflectance confocal laser microscopy. Optics Express, 2021, 29, 40481.	3.4	6
1253	Recent Progress in the Transfer of Graphene Films and Nanostructures. Small Methods, 2021, 5, e2100771.	8.6	17
1254	Computer-aided design of graphene and 2D materials synthesis via magnetic inductive heating of eleven transition metals. Journal Physics D: Applied Physics, 0, , .	2.8	1
1255	Recentadvances in the propertiesand synthesis of bilayer graphene and transition metal dichalcogenides. JPhys Materials, 2020, 3, 042003.	4.2	11
1256	The nucleation and growth of graphene under a controlled atmosphere during radio frequency-plasma-enhanced chemical vapor deposition. Vacuum, 2022, 196, 110750.	3.5	5
1257	Controlled Epitaxial Growth and Atomically Sharp Interface of Graphene/Ferromagnetic Heterostructure via Ambient Pressure Chemical Vapor Deposition. Nanomaterials, 2021, 11, 3112.	4.1	2
1258	Insights into the Role of Graphene/Grapheneâ€hybrid Nanocomposites in Antiviral Therapy. ChemBioEng Reviews, 2021, 8, 549.	4.4	1
1259	Surface Engineering of Substrates for Chemical Vapor Deposition Growth of Graphene and Applications in Electronic and Spintronic Devices. Chemistry of Materials, 2021, 33, 8960-8989.	6.7	9
1260	Promoting the corrosion resistance of carbon steel via facile catalytic deposition of novel hierarchical carbon film layer in an ethanol combustion flame. Diamond and Related Materials, 2021, 120, 108714.	3.9	4
1261	Growth of 2D Materials at the Wafer Scale. Advanced Materials, 2022, 34, e2108258.	21.0	43

#	Article	IF	CITATIONS
1262	Continuous orientated growth of scaled single-crystal 2D monolayer films. Nanoscale Advances, 2021, 3, 6545-6567.	4.6	3
1263	Environmental applications of ecofriendly nanophotocatalysts: toward green nanotechnology. , 2022, , 325-341.		0
1264	Effects of Ge and Ni catalytic underlayers to nanographene synthesis from pentacene-based film via soft X-ray irradiation. Japanese Journal of Applied Physics, 2022, 61, SC1057.	1.5	0
1265	Scanning probe analysis of twisted graphene grown on a graphene/silicon carbide template. Nanotechnology, 2022, 33, 155603.	2.6	4
1266	Heat dissipation of underlying multilayered graphene layers grown on Cu–Ni alloys for high-performance interconnects. Applied Surface Science, 2022, 583, 152506.	6.1	1
1267	Adiabatic versus non-adiabatic electron transfer at 2D electrode materials. Nature Communications, 2021, 12, 7110.	12.8	24
1268	Realization of electronic grade graphene and h-BN. , 2022, , 119-157.		0
1269	Graphene Supercapacitor Electrode of Liquid Hydrocarbons using CVD Process. , 2022, , .		1
1270	Distinctive conductivity improvement by embedding Cu nanoparticles in the carbon shell of submicron Si@C anode materials for LIBs. Sustainable Energy and Fuels, 2022, 6, 2306-2313.	4.9	5
1272	3D Continuously Porous Graphene for Energy Applications. Advanced Materials, 2022, 34, e2108750.	21.0	53
1273	Dry Reforming of Methane on NiCu and NiPd Model Systems: Optimization of Carbon Chemistry. Catalysts, 2022, 12, 311.	3.5	11
1274	Chemical vapor deposition-grown nitrogen-doped graphene's synthesis, characterization and applications. Npj 2D Materials and Applications, 2022, 6, .	7.9	29
1276	Strong suppression of graphene growth by sulfur superstructure on a nickel substrate. Physical Review Materials, 2022, 6, .	2.4	0
1277	Al matrix composites reinforced by in situ synthesized graphene–Cu hybrid layers: interface control by spark plasma sintering conditions. Journal of Materials Science, 2022, 57, 6266-6281.	3.7	0
1278	Imaging of isotope diffusion using atomic-scale vibrational spectroscopy. Nature, 2022, 603, 68-72.	27.8	14
1279	The role of water in bi-reforming of methane: a micro-kinetic study. Reaction Kinetics, Mechanisms and Catalysis, 2022, 135, 705.	1.7	0
1280	Chemical Interactions of Nano Islandic Graphene Grown on Titanium Dioxide Substrates by Chemical Vapor Deposition. Arabian Journal for Science and Engineering, 0, , 1.	3.0	0
1281	Achieving Ultralow Friction and Wear by Tribocatalysis: Enabled by <i>In-Operando</i> Formation of Nanocarbon Films. ACS Nano, 2021, 15, 18865-18879.	14.6	42

#	Article	IF	CITATIONS
1282	Unconventional Reaction Phase Diagram for the Penetration Etching/Growth of Graphene Adlayers. Chemistry of Materials, 2021, 33, 9698-9707.	6.7	2
1283	Improving TC drill bit's efficiency and resistance to wear by graphene coating. Petroleum Research, 2022, 7, 430-436.	2.7	1
1284	Towards Repeatable, Scalable Graphene Integrated Micro-Nano Electromechanical Systems (MEMS/NEMS). Micromachines, 2022, 13, 27.	2.9	6
1285	Epitaxial growth of black phosphorene enabled on black-phosphorene-like group IV-VI substrates. Physical Review B, 2021, 104, .	3.2	3
1286	Graphene-Based Composite Membrane Prepared from Solid Carbon Source Catalyzed by Ni Nanoparticles. Nanomaterials, 2021, 11, 3392.	4.1	3
1287	Recent advances in the controlled chemical vapor deposition growth of bilayer 2D single crystals. Journal of Materials Chemistry C, 2022, 10, 13324-13350.	5.5	10
1288	Formation of Carbon Materials by the Oxidative Pyrolysis of Methane on Resistive Catalysts. Kinetics and Catalysis, 2022, 63, 27-42.	1.0	0
1292	Graphene—Technology and integration with semiconductor electronics. Theoretical and Computational Chemistry, 2022, , 1-40.	0.4	1
1293	Achievements and Challenges of Graphene Chemical Vapor Deposition Growth. Advanced Functional Materials, 2022, 32, .	14.9	20
1294	Microscopic investigation of Cu-induced crystallization of amorphous carbon at low temperatures. Applied Surface Science, 2022, 595, 153507.	6.1	1
1295	Advanced wearable biosensors for the detection of body fluids and exhaled breath by graphene. Mikrochimica Acta, 2022, 189, .	5.0	35
1296	Interlayer shear coupling in bilayer graphene. Npj 2D Materials and Applications, 2022, 6, .	7.9	4
1297	Enclosed Cells for Extending Soft X-ray Spectroscopies to Atmospheric Pressures and Above. ACS Symposium Series, 0, , 175-218.	0.5	2
1298	Large-scale Graphene Production and Transfer for Industrial Applications. , 2022, 02, 15-25.		4
1299	Embedded Pseudo Graphene Nanoribbons Oriented Via Ge(110) Surface Reconstruction. SSRN Electronic Journal, 0, , .	0.4	0
1300	Developing Graphene Grids for Cryoelectron Microscopy. Frontiers in Molecular Biosciences, 0, 9, .	3.5	3
1301	Interface collisions with diffusive mass transport. Physical Review E, 2022, 106, .	2.1	2
1303	Chemical Vapor Deposition Synthesis of Graphene on Copper Foils. , 0, , .		0

#	Article	IF	CITATIONS
1304	Transformation of carbon dioxide, a greenhouse gas, into useful components and reducing global warming: A comprehensive review. International Journal of Energy Research, 2022, 46, 17926-17951.	4.5	9
1305	A method to estimate adhesion energy of as-grown graphene in a roll-to-roll dry transfer process. Carbon, 2023, 201, 712-718.	10.3	4
1306	A review of top-down and bottom-up synthesis methods for the production of graphene, graphene oxide and reduced graphene oxide. Journal of Materials Science, 2022, 57, 14543-14578.	3.7	35
1307	Coâ€Localized Characterization of Aged and Transferred CVD Graphene with Scanning Electron Microscopy, Atomic Force Microscopy, and Raman Spectroscopy. Advanced Materials Technologies, 2023, 8, .	5.8	2
1308	A novel Si@C structure interwoven with Si composite nanowires catalyzed by Cu nano particles and its performances as an anode for LIBs. Sustainable Energy and Fuels, 2022, 6, 4991-4999.	4.9	3
1309	The carbon chain growth during the onset of CVD graphene formation on γ-Al ₂ O ₃ is promoted by unsaturated CH ₂ ends. Physical Chemistry Chemical Physics, 2022, 24, 23357-23366.	2.8	5
1310	Effect OfÂPretreated Copper FoilÂOn the Growth of High Quality Graphene. SSRN Electronic Journal, 0, ,	0.4	0
1311	On the Distinctive Hardness, Anti-Corrosion Properties and Mechanisms of Flame-Deposited Carbon Coating with a Hierarchical Structure in Contrast to a Graphene Layer via Chemical Vapor Deposition. Nanomaterials, 2022, 12, 2944.	4.1	3
1312	An Overview of Coating Processes on Metal Substrates Based on Graphene-Related Materials for Multifarious Applications. Industrial & Engineering Chemistry Research, 2022, 61, 13763-13786.	3.7	1
1313	A Comprehensive Review on Graphene Nanoparticles: Preparation, Properties, and Applications. Sustainability, 2022, 14, 12336.	3.2	10
1314	Sorbitol-derived carbon overlayers encapsulated Cu nanoparticles on SiO2: Stable and efficient for the continuous hydrogenation of ethylene carbonate. IScience, 2022, 25, 105239.	4.1	6
1315	Copper sulfide nanoribbon growth triggered by carbon nanotube aggregation <i>via</i> dialysis. RSC Advances, 2022, 12, 31363-31368.	3.6	0
1317	Nickel-Assisted Transfer-Free Technology of Graphene Chemical Vapor Deposition on GaN for Improving the Electrical Performance of Light-Emitting Diodes. Crystals, 2022, 12, 1497.	2.2	2
1318	Transferâ€Free Quasiâ€Suspended Graphene Grown on a Si Wafer. Advanced Materials, 2022, 34, .	21.0	9
1319	Synthesis of high-quality graphene sheets via decomposition of non-condensable gases from pyrolysis of polypropylene waste using unsupported Fe, Co, and Fe–Co catalysts. Journal of Material Cycles and Waste Management, 0, , .	3.0	2
1320	Evolution of copper step beams during graphene growth by CVD method. Applied Surface Science, 2023, 610, 155518.	6.1	4
1321	Embedded pseudo graphene nanoribbons oriented via Ge(110) surface reconstruction. Physica E: Low-Dimensional Systems and Nanostructures, 2023, 146, 115531.	2.7	1
1322	Transfer-Free CVD Growth of High-Quality Wafer-Scale Graphene at 300 °C for Device Mass Fabrication. ACS Applied Materials & Interfaces, 2022, 14, 53174-53182.	8.0	4

#	Article	IF	CITATIONS
1323	Graphene coatings for corrosion resistance of nickel and copper in acidic, alkaline and neutral environments. Journal of Materials Science and Technology, 2023, 142, 124-133.	10.7	10
1324	Flexible Devices Based on Soybean-Derived High-Quality N-Doped Graphene. Science of Advanced Materials, 2022, 14, 1050-1055.	0.7	0
1325	Innovations in the synthesis of graphene nanostructures for bio and gas sensors. , 2023, 145, 213234.		9
1326	Interfacial damage of bilayer graphene under shear deformation: Theory, experiment, and simulation. Journal of the Mechanics and Physics of Solids, 2023, 171, 105154.	4.8	1
1327	Study of solid carbon source-based graphene growth directly on SiO2 substrate with Cu or Cu/Ni as the sacrificial catalysts. MRS Communications, 0, , .	1.8	0
1328	CO2-promoted transfer-free growth of conformal graphene. Nano Research, 2023, 16, 6334-6342.	10.4	2
1329	Synthesis of Multilayer Graphene with Controlled C Supply. Advanced Engineering Materials, 2023, 25, .	3.5	0
1330	Graphene synthesis by electromagnetic induction heating of oxygen-rich copper foils. Diamond and Related Materials, 2023, 132, 109659.	3.9	6
1331	Two-dimensional nanomaterials: synthesis and applications in photothermal catalysis. Nanoscale, 2023, 15, 2455-2469.	5.6	11
1332	In Situ Growth of Graphene Catalyzed by a Phaseâ€Change Material at 400°C for Waferâ€Scale Optoelectronic Device Application. Small, 2023, 19, .	10.0	1
1333	Hydrogenâ€Enhanced Catalytic Conversion of Amorphous Carbon to Graphene for Achieving Superlubricity. Small, 2023, 19, .	10.0	7
1334	Graphene: Preparation, tailoring, and modification. Exploration, 2023, 3, .	11.0	19
1335	Synthesis and applications of carbon-polymer composites and nanocomposite functional materials. , 2023, , 71-105.		0
1336	Mechanical Properties of Graphene Networks under Compression: A Molecular Dynamics Simulation. International Journal of Molecular Sciences, 2023, 24, 6691.	4.1	1
1337	Fluorinated graphene films for Ultra-High sensitivity of Surface-Enhanced Raman scattering. Applied Surface Science, 2023, 616, 156496.	6.1	5
1338	Highly Efficient, Non-Covalent Functionalization of CVD-Graphene via Novel Pyrene-Based Supporter Construct. Chemosensors, 2023, 11, 83.	3.6	9
1339	Efficient strategies to produce Graphene and functionalized graphene materials: A review. Applied Surface Science Advances, 2023, 14, 100386.	6.8	11
1340	Graphite Pellicle: Physical Shield for Nextâ€Generation EUV Lithography Technology. Advanced Materials Interfaces, 2023, 10, .	3.7	6

#	Article	IF	CITATIONS
1341	Nanoscale characterization of the heterogeneous interfacial oxidation layer of graphene/Cu based on a SEM electron beam induced reduction effect. Physical Chemistry Chemical Physics, 2023, 25, 8816-8825.	2.8	1
1342	Formation of Graphene on Gold–Nickel Surface Alloys. Journal of the American Chemical Society, 2023, 145, 6299-6309.	13.7	0
1343	Insights into the Conductive Network of Electrochemical Exfoliation with Graphite Powder as Starting Raw Material for Graphene Production. Langmuir, 2023, 39, 4413-4426.	3.5	3
1344	Enhanced adhesion and corrosion resistance of reduced graphene oxide coated-steel with iron oxide nanoparticles. Applied Surface Science, 2023, 624, 157121.	6.1	2
1345	Block Copolymer-Directed Facile Synthesis of N-Doped Mesoporous Graphitic Carbon for Reliable, High-Performance Zn Ion Hybrid Supercapacitor. ACS Applied Materials & Interfaces, 2023, 15, 57905-57912.	8.0	6
1346	Grain Size Engineering of CVDâ€Grown Largeâ€Area Graphene Films. Small Methods, 2023, 7, .	8.6	2
1347	Phonon transition across an isotopic interface. Nature Communications, 2023, 14, .	12.8	1
1348	Numerical investigation on the influence of the Soret effect on graphene growth in chemical vapor deposition. Journal of Crystal Growth, 2023, 614, 127253.	1.5	0
1349	The Effect of Pressure on the Growth of Single-Layer Graphene on Copper Sheets by Chemical Vapor Deposition Methods. Journal of Materials Engineering and Performance, 2024, 33, 1996-2001.	2.5	0
1350	Covalent Coating of Microâ€Sized Silicon With Dynamically Bonded Graphene Layers Toward Stably Cycled Lithium Storage. Advanced Energy Materials, 2023, 13, .	19.5	6
1351	Remarkably Corrosion Resistant Graphene Coating on Steel Enabled Through Metallurgical Tailoring. Small, 0, , .	10.0	1
1352	Hybrid Metasurfaces of Plasmonic Lattices and 2D Materials. Advanced Functional Materials, 2023, 33, .	14.9	3
1353	Nucleation and growth of graphene at different temperatures by plasma enhanced chemical vapor deposition. Materials Today Communications, 2023, 36, 106568.	1.9	1
1354	Adsorptive Removal of Pollutants Using Graphene-based Materials for Water Purification. Springer Series in Materials Science, 2023, , 179-244.	0.6	2
1355	Multiscale Model of CVD Growth of Graphene on Cu(111) Surface. International Journal of Molecular Sciences, 2023, 24, 8563.	4.1	0
1356	Theoretical insights on the effect of alloying with Co in the mechanism of graphene growth on a Cu Co (1 1 1) catalyst. Applied Surface Science, 2023, 631, 157500.	6.1	0
1357	Low-cost synthesis of titanium dioxide nanotubes/reduced graphene oxide heterostructure for pH sensor applications. Diamond and Related Materials, 2023, 137, 110086.	3.9	0
1358	Fast scanning growth of high-quality graphene films on Cu foils fueled by dimeric carbon precursor. Nano Research, 2023, 16, 12246-12252.	10.4	1

#	Article	IF	CITATIONS
1359	Two-dimensional materials (2DMs): classification, preparations, functionalization and fabrication of 2DMs-oriented electrochemical sensors. , 2023, , 45-132.		0
1360	Direct Solar-Thermal Formation of Graphitic Heat Spreaders on Organic Substrates. , 2023, , .		0
1361	Preparation of graphene-coated high entropy alloy nanoparticles by double pulse carbothermal shock. Scripta Materialia, 2023, 236, 115668.	5.2	0
1362	Comparison of the Tribological Behaviour of Various Graphene Nano-Coatings as a Solid Lubricant for Copper. Applied Sciences (Switzerland), 2023, 13, 8540.	2.5	3
1363	Induction heating for desorption of surface contamination for high-repetition laser-driven carbon-ion acceleration. Matter and Radiation at Extremes, 2023, 8, .	3.9	0
1364	Recent Understanding in the Chemical Vapor Deposition of Multilayer Graphene: Controlling Uniformity, Thickness, and Stacking Configuration. Nanomaterials, 2023, 13, 2217.	4.1	1
1365	Pulsed Laser Deposition of Carbon-Based Materials: A Focused Review of Methods and Results. Processes, 2023, 11, 2373.	2.8	2
1366	Ab Initio Molecular Dynamics of the Initial Growth of Few-Layer Graphene on a Cu–Ni(111) Catalyst. Journal of Physical Chemistry C, 2023, 127, 19258-19268.	3.1	0
1367	Transfer-free chemical vapor deposition graphene for nitride epitaxy: challenges, current status and future outlook. Science China Chemistry, 2024, 67, 824-840.	8.2	0
1368	Understanding epitaxy of graphene: From experimental observation to density functional theory and machine learning. Journal of Applied Physics, 2023, 134, .	2.5	0
1369	An Ultraâ€Lowâ€Temperature Alternating Current Filter. Small, 0, , .	10.0	0
1370	Effect of Annealing Temperature and Time on Ni atalyzed In Situ Growth of Graphene on Diamond Substrate. Crystal Research and Technology, 2023, 58, .	1.3	0
1371	Methane Pyrolysis for CO2-free Hydrogen Production. , 2023, , 148-198.		0
1372	Grapheneâ€Coated Ni–Cu Alloys for Durable Degradation Resistance of Biâ€Polar Plates for Proton Exchange Membrane Fuel Cells: Remarkable Role of Alloy Composition. Small, 0, , .	10.0	0
1373	Unraveling the role of substrate materials in governing the carbon/carbide growth of molten carbonate electrolysis of CO ₂ . Nanoscale, 2023, 15, 18707-18715.	5.6	1
1374	Monolayer Borophene Formation on Cu(111) Surface Triggered by ⟨11¯0⟩\$langle {1ar{1}0} angle \$ Step Edge. Small, 2024, 20, .	10.0	1
1375	Grapheneâ€Based Silicon Photonic Devices for Optical Interconnects. Advanced Functional Materials, 2024, 34, .	14.9	0
1376	Invisible vapor catalysis in graphene growth by chemical vapor deposition. Nano Research, 0, , .	10.4	ο

#	Article	IF	CITATIONS
1377	Graphene-based crown-cork-like macrostructures. Materials Chemistry Frontiers, 0, , .	5.9	0
1380	Structural control of nanoporous frameworks consisting of minimally stacked graphene walls. Frontiers in Materials, 0, 10, .	2.4	0
1381	Longâ€Range Uniform Deposition of Ag Nanoseed on Cu Current Collector for Highâ€Performance Lithium Metal Batteries. Small, 0, , .	10.0	0
1382	Precise synthesis of graphene by chemical vapor deposition. Nanoscale, 2024, 16, 4407-4433.	5.6	0
1383	Particle morphology dependence of the mechanical and electrical properties in the in-situ graphene reinforced Cu matrix composites. Composites Part A: Applied Science and Manufacturing, 2024, 179, 108032.	7.6	0
1384	Simultaneous measurement of in-plane and interfacial thermal conductivity of isotopically labeled bilayer graphene. Physical Review B, 2024, 109, .	3.2	0
1385	Optimization growth of graphene on annealed copper and its application as glucose sensor material. Materials Science in Semiconductor Processing, 2024, 173, 108147.	4.0	0
1386	Electron beam-induced demetallation of Fe, Co, Ni, Cu, Zn, Pd, and Pt metalloporphyrins: insights in e-beam chemistry and metal cluster formations. Physical Chemistry Chemical Physics, 2024, 26, 8051-8061.	2.8	0
1387	Solid-State Synthesis of Graphene by Induction Heating. Crystal Growth and Design, 2024, 24, 1560-1569.	3.0	0
1388	Suppression of Nucleation Density in Twisted Graphene Domains Grown on Graphene/SiC Template by Sequential Thermal Process. Crystal Growth and Design, 2024, 24, 1682-1689.	3.0	0
1389	Direct synthesis of nanocrystalline single-layer porous graphene for hydrogen sieving. Carbon, 2024, 221, 118866.	10.3	0
1390	Advancing Molecular Sieving via ÃScale Pore Tuning in Bottom-Up Graphene Synthesis. ACS Nano, 0, , .	14.6	0
1391	The Preparation and Properties of In Situ Grown Oriented Nitrogen-Doped Graphene-like/Copper Composite Materials. ACS Applied Electronic Materials, 2024, 6, 1396-1404.	4.3	0
1392	In situ characterisation of graphene growth on liquid copper-gallium alloys: Paving the path for cost-effective synthesis. Applied Surface Science, 2024, 657, 159723.	6.1	0
1393	Influence of morphological characteristics of graphene on its field emission properties. Wuli Xuebao/Acta Physica Sinica, 2024, 73, 086101.	0.5	0
1394	The quest for harnessing nuclear effects in graphene-based devices. Applied Physics Reviews, 2024, 11, .	11.3	0
1395	Robust macroscale superlubricity on carbon-coated metallic surfaces. Applied Materials Today, 2024, 37, 102140.	4.3	0
1396	Area-selective atomic layer deposition on 2D monolayer lateral superlattices. Nature Communications, 2024, 15, .	12.8	0

#	Article	IF	CITATIONS
1397	Synthesis, properties, and state-of-the-art advances in surface tuning of borophene for emerging applications. Materials Today Sustainability, 2024, 26, 100743.	4.1	0