Quantifying ion-induced defects and Raman relaxation

Carbon 48, 1592-1597

DOI: 10.1016/j.carbon.2009.12.057

Citation Report

#	ARTICLE	IF	CITATIONS
14	Defect characterization in graphene and carbon nanotubes using Raman spectroscopy. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 5355-5377.	1.6	571
15	Effect of Surface Chemistry on Electronic Properties of Carbon Nanotube Network Thin Film Transistors. ACS Nano, 2010, 4, 6137-6145.	7.3	54
16	Defects in Individual Semiconducting Single Wall Carbon Nanotubes: Raman Spectroscopic and in Situ Raman Spectroelectrochemical Study. Nano Letters, 2010, 10, 4619-4626.	4.5	79
17	Measuring disorder in graphene with the G and D bands. Physica Status Solidi (B): Basic Research, 2010, 247, 2980-2982.	0.7	190
18	Uncovering the dominant scatterer in graphene sheets on <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mrow><mml:mtext>SiO</mml:mtext></mml:mrow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow><mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mnow></mml:mrow></mml:msub></mml:mrow></mml:math>	>2 <td>nn></td>	nn>
19	Effect of electron-beam irradiation on graphene field effect devices. Applied Physics Letters, 2010, 97, .	1.5	154
20	Tip-enhanced Raman spectroscopic imaging of localized defects in carbon nanotubes. Applied Physics Letters, 2010, 97, 143117.	1.5	54
21	Electrostatic transfer of patterned epitaxial graphene from SiC(0001) to glass. New Journal of Physics, 2010, 12, 125016.	1.2	9
22	Spectroscopy of Covalently Functionalized Graphene. Nano Letters, 2010, 10, 4061-4066.	4.5	507
23	Modulating the electronic structures of graphene by controllable hydrogenation. Applied Physics Letters, 2010, 97, .	1.5	82
24	Atmospheric Oxygen Binding and Hole Doping in Deformed Graphene on a SiO ₂ Substrate. Nano Letters, 2010, 10, 4944-4951.	4.5	706
25	Splitting of the Raman <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mi>0</mml:mi></mml:mrow></mml:math> band of graphene subjected to strain. Physical Review B, 2010, 82, .	1.1	106
26	Thermal enhancement of chemical doping in graphene: a Raman spectroscopy study. Journal of Physics Condensed Matter, 2010, 22, 334202.	0.7	36
27	Evolution of the Raman spectra from single-, few-, and many-layer graphene with increasing disorder. Physical Review B, 2010, 82, .	1.1	606
28	Probing the electron-phonon coupling in ozone-doped graphene by Raman spectroscopy. Physical Review B, 2010, 82, .	1,1	32
29	Controllable N-Doping of Graphene. Nano Letters, 2010, 10, 4975-4980.	4.5	793
30	On Resonant Scatterers As a Factor Limiting Carrier Mobility in Graphene. Nano Letters, 2010, 10, 3868-3872.	4. 5	256
31	Raman study of ion-induced defects in <i>N</i> -layer graphene. Journal of Physics Condensed Matter, 2010, 22, 334204.	0.7	110

#	Article	IF	CITATIONS
32	Towards electron transport measurements in chemically modified graphene: effect of a solvent. New Journal of Physics, 2010, 12, 125007.	1.2	13
33	Low Temperature Raman Study of the Electron Coherence Length near Graphene Edges. Nano Letters, 2011, 11, 1177-1181.	4.5	70
34	Controlling and Quantifying Oxygen Functionalities on Hydrothermally and Thermally Treated Single-Wall Carbon Nanotubes. Journal of Physical Chemistry C, 2011, 115, 8534-8546.	1.5	55
35	Electrical and thermal conductivity of low temperature CVD graphene: the effect of disorder. Nanotechnology, 2011, 22, 275716.	1.3	132
36	Effect of oxygen plasma etching on graphene studied using Raman spectroscopy and electronic transport measurements. New Journal of Physics, 2011, 13, 025008.	1.2	211
37	Synthesis and properties of monolayer graphene oxyfluoride. Journal of Materials Chemistry, 2011, 21, 18730.	6.7	50
38	Characterization of ion-irradiation-induced defects in multi-walled carbon nanotubes. New Journal of Physics, 2011, 13, 073004.	1.2	55
39	Electronic Structures and Structural Evolution of Hydrogenated Graphene Probed by Raman Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 1422-1427.	1.5	95
40	Visualizing Individual Nitrogen Dopants in Monolayer Graphene. Science, 2011, 333, 999-1003.	6.0	774
41	Raman Spectroscopy and in Situ Raman Spectroelectrochemistry of Bilayer ¹² C/ ¹³ C Graphene. Nano Letters, 2011, 11, 1957-1963.	4.5	104
42	Raman Spectroscopy of Lithographically Patterned Graphene Nanoribbons. ACS Nano, 2011, 5, 4123-4130.	7.3	148
43	Dielsâ^'Alder Chemistry of Graphite and Graphene: Graphene as Diene and Dienophile. Journal of the American Chemical Society, 2011, 133, 3324-3327.	6.6	253
45	Measuring Disorder in Graphene with Raman Spectroscopy. , 0, , .		18
46	Ion beam nanopatterning and micro-Raman spectroscopy analysis on HOPG for testing FIB performances. Ultramicroscopy, 2011, 111, 1338-1342.	0.8	16
47	Tuning the electronic transport properties of graphene through functionalisation with fluorine. Nanoscale Research Letters, 2011, 6, 526.	3.1	105
48	The synthesis and characterization of carbon nano-onions produced by solution ozonolysis. Carbon, 2011, 49, 5079-5089.	5.4	63
49	A comparison of Raman signatures and laser-induced incandescence with direct numerical simulation of soot growth in non-premixed ethylene/air flames. Carbon, 2011, 49, 5298-5311.	5.4	92
50	Properties of laser fabricated nanostructured Cu/diamond-like carbon composite. Journal of Materials Research, 2011, 26, 2761-2771.	1.2	11

#	Article	IF	Citations
51	Raman Signature of Graphene Superlattices. Nano Letters, 2011, 11, 4527-4534.	4.5	234
52	Structural Defects in Graphene. ACS Nano, 2011, 5, 26-41.	7. 3	2,818
53	Nanostructured materials for water desalination. Nanotechnology, 2011, 22, 292001.	1.3	543
54	Raman spectroscopy of graphene and carbon nanotubes. Advances in Physics, 2011, 60, 413-550.	35.9	797
55	Quantifying Defects in Graphene via Raman Spectroscopy at Different Excitation Energies. Nano Letters, 2011, 11, 3190-3196.	4.5	2,807
56	Raman Spectroscopy: Characterization of Edges, Defects, and the Fermi Energy of Graphene and sp 2 Carbons. Nanoscience and Technology, 2011, , 15-55.	1.5	5
57	Functionalization of Multiwalled Carbon Nanotubes with Cyclic Nitrones for Materials and Composites: Addressing the Role of CNT Sidewall Defects. Chemistry of Materials, 2011, 23, 1923-1938.	3.2	51
58	Theory of double-resonant Raman spectra in graphene: Intensity and line shape of defect-induced and two-phonon bands. Physical Review B, 2011, 84, .	1.1	476
60	Electrochemical Properties of Oxidized Carbon Nanoâ€Onions: DRIFTSâ€FTIR and Raman Spectroscopic Analyses. ChemPhysChem, 2011, 12, 2659-2668.	1.0	31
61	Raman characterization of carbon materials under non-hydrostatic conditions. Carbon, 2011, 49, 973-979.	5.4	33
62	Controlled oxygen plasma treatment of single-walled carbon nanotube films improves osteoblastic cells attachment and enhances their proliferation. Carbon, 2011, 49, 2926-2934.	5.4	25
63	Radiofrequency plasma assisted exfoliation and reduction of large-area graphene oxide platelets produced by a mechanical transfer process. Chemical Physics Letters, 2011, 508, 285-288.	1.2	18
64	Focused helium ion beam milling and deposition. Microelectronic Engineering, 2011, 88, 2452-2455.	1.1	63
65	Novel gold cantilever for nano-Raman spectroscopy of graphene. Microelectronic Engineering, 2011, 88, 2759-2762.	1.1	54
66	Dielectrophoretic assembly and atomic force microscopy modification of reduced graphene oxide. Journal of Applied Physics, 2011, 110, 114515.	1.1	8
67	Perspective: The dawning of the age of graphene. Journal of Chemical Physics, 2011, 135, 050901.	1.2	31
68	A road to hydrogenating graphene by a reactive ion etching plasma. Journal of Applied Physics, 2011, 110, .	1.1	85
69	<mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"><mml:mrow><mml:mi>O</mml:mi></mml:mrow></mml:math> band Raman intensity calculation in armchair edged graphene nanoribbons. Physical Review B, 2011, 83, .	1.1	14

#	Article	IF	Citations
70	Correlation between structure and electrical transport in ion-irradiated graphene grown on Cu foils. Applied Physics Letters, $2011,98,.$	1.5	55
71	Molecular beam epitaxial growth of graphene and ridge-structure networks of graphene. Journal Physics D: Applied Physics, 2011, 44, 435305.	1.3	13
72	Distinguishing between Individual Contributions to the Via Resistance in Carbon Nanotubes Based Interconnects. ECS Journal of Solid State Science and Technology, 2012, 1, M47-M51.	0.9	6
73	Noncatalytic chemical vapor deposition of graphene on high-temperature substrates for transparent electrodes. Applied Physics Letters, $2012,100,$	1.5	66
74	lon irradiation of electronic-type-separated single wall carbon nanotubes: A model for radiation effects in nanostructured carbon. Journal of Applied Physics, 2012, 112, 034314.	1.1	18
75	Mechanism of near-field Raman enhancement in two-dimensional systems. Physical Review B, 2012, 85, .	1.1	52
76	Effect of e-beam irradiation on graphene layer grown by chemical vapor deposition. Journal of Applied Physics, 2012, 111, .	1.1	38
77	Synthesis of patterned nanographene on insulators from focused ion beam induced deposition of carbon. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 03D113.	0.6	7
78	Preparation of Graphene Dispersion and Carbon Nanoscrolls. Chemistry Letters, 2012, 41, 606-608.	0.7	2
79	Probing the Nature of Defects in Graphene by Raman Spectroscopy. Nano Letters, 2012, 12, 3925-3930.	4.5	1,696
80	Electronic Transport in Graphene. , 2012, , 17-49.		0
81	Tuning the properties of graphene using a reversible gas-phase reaction. NPG Asia Materials, 2012, 4, e31-e31.	3.8	16
82	Advances in the chemical modification of epitaxial graphene. Journal Physics D: Applied Physics, 2012, 45, 154009.	1.3	103
84	A General Strategy for the Synthesis of Carbon Nanofibers from Solid Carbon Materials. Angewandte Chemie - International Edition, 2012, 51, 12202-12205.	7.2	17
85	Raman spectroscopy of isotopically labeled twoâ€layer graphene. Physica Status Solidi (B): Basic Research, 2012, 249, 2500-2502.	0.7	3
86	Perforation of graphite in boiling mineral acid. Physica Status Solidi (B): Basic Research, 2012, 249, 2620-2624.	0.7	16
87	Influences of Ion-Induced Defects on Growth of Copper-Phthalocyanine Film on Graphene Substrates. Journal of Physical Chemistry C, 2012, 116, 19278-19284.	1.5	14
88	Identification of structural defects in graphitic materials by gas-phase anisotropic etching. Nanoscale, 2012, 4, 2005.	2.8	37

#	Article	IF	CITATIONS
89	Electronic Transport and Raman Scattering in Size-Controlled Nanoperforated Graphene. ACS Nano, 2012, 6, 9846-9854.	7.3	48
90	Evidence for Spin-Flip Scattering and Local Moments in Dilute Fluorinated Graphene. Physical Review Letters, 2012, 108, 226602.	2.9	115
91	Three-stage structural modification of carbon nanotubes by swift heavy ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2012, 285, 30-36.	0.6	14
92	Understanding and controlling the substrate effect on graphene electron-transfer chemistry via reactivity imprint lithography. Nature Chemistry, 2012, 4, 724-732.	6.6	463
93	Raman Spectroscopy of Boron-Doped Single-Layer Graphene. ACS Nano, 2012, 6, 6293-6300.	7.3	245
94	Chemical and thermal reduction of graphene oxide and its electrically conductive polylactic acid nanocomposites. Composites Science and Technology, 2012, 72, 1430-1435.	3.8	129
95	Perspectives on Raman spectroscopy of graphene-based systems: from the perfect two-dimensional surface to charcoal. Physical Chemistry Chemical Physics, 2012, 14, 15246.	1.3	50
96	Renewing Functionalized Graphene as Electrodes for Highâ€Performance Supercapacitors. Advanced Materials, 2012, 24, 6348-6355.	11.1	394
97	Novel Multifunctional Graphene Sheets with Encased Au/Ag Nanoparticles for Advanced Electrochemical Analysis of Organic Compounds. ChemPhysChem, 2012, 13, 3632-3639.	1.0	19
98	Nanoscale optical and electrical characterization of horizontally aligned single-walled carbon nanotubes. Nanoscale Research Letters, 2012, 7, 682.	3.1	18
100	Raman Spectroscopy for Characterization of Graphene. , 2012, , 191-214.		14
101	Fabrication and ab initio study of downscaled graphene nanoelectronic devices. , 2012, , .		0
102	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
103	Covalent chemistry in graphene electronics. Materials Today, 2012, 15, 276-285.	8.3	58
104	Organic-free suspension of large-area graphene. Applied Physics Letters, 2012, 101, .	1.5	8
106	GRAPHENE FOR ENVIRONMENTAL AND BIOLOGICAL APPLICATIONS. International Journal of Modern Physics B, 2012, 26, 1242001.	1.0	38
107	Nanostructured arrays of stacked graphene sheets. Nanotechnology, 2012, 23, 415302.	1.3	7
108	Layer-by-layer thinning of graphene by plasma irradiation and post-annealing. Nanotechnology, 2012, 23, 025704.	1.3	43

#	ARTICLE	IF	CITATIONS
109	Strain-induced D band observed in carbon nanotubes. Nano Research, 2012, 5, 854-862.	5.8	23
110	Large scale metal-free synthesis of graphene on sapphire and transfer-free device fabrication. Nanoscale, 2012, 4, 3050.	2.8	118
111	Nitrogen-doped graphene: beyond single substitution and enhanced molecular sensing. Scientific Reports, 2012, 2, 586.	1.6	563
112	Layer Number and Stacking Sequence Imaging of Few-Layer Graphene by Transmission Electron Microscopy. Nano Letters, 2012, 12, 4635-4641.	4.5	64
113	Decoration of Graphitic Surfaces with Sn Nanoparticles through Surface Functionalization Using Diazonium Chemistry. Langmuir, 2012, 28, 13042-13050.	1.6	35
114	Raman Spectroscopy in Graphene-Based Systems: Prototypes for Nanoscience and Nanometrology. ISRN Nanotechnology, 2012, 2012, 1-16.	1.3	123
115	Formation and Decomposition of CO ₂ Intercalated Graphene Oxide. Chemistry of Materials, 2012, 24, 1276-1282.	3.2	231
116	Defects and impurities in graphene-like materials. Materials Today, 2012, 15, 98-109.	8.3	298
117	Structure of a Peptide Adsorbed on Graphene and Graphite. Nano Letters, 2012, 12, 2342-2346.	4.5	134
118	Selective-Area Fluorination of Graphene with Fluoropolymer and Laser Irradiation. Nano Letters, 2012, 12, 2374-2378.	4.5	222
119	Chemical modification of graphene characterized by Raman and transport experiments. Nanoscale, 2012, 4, 3781.	2.8	15
120	The use of a Ga ⁺ focused ion beam to modify graphene for device applications. Nanotechnology, 2012, 23, 255305.	1.3	46
121	Large Variations of the Raman Signal in the Spectra of Twisted Bilayer Graphene on a BN Substrate. Journal of Physical Chemistry Letters, 2012, 3, 796-799.	2.1	30
122	Highly Conductive Fewâ€Layer Graphene/Al ₂ O ₃ Nanocomposites with Tunable Charge Carrier Type. Advanced Functional Materials, 2012, 22, 3882-3889.	7.8	145
123	"Click―on Tubes: a Versatile Approach towards Multimodal Functionalization of SWCNTs. Chemistry - A European Journal, 2012, 18, 8454-8463.	1.7	32
124	Industrial graphene metrology. Nanoscale, 2012, 4, 3807.	2.8	19
125	Controllable chemical vapor deposition of large area uniform nanocrystalline graphene directly on silicon dioxide. Journal of Applied Physics, 2012, 111, .	1.1	59
126	Functionalization of graphene by electrophilic alkylation of reduced graphite. Chemical Communications, 2012, 48, 5025.	2.2	68

#	Article	IF	CITATIONS
127	Fluorescent detection of cholesterol using \hat{l}^2 -cyclodextrin functionalized graphene. Chemical Communications, 2012, 48, 7316.	2.2	124
128	Nanocomposite films and coatings produced by interaction between graphite oxide and Congo red. Journal of Materials Science, 2012, 47, 5852-5860.	1.7	17
129	The reduction of graphene oxide. Carbon, 2012, 50, 3210-3228.	5.4	4,247
130	Anodic chlorine/nitrogen co-doping of reduced graphene oxide films at room temperature. Carbon, 2012, 50, 3333-3341.	5.4	44
131	Synthesis of few-layer graphene over gold nanoclusters supported on MgO. Carbon, 2012, 50, 2252-2263.	5.4	25
132	Influence of the growth conditions on the defect density of single-walled carbon nanotubes. Carbon, 2012, 50, 2407-2416.	5.4	26
133	Visualization of defect densities in reduced graphene oxide. Carbon, 2012, 50, 3666-3673.	5.4	476
134	Advanced nanostructured photocatalysts based on reduced graphene oxide–TiO2 composites for degradation of diphenhydramine pharmaceutical and methyl orange dye. Applied Catalysis B: Environmental, 2012, 123-124, 241-256.	10.8	270
135	Microscopy and spectroscopy analysis of carbon nanostructures in highly fertile Amazonian anthrosoils. Soil and Tillage Research, 2012, 122, 61-66.	2.6	48
136	Structural modifications and enhanced Raman scattering from multiwalled carbon nanotubes grown on titanium coated silicon single crystals. Thin Solid Films, 2012, 520, 1902-1908.	0.8	6
137	Processing route dramatically influencing the nanostructure of carbon-rich SiCN and SiBCN polymer-derived ceramics. Part I: Low temperature thermal transformation. Journal of the European Ceramic Society, 2012, 32, 1857-1866.	2.8	95
138	Raman study on defective graphene: Effect of the excitation energy, type, and amount of defects. Physical Review B, 2013, 88, .	1.1	279
139	Graphene oxide: efficiency of reducing agents. Chemical Communications, 2013, 49, 7391.	2.2	118
140	Resonance effects on the Raman spectra of graphene superlattices. Physical Review B, 2013, 88, .	1.1	128
141	Post-fabrication, <i>in situ</i> laser reduction of graphene oxide devices. Applied Physics Letters, 2013, 102, .	1.5	76
142	Graphene transfer with reduced residue. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 1455-1458.	0.9	140
143	The structural and electrical evolution of chemical vapor deposition grown graphene by electron beam irradiation induced disorder. Carbon, 2013, 59, 366-371.	5.4	39
144	Graphene for energy solutions and its industrialization. Nanoscale, 2013, 5, 10108.	2.8	86

#	Article	IF	Citations
145	Influence of ethanol on the chain-ordering of carbonised polyaniline. Chemical Papers, 2013, 67, .	1.0	15
146	A graphene-based large area surface-conduction electron emission display. Carbon, 2013, 56, 255-263.	5.4	43
147	Enhanced response to molecular adsorption of structurally defective graphene. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, 030602.	0.6	5
148	Radiation hardness of graphene and MoS2 field effect devices against swift heavy ion irradiation. Journal of Applied Physics, 2013, 113, .	1.1	78
149	The thermal stability of graphene in air investigated by Raman spectroscopy. Journal of Raman Spectroscopy, 2013, 44, 1018-1021.	1.2	209
150	Weak localization and Raman study of anisotropically etched graphene antidots. Applied Physics Letters, 2013, 103, 143111.	1.5	29
151	Reduced graphene oxide with a highly restored π-conjugated structure for inkjet printing and its use in all-carbon transistors. Nano Research, 2013, 6, 842-852.	5. 8	68
152	The Dependence of Graphene Raman D-band on Carrier Density. Nano Letters, 2013, 13, 6170-6175.	4.5	138
153	Carbon Nanotube Enhanced Aerospace Composite Materials. Solid Mechanics and Its Applications, 2013,	0.1	12
154	Evolution of Physical and Electronic Structures of Bilayer Graphene upon Chemical Functionalization. Journal of the American Chemical Society, 2013, 135, 18866-18875.	6.6	43
155	Self healing of defected graphene. Applied Physics Letters, 2013, 102, .	1.5	105
156	Quantum Hall Effect in Hydrogenated Graphene. Physical Review Letters, 2013, 110, 176801.	2.9	28
157	Insitu Raman spectroscopy and thermal analysis of the formation of nitrogen-doped graphene from urea and graphite oxide. RSC Advances, 2013, 3, 21763.	1.7	43
158	Carbon nanotube growth on high modulus carbon fibres: Morphological and interfacial characterization. Surface and Interface Analysis, 2013, 45, 1372-1381.	0.8	29
159	Strain relaxation in graphene grown by chemical vapor deposition. Journal of Applied Physics, 2013, 114, .	1.1	28
160	Raman spectroscopy study of low energy He ⁺ ion irradiation effect in graphene transferred onto SiO <inf>2</inf> . , 2013, , .		0
161	Oxidative pit formation in pristine, hydrogenated and dehydrogenated graphene. Applied Surface Science, 2013, 264, 853-863.	3.1	8
162	Stress Induced Changes in the Raman Spectrum of Carbon Nanostructures and Their Composites. Solid Mechanics and Its Applications, 2013, , 185-217.	0.1	5

#	Article	IF	CITATIONS
163	lonâ€Irradiationâ€Induced Defects in Isotopicallyâ€Labeled Two Layered Graphene: Enhanced Inâ€Situ Annealing of the Damage. Advanced Materials, 2013, 25, 1004-1009.	11.1	79
164	Organic Synthesis on Graphene. Accounts of Chemical Research, 2013, 46, 2297-2306.	7.6	68
165	The use of Raman spectroscopy to characterize the carbon materials found in Amazonian anthrosoils. Journal of Raman Spectroscopy, 2013, 44, 283-289.	1.2	59
166	Synthesis of Ag-decorated, few-layer graphene structures over a novel Ag/MgO catalytic system by radio-frequency chemical vapor deposition. Materials Chemistry and Physics, 2013, 138, 454-461.	2.0	14
167	Bulk functionalization of graphene using diazonium compounds and amide reaction. Applied Surface Science, 2013, 280, 914-919.	3.1	28
168	Murchison presolar carbon grains of different density fractions: A Raman spectroscopic perspective. Geochimica Et Cosmochimica Acta, 2013, 106, 463-489.	1.6	24
169	The role of carbon nanofiber defects on the electrical and mechanical properties of CNF-based resins. Nanotechnology, 2013, 24, 305704.	1.3	97
170	Experimental and computational determinations of optical band gaps for PAH and soot in a N2-diluted, ethylene/air non-premixed flame. Proceedings of the Combustion Institute, 2013, 34, 3669-3675.	2.4	44
171	Molecular beam epitaxial growth of graphene using cracked ethylene. Journal of Crystal Growth, 2013, 378, 404-409.	0.7	2
172	Molecular beam epitaxial growth of graphene using cracked ethylene — Advantage over ethanol in growth. Diamond and Related Materials, 2013, 34, 84-88.	1.8	11
173	The effects of low power density CO2 laser irradiation on graphene properties. Applied Surface Science, 2013, 273, 502-506.	3.1	26
174	The role of band structure in electron transfer kinetics in lowâ€dimensional carbon. Materialwissenschaft Und Werkstofftechnik, 2013, 44, 226-230.	0.5	13
175	Raman spectroscopy as a versatile tool for studying the properties of graphene. Nature Nanotechnology, 2013, 8, 235-246.	15.6	5,652
176	Robust Graphene Membranes in a Silicon Carbide Frame. ACS Nano, 2013, 7, 4441-4448.	7.3	15
177	Single―and Double‧ided Chemical Functionalization of Bilayer Graphene. Small, 2013, 9, 631-639.	5.2	49
178	The chemistry of pristine graphene. Chemical Communications, 2013, 49, 3721.	2.2	225
179	Graphene nanochains and nanoislands in the layers of room-temperature fluorinated graphite. Carbon, 2013, 59, 518-529.	5.4	57
180	Current understanding of the growth of carbon nanotubes in catalytic chemical vapour deposition. Carbon, 2013, 58, 2-39.	5.4	460

#	Article	IF	CITATIONS
181	In situnitrogen-doped graphene grown from polydimethylsiloxane by plasma enhanced chemical vapor deposition. Nanoscale, 2013, 5, 600-605.	2.8	114
182	Contactâ€Engineered and Voidâ€Involved Silicon/Carbon Nanohybrids as Lithiumâ€Ionâ€Battery Anodes. Advanced Materials, 2013, 25, 3560-3565.	11.1	227
183	Janus graphene from asymmetric two-dimensional chemistry. Nature Communications, 2013, 4, 1443.	5.8	231
184	Scanning-Raman-Microscopy for the Statistical Analysis of Covalently Functionalized Graphene. ACS Nano, 2013, 7, 5472-5482.	7.3	143
185	Optimization of graphene dry etching conditions via combined microscopic and spectroscopic analysis. Applied Physics Letters, 2013, 102, 193111.	1.5	26
186	Direct Real-Time Monitoring of Stage Transitions in Graphite Intercalation Compounds. ACS Nano, 2013, 7, 2773-2780.	7.3	153
187	Optical Probing of the Electronic Interaction between Graphene and Hexagonal Boron Nitride. ACS Nano, 2013, 7, 1533-1541.	7.3	53
188	Disorder Imposed Limits of Mono- and Bilayer Graphene Electronic Modification Using Covalent Chemistry. Nano Letters, 2013, 13, 809-817.	4.5	62
189	Carbonisation of biomass-derived chars and the thermal reduction of a graphene oxide sample studied using Raman spectroscopy. Carbon, 2013, 59, 383-405.	5.4	144
191	Raman spectroscopy investigation of defect occurrence in graphene grown on copper single crystals. Physica Status Solidi (B): Basic Research, 2013, 250, 2653-2658.	0.7	7
192	Transformation of Oligoaniline Microspheres to Platelike Nitrogen-Containing Carbon. Journal of Physical Chemistry C, 2013, 117, 2289-2299.	1.5	20
193	Thickness and stacking geometry effects on high frequency overtone and combination Raman modes of graphene. Journal of Raman Spectroscopy, 2013, 44, 86-91.	1.2	14
194	Low-energy D+ and H+ ion irradiation effects on highly oriented pyrolytic graphite. Journal of Applied Physics, 2013, 114, 214310.	1.1	3
195	Metal-Induced Crystallization of Focused Ion Beam-Induced Deposition for Functional Patterned Ultrathin Nanocarbon. Lecture Notes in Nanoscale Science and Technology, 2013, , 123-159.	0.4	2
196	Structural investigation of nanocrystalline graphene grown on ($6\hat{a}\hat{s}3\tilde{A}-6\hat{a}\hat{s}3$)R30 \hat{A}° -reconstructed SiC surfaces by molecular beam epitaxy. New Journal of Physics, 2013, 15, 123034.	1.2	16
197	Controlling the Crystalline Quality and the Purity of Single-walled Carbon Nanotubes Grown by Catalytic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 2013, 1515, 1.	0.1	1
198	Catalytic one-step synthesis of Pt-decorated few-layer graphenes. RSC Advances, 2013, 3, 26391.	1.7	17
199	Carbon monoxide-induced reduction and healing of graphene oxide. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	0.9	17

#	Article	IF	CITATIONS
200	Controlled modification of mono- and bilayer graphene in O ₂ , H ₂ and CF ₄ plasmas. Nanotechnology, 2013, 24, 355705.	1.3	89
201	Effect of Engine Operating Conditions on Nanostructure and Oxidation Reactivity of Soot Particles from Diesel Engine. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2013, 79, 2228-2238.	0.2	3
202	Graphene as an atomically thin interface for growth of vertically aligned carbon nanotubes. Scientific Reports, 2013, 3, 1891.	1.6	54
203	Multiple Virtual Tunneling of Dirac Fermions in Granular Graphene. Scientific Reports, 2013, 3, 3404.	1.6	4
204	In situ Raman spectroelectrochemistry of graphene oxide. Physica Status Solidi (B): Basic Research, 2013, 250, 2662-2667.	0.7	26
205	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.	7.2	106
206	Unipolar behavior in graphene-channel field-effect-transistors with n-type doped SiC source/drain regions. Applied Physics Letters, 2013, 103 , .	1.5	5
207	Few-layer graphene sheets with embedded gold nanoparticles for electrochemical analysis of adenine. International Journal of Nanomedicine, 2013, 8, 1429.	3.3	39
208	Early Damage Mechanisms in Nuclear Grade Graphite under Irradiation. Materials Research Letters, 2014, 2, 43-50.	4.1	33
209	Raman spectra and electron-phonon coupling in disordered graphene with gate-tunable doping. Journal of Applied Physics, 2014, 116, .	1.1	23
210	Quantitative characterization of defect size in graphene using Raman spectroscopy. Applied Physics Letters, 2014, 105, .	1.5	61
211	Negative-ion production on carbon materials in hydrogen plasma: influence of the carbon hybridization state and the hydrogen content on H ^{â^'} yield. Journal Physics D: Applied Physics, 2014, 47, 085201.	1.3	32
212	Helium ion microscopy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, .	0.6	170
213	Unipolar conduction induced by defects in graphene nanowire field effect transistors. , 2014, , .		0
214	Extraordinary suppression of carrier scattering in large area graphene oxide films. Applied Physics Letters, 2014, 105, .	1.5	28
215	Reductive arylation of graphene: Insights into a reversible carbon allotrope functionalization reaction. Physica Status Solidi (B): Basic Research, 2014, 251, 2536-2540.	0.7	28
216	Radiation stability of graphene under extreme conditions. Applied Physics Letters, 2014, 105, .	1.5	39
217	Van der Waals epitaxial growth of topological insulator Bi2â^'xSbxTe3â^'ySey ultrathin nanoplate on electrically insulating fluorophlogopite mica. Applied Physics Letters, 2014, 105, 063104.	1.5	16

#	Article	IF	CITATIONS
218	Raman spectra for characterization of defective CVD multiâ€walled carbon nanotubes. Physica Status Solidi (B): Basic Research, 2014, 251, 2444-2450.	0.7	81
219	Radiation effects on the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>D</mml:mi></mml:math> to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>G</mml:mi></mml:math> Raman intensities of carbon nanotubes. Physical Review B. 2014. 89	1.1	17
220	Disorder-induced double resonant Raman process in graphene. Physical Review B, 2014, 90, .	1.1	15
221	Carbon impurities on graphene synthesized by chemical vapor deposition on platinum. Journal of Applied Physics, 2014, 116, 044303.	1.1	15
222	Graphene defect formation by extreme ultraviolet generated photoelectrons. Journal of Applied Physics, 2014, 116, .	1.1	10
223	Spatial Coherence in Near-Field Raman Scattering. Physical Review Letters, 2014, 113, 186101.	2.9	63
224	Double-resonant LA phonon scattering in defective graphene and carbon nanotubes. Physical Review B, 2014, 90, .	1.1	29
225	Enhancing the Electrochemical and Electronic Performance of CVDâ€Grown Graphene by Minimizing Trace Metal Impurities. ChemElectroChem, 2014, 1, 2070-2074.	1.7	33
226	Tunneling phenomena in aligned multi-walled carbon nanotube sheets: conductivity and Raman correlations. Materials Research Express, 2014, 1, 045603.	0.8	2
227	Purification/annealing of graphene with 100-MeV Ag ion irradiation. Nanoscale Research Letters, 2014, 9, 126.	3.1	46
228	Electron and Phonon Transport in Graphene in and out of the Bulk. Nanoscience and Technology, 2014, , 65-112.	1.5	5
229	Atomically thin graphene plane electrode for 3D RRAM. , 2014, , .		12
230	A novel reduced graphene oxide/Ag/CeO2 ternary nanocomposite: Green synthesis and catalytic properties. Applied Catalysis B: Environmental, 2014, 144, 454-461.	10.8	128
231	Highly Electron Transparent Graphene for Field Emission Triode Gates. Advanced Functional Materials, 2014, 24, 1218-1227.	7.8	49
232	Measuring the thermal conductivity of residue-free suspended graphene bridge using null point scanning thermal microscopy. Carbon, 2014, 76, 77-83.	5.4	53
233	Raman and electron field emission studies of the order–disorder transition in Ar ion implanted graphite. Nuclear Instruments & Methods in Physics Research B, 2014, 318, 276-280.	0.6	2
234	Laser-Assisted Reduction of Graphene Oxide for Flexible, Large-Area Optoelectronics. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 106-115.	1.9	59
235	Synthesis and characterization of graphene and carbon nanotubes: A review on the past and recent developments. Journal of Industrial and Engineering Chemistry, 2014, 20, 1171-1185.	2.9	307

#	ARTICLE	IF	Citations
236	Behavior of Raman D band for pyrocarbons with crystallite size in the 2–5 nm range. Applied Physics A: Materials Science and Processing, 2014, 114, 759-763.	1.1	38
237	Tunable D peak in gated graphene. Nano Research, 2014, 7, 338-344.	5.8	20
238	Heterogeneity of carbon fibre. Carbon, 2014, 68, 240-249.	5.4	78
239	A comparative study on hydrogen interaction with defective graphene structures doped by transition metals. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 60, 104-111.	1.3	19
240	Electrical measurement of PVA/graphene nanofibers for transparent electrode applications. Synthetic Metals, 2014, 191, 113-119.	2.1	35
241	Study of high radio frequency plasma discharge effects on carbon fiber using Raman spectroscopy. Surface and Coatings Technology, 2014, 240, 233-242.	2.2	24
242	Direct Integration of Polycrystalline Graphene into Light Emitting Diodes by Plasma-Assisted Metal-Catalyst-Free Synthesis. ACS Nano, 2014, 8, 2230-2236.	7.3	55
243	A General Route Towards Defect and Pore Engineering in Graphene. Small, 2014, 10, 2280-2284.	5.2	46
244	High―versus Lowâ€Quality Graphene: A Mechanistic Investigation of Electrografted Diazoniumâ€Based Films for Growth of Polymer Brushes. Small, 2014, 10, 922-934.	5.2	23
245	Chemically Functionalized Carbon Nanotubes with Pyridine Groups as Easily Tunable N-Decorated Nanomaterials for the Oxygen Reduction Reaction in Alkaline Medium. Chemistry of Materials, 2014, 26, 3460-3470.	3.2	107
246	Conversion of pyrazoline to pyrazole in hydrazine treated N-substituted reduced graphene oxide films obtained by ion bombardment and their electrical properties. Carbon, 2014, 74, 32-43.	5.4	25
247	Progressive In Situ Reduction of Graphene Oxide Studied by Raman Spectroelectrochemistry: Implications for a Spontaneous Activation of LiFePO ₄ (Olivine). Electroanalysis, 2014, 26, 57-61.	1.5	8
248	Quantifying defects in N-layer graphene via a phenomenological model of Raman spectroscopy. Nuclear Instruments & Methods in Physics Research B, 2014, 319, 71-74.	0.6	15
249	Stressâ€dependent correlations for resonant Raman bands in graphite with defects. Journal of Raman Spectroscopy, 2014, 45, 476-480.	1.2	16
250	Investigation of the Thermal Stability of the Carbon Framework of Graphene Oxide. Chemistry - A European Journal, 2014, 20, 984-989.	1.7	49
251	Plasma-enhanced chemical vapor deposition of graphene on copper substrates. AIP Advances, 2014, 4, .	0.6	65
252	Fluorination of Graphene: A Spectroscopic and Microscopic Study. ACS Nano, 2014, 8, 1862-1870.	7.3	98
253	Controlled Electrochemical Carboxylation of Graphene To Create a Versatile Chemical Platform for Further Functionalization. Langmuir, 2014, 30, 6622-6628.	1.6	21

#	ARTICLE	IF	CITATIONS
254	A facile and general route for the synthesis of semiconductor quantum dots on reduced graphene oxide sheets. RSC Advances, 2014, 4, 13601.	1.7	8
255	Thermally conductive and electrically insulating epoxy nanocomposites with silica-coated graphene. RSC Advances, 2014, 4, 15297-15303.	1.7	93
256	Carbon nanotube based via interconnects: Performance estimation based on the resistance of individual carbon nanotubes. Microelectronic Engineering, 2014, 120, 210-215.	1.1	13
257	Microstructure of natural graphite flakes revealed by oxidation: Limitations of XRD and Raman techniques for crystallinity estimates. Carbon, 2014, 66, 674-690.	5.4	87
258	Effect of defects on the intrinsic strength and stiffness of graphene. Nature Communications, 2014, 5, 3186.	5.8	560
259	Defect-controlled synthesis of graphene based nano-size electronic devices using in situ thermal treatment. Organic Electronics, 2014, 15, 685-691.	1.4	7
260	Exfoliation of Graphite with Triazine Derivatives under Ball-Milling Conditions: Preparation of Few-Layer Graphene <i>via</i> Selective Noncovalent Interactions. ACS Nano, 2014, 8, 563-571.	7.3	241
261	Raman spectroscopy and band structure of Pd-hybridized multilayer graphene. Carbon, 2014, 68, 687-694.	5.4	4
262	Catalyst and doping methods for arc graphene. Nanotechnology, 2014, 25, 445601.	1.3	7
263	Relationship between the structure and electrical characteristics of diamond-like carbon films. Journal of Applied Physics, 2014, 116, .	1.1	23
264	Quantitative Correlation between Defect Density and Heterogeneous Electron Transfer Rate of Single Layer Graphene. Journal of the American Chemical Society, 2014, 136, 16609-16617.	6.6	206
265	Stability of graphene doping with MoO3 and I2. Applied Physics Letters, 2014, 105, .	1.5	49
267	Flexible cadmium telluride thin films grown on electron-beam-irradiated graphene/thin glass substrates. Applied Physics Letters, 2014, 105, 083902.	1.5	2
268	Tuning the electrical properties of exfoliated graphene layers using deep ultraviolet irradiation. Journal of Materials Chemistry C, 2014, 2, 5404-5410.	2.7	40
269	Application of HOPG and CVD graphene as ion beam detectors. Nuclear Instruments & Methods in Physics Research B, 2014, 340, 81-84.	0.6	3
270	Nondestructive Characterization of the Structural Quality and Thickness of Large-Area Graphene on Various Substrates. Analytical Chemistry, 2014, 86, 7192-7199.	3.2	8
271	Defect Enhanced Efficient Physical Functionalization of Graphene with Gold Nanoparticles Probed by Resonance Raman Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 13833-13843.	1.5	50
272	In-Depth Investigation of the Carbon Microstructure of Silicon Carbide-Derived Carbons by Wide-Angle X-ray Scattering. Journal of Physical Chemistry C, 2014, 118, 15705-15715.	1.5	39

#	ARTICLE	IF	Citations
273	High entropy alloy mediated growth of graphene. CrystEngComm, 2014, 16, 6187-6194.	1.3	7
274	Preparation of N-doped graphene by reduction of graphene oxide with mixed microbial system and its haemocompatibility. Nanoscale, 2014, 6, 4882.	2.8	43
275	Edge effect on a vacancy state in semi-infinite graphene. Physical Review B, 2014, 90, .	1.1	19
276	Chemical and morphological characterization of multi-walled-carbon nanotubes synthesized by carbon deposition from an ethanol–glycerol blend. Diamond and Related Materials, 2014, 50, 38-48.	1.8	36
277	Tunable Enhancement of Raman Scattering in Grapheneâ€Nanoparticle Hybrids. Advanced Functional Materials, 2014, 24, 6348-6358.	7.8	31
278	Strain engineering the properties of graphene and other two-dimensional crystals. Physical Chemistry Chemical Physics, 2014, 16, 11124-11138.	1.3	199
279	Thermolubricity of gas monolayers on graphene. Nanoscale, 2014, 6, 8062.	2.8	13
280	Interactions of Organic Solvents at Graphene/ \hat{l} ±-Al ₂ O ₃ and Graphene Oxide/ \hat{l} ±-Al ₂ O ₃ Interfaces Studied by Sum Frequency Generation. Journal of Physical Chemistry C, 2014, 118, 17745-17755.	1.5	13
281	Large area uniformly oriented multilayer graphene with high transparency and conducting properties derived from highly oriented polyethylene films. Journal of Materials Chemistry C, 2014, 2, 6048-6055.	2.7	6
282	Defect Evolution in Graphene upon Electrochemical Lithiation. ACS Applied Materials & Samp; Interfaces, 2014, 6, 17626-17636.	4.0	30
283	Mechanistic insights into the reduction of graphene oxide addressing its surfaces. Physical Chemistry Chemical Physics, 2014, 16, 19832-19835.	1.3	25
284	Interface Engineering for CVD Graphene: Current Status and Progress. Small, 2014, 10, 4443-4454.	5.2	29
285	Doping Dependence of the Raman Spectrum of Defected Graphene. ACS Nano, 2014, 8, 7432-7441.	7.3	312
286	Finely tuning oxygen functional groups of graphene materials and optimizing oxygen levels for capacitors. RSC Advances, 2014, 4, 36377.	1.7	27
287	Breaking the limits of structural and mechanical imaging of the heterogeneous structure of coal macerals. Nanotechnology, 2014, 25, 435402.	1.3	19
288	Tuning TiO ₂ nanoparticle morphology in graphene–TiO ₂ hybrids by graphene surface modification. Nanoscale, 2014, 6, 6710-6719.	2.8	60
289	Theory of Spatial Coherence in Near-Field Raman Scattering. Physical Review X, 2014, 4, .	2.8	31
290	Raman identification of edge alignment of bilayer graphene down to the nanometer scale. Nanoscale, 2014, 6, 7519-7525.	2.8	8

#	Article	IF	CITATIONS
291	Interplay of interfacial compounds, catalyst thickness and carbon precursor supply in the selectivity of single-walled carbon nanotube growth. Carbon, 2014, 80, 599-609.	5.4	11
292	Insights into electrocatalytic activity of epitaxial graphene on SiC from cyclic voltammetry and ac impedance spectroscopy. Journal of Solid State Electrochemistry, 2014, 18, 2555-2562.	1.2	12
293	Hydrothermal growth of ZnO microstructures on Ar plasma treated graphite. Current Applied Physics, 2014, 14, 269-274.	1.1	2
294	Evolution and defect analysis of vertical graphene nanosheets. Journal of Raman Spectroscopy, 2014, 45, 642-649.	1.2	109
295	Chemical hydrogenation of single-layer graphene enables completely reversible removal of electrical conductivity. Carbon, 2014, 72, 348-353.	5.4	52
296	Determination of the thickness distribution of a graphene layer grown on a $2\hat{a}\in 3$ SiC wafer by means of Auger electron spectroscopy depth profiling. Applied Surface Science, 2014, 316, 301-307.	3.1	4
297	Characterization of the cleaning process on a transferred graphene. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	10
298	Nanosized Carbon Black Combined with Ni ₂ O ₃ as "Universal―Catalysts for Synergistically Catalyzing Carbonization of Polyolefin Wastes to Synthesize Carbon Nanotubes and Application for Supercapacitors. Environmental Science & Environmental Scie	4.6	82
299	Polyamide 6/Graphene composites: The effect of in situ polymerisation on the structure and properties of graphene oxide and reduced graphene oxide. European Polymer Journal, 2014, 59, 353-362.	2.6	90
300	Enhanced Photoresponse in Monolayer Hydrogenated Graphene Photodetector. ACS Applied Materials & Lamp; Interfaces, 2014, 6, 16763-16768.	4.0	19
301	Interlayer Interaction in the UV Irradiated Defect Formation of Graphene. Journal of Physical Chemistry C, 2014, 118, 11842-11848.	1.5	11
302	Graphene nanoribbon superlattices fabricated via He ion lithography. Applied Physics Letters, 2014, 104,	1.5	35
303	Post-modification by low-temperature annealing of carbon nano-onions in the presence of carbohydrates. Carbon, 2014, 67, 304-317.	5.4	39
304	Growth and oxidation of graphitic crystallites in soot particles within a laminar diffusion flame. Fuel, 2014, 128, 148-154.	3.4	37
305	Functionally Graded Dual-nanoparticulate-reinforced Aluminium Matrix Bulk Materials Fabricated by Spark Plasma Sintering. Journal of Materials Science and Technology, 2014, 30, 736-742.	5.6	58
306	Hydrogen adsorption characteristics of magnesium combustion derived graphene at 77 and 293ÂK. International Journal of Hydrogen Energy, 2014, 39, 6783-6788.	3.8	15
307	Multiwavelength Raman spectroscopy analysis of a large sampling of disordered carbons extracted from the Tore Supra tokamak. Vibrational Spectroscopy, 2014, 70, 187-192.	1.2	33
308	Graphene grown on Ge(0 0 1) from atomic source. Carbon, 2014, 75, 104-112.	5.4	54

#	Article	IF	Citations
309	Characterization of flame-generated 2-D carbon nano-disks. Carbon, 2014, 68, 138-148.	5.4	59
310	Nickel silicide nanocrystal-containing magnetoceramics from the bulk pyrolysis of polysilazane and nickelocene. Ceramics International, 2014, 40, 6937-6947.	2.3	22
311	Raman study of damage extent in graphene nanostructures carved by high energy helium ion beam. Carbon, 2014, 72, 233-241.	5.4	50
312	Swift heavy ions induced irradiation effects in monolayer graphene and highly oriented pyrolytic graphite. Nuclear Instruments & Methods in Physics Research B, 2014, 330, 18-23.	0.6	37
313	Thermal annealing effects on multi-walled carbon nanotube yarns probed by Raman spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 117, 598-603.	2.0	34
314	Chemistry with Graphene and Graphene Oxideâ€"Challenges for Synthetic Chemists. Angewandte Chemie - International Edition, 2014, 53, 7720-7738.	7.2	741
315	Statistical Raman Microscopy and Atomic Force Microscopy on Heterogeneous Graphene Obtained after Reduction of Graphene Oxide. Journal of Physical Chemistry C, 2014, 118, 7698-7704.	1.5	95
316	Transfer of Pre-Assembled Block Copolymer Thin Film to Nanopattern Unconventional Substrates. ACS Applied Materials & Diterfaces, 2014, 6, 9442-9448.	4.0	14
317	Reversible Charge-Transfer Doping in Graphene due to Reaction with Polymer Residues. Journal of Physical Chemistry C, 2014, 118, 13890-13897.	1.5	19
318	Synthesis of silicon carbide whiskers using reactive graphite as template. Ceramics International, 2014, 40, 1481-1488.	2.3	55
319	Structural Characterization of Carbon Nanowalls and Their Potential Applications in Energy Devices. , 2014, , 133-164.		0
320	Damage in graphene due to electronic excitation induced by highly charged ions. 2D Materials, 2014, 1, 011011.	2.0	35
321	Modeling the Raman Spectrum of Graphitic Material in Rock Samples with Fluorescence Backgrounds: Accuracy of Fitting and Uncertainty Estimation. Applied Spectroscopy, 2014, 68, 1393-1406.	1.2	4
322	Highly crystalline graphene formation from graphene oxides by ultrahigh temperature process using solar furnace. Materials Research Society Symposia Proceedings, 2015, 1786, 31-36.	0.1	1
323	Correlating Chemical Structure and Charge Transport in Reduced Graphene Oxide for Transparent Conductor and Interconnect Applications. , 2015, , .		3
324	Raman spectroscopy of electrochemically gated graphene transistors: Geometrical capacitance, electron-phonon, electron-electron, and electron-defect scattering. Physical Review B, 2015, 91, .	1.1	145
325	Electrically tunable resonant scattering in fluorinated bilayer graphene. Physical Review B, 2015, 92, .	1,1	20
326	Measurement of topological Berry phase in highly disordered graphene. Physical Review B, 2015, 92, .	1.1	11

#	Article	IF	CITATIONS
327	Measurement of electronic heat dissipation in highly disordered graphene. Physical Review B, 2015, 92,	1.1	6
328	Measuring the proton selectivity of graphene membranes. Applied Physics Letters, 2015, 107, .	1.5	56
329	The effect of residual gas scattering on Ga ion beam patterning of graphene. Applied Physics Letters, 2015, 107, .	1.5	13
330	Raman spectroscopy of carbonaceous particles of environmental interest. Journal of Raman Spectroscopy, 2015, 46, 1215-1224.	1.2	11
331	Nanostructuring graphene by dense electronic excitation. Nanotechnology, 2015, 26, 465302.	1.3	39
332	Multiphonon Raman spectroscopy properties and Raman mapping of 2D <i>van der Waals</i> solids: graphene and beyond. Journal of Raman Spectroscopy, 2015, 46, 217-230.	1.2	19
333	Influence of the Synthetic Conditions on the Structural and Electrochemical Properties of Carbon Nanoâ€Onions. ChemPhysChem, 2015, 16, 2182-2191.	1.0	27
334	Selfâ€Passivation of Defects: Effects of Highâ€Energy Particle Irradiation on the Elastic Modulus of Multilayer Graphene. Advanced Materials, 2015, 27, 6841-6847.	11.1	24
335	In-situ observation and atomic resolution imaging of the ion irradiation induced amorphisation of graphene. Scientific Reports, 2014, 4, 6334.	1.6	62
336	Mechanism of the Defect Formation in Supported Graphene by Energetic Heavy Ion Irradiation: the Substrate Effect. Scientific Reports, 2015, 5, 9935.	1.6	66
337	Facile electrochemical transfer of large-area single crystal epitaxial graphene from Ir(1 1 1). Journal Physics D: Applied Physics, 2015, 48, 115306.	1.3	23
338	Tip-enhanced Raman mapping of local strain in graphene. Nanotechnology, 2015, 26, 175702.	1.3	62
339	Graphene electrode modified with electrochemically reduced graphene oxide for label-free DNA detection. Biosensors and Bioelectronics, 2015, 72, 313-319.	5.3	110
340	Synthesis of graphene-like transparent conductive films on dielectric substrates using a modified filtered vacuum arc system. Journal of Applied Physics, 2015, 117, .	1.1	13
341	Î ³ -Aminopropyl triethoxysilane functionalized graphene oxide for composites with high dielectric constant and low dielectric loss. Composites Part A: Applied Science and Manufacturing, 2015, 76, 194-202.	3.8	76
342	Near-field Raman spectroscopy of nanocarbon materials. Faraday Discussions, 2015, 184, 193-206.	1.6	11
343	Raman signature of defected twisted bilayer graphene. Carbon, 2015, 93, 250-257.	5.4	21
344	Effect of disorder on Raman scattering of single-layer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mo</mml:mi><mml:msub><mml:m mathvariant="normal">S<mml:mn>2</mml:mn></mml:m></mml:msub></mml:mrow></mml:math> . Physical Review B. 2015. 91	i 1.1	553

#	Article	IF	CITATIONS
345	Enhanced Shubnikov–De Haas Oscillation in Nitrogen-Doped Graphene. ACS Nano, 2015, 9, 7207-7214.	7.3	19
346	Effect of UV light-induced nitrogen doping on the field effect transistor characteristics of graphene. RSC Advances, 2015, 5, 70522-70526.	1.7	10
347	A comparison of the charring and carbonisation of oxygen-rich precursors with the thermal reduction of graphene oxide. Philosophical Magazine, 2015, 95, 4054-4077.	0.7	16
348	Reduced graphene oxide and inorganic nanoparticles composites – synthesis and characterization. Polish Journal of Chemical Technology, 2015, 17, 95-103.	0.3	10
349	Charge Transport in Thick Reduced Graphene Oxide Film. Journal of Physical Chemistry C, 2015, 119, 28685-28690.	1.5	35
350	Demonstration of distinct semiconducting transport characteristics of monolayer graphene functionalized via plasma activation of substrate surfaces. Carbon, 2015, 93, 353-360.	5.4	7
351	First principles Raman study of boron and nitrogen doped planar T-graphene clusters. Materials Research Express, 2015, 2, 095603.	0.8	18
352	Enhanced electrochemical performance of ion-beam-treated 3D graphene aerogels for lithium ion batteries. Carbon, 2015, 85, 269-278.	5.4	46
353	Enhanced sensing response of oxidized graphene formed by UV irradiation in water. Nanotechnology, 2015, 26, 105701.	1.3	10
354	Graphite sulphate – a precursor to graphene. Chemical Communications, 2015, 51, 3162-3165.	2.2	80
355	Facile synthesis of functionalized graphene-palladium nanoparticle incorporated multicomponent TiO2 composite nanofibers. Materials Chemistry and Physics, 2015, 154, 125-136.	2.0	27
356	Defects in Graphene: Generation, Healing, and Their Effects on the Properties of Graphene: A Review. Journal of Materials Science and Technology, 2015, 31, 599-606.	5.6	300
357	Room temperature dry processing of patterned CVD graphene devices. Carbon, 2015, 86, 256-263.	5.4	22
358	Photochemical Transformation of Graphene Oxide in Sunlight. Environmental Science & Emp; Technology, 2015, 49, 3435-3443.	4.6	202
359	Signature Vibrational Bands for Defects in CVD Single-Layer Graphene by Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry Letters, 2015, 6, 964-969.	2.1	22
360	Raman characterization of defects and dopants in graphene. Journal of Physics Condensed Matter, 2015, 27, 083002.	0.7	451
361	Phytosynthesis of silver–reduced graphene oxide (Ag–RGO) nanocomposite with an enhanced antibacterial effect using Potamogeton pectinatus extract. RSC Advances, 2015, 5, 17358-17365.	1.7	52
362	Dopant Segregation in Polycrystalline Monolayer Graphene. Nano Letters, 2015, 15, 1428-1436.	4.5	19

#	Article	IF	CITATIONS
363	Free-standing graphene membranes on glass nanopores for ionic current measurements. Applied Physics Letters, $2015,106,.$	1.5	45
364	Structural evolution in CVD graphene chemically oxidized by sulphuric acid. Journal of Raman Spectroscopy, 2015, 46, 283-286.	1.2	7
365	Raman spectroscopy study of the transformation of the carbonaceous skeleton of a polymer-based nanoporous carbon along the thermal annealing pathway. Carbon, 2015, 85, 147-158.	5.4	145
366	Vacancy effects on electronic and transport properties of graphene nanoribbons. Physical Review B, 2015, 91, .	1.1	21
367	Tunable doping of graphene nanoribbon arrays by chemical functionalization. Nanoscale, 2015, 7, 3572-3580.	2.8	19
368	Modification of Graphene/SiO ₂ Interface by UV-Irradiation: Effect on Electrical Characteristics. ACS Applied Materials & Samp; Interfaces, 2015, 7, 2439-2443.	4.0	42
369	Inâ€plane and outâ€ofâ€plane defects of graphite bombarded by H, D and He investigated by atomic force and Raman microscopies. Journal of Raman Spectroscopy, 2015, 46, 256-265.	1.2	12
370	Effect of the flame environment on soot nanostructure inferred by Raman spectroscopy at different excitation wavelengths. Combustion and Flame, 2015, 162, 2431-2441.	2.8	80
371	Formation mechanism of graphene buffer layer on SiC(0 0 0 1). Carbon, 2015, 81, 63-72.	5.4	33
372	Atomic-scale assessment of the crystallization onset in silicon carbonitride. Journal of the European Ceramic Society, 2015, 35, 3355-3362.	2.8	15
373	Towards the continuous production of high crystallinity graphene via electrochemical exfoliation with molecular in situ encapsulation. Nanoscale, 2015, 7, 15362-15373.	2.8	112
374	Ultrafine porous carbon fiber and its supported platinum catalyst for enhancing performance of proton exchange membrane fuel cells. Electrochimica Acta, 2015, 177, 174-180.	2.6	31
375	Hydrogenation of Graphene by Reaction at High Pressure and High Temperature. ACS Nano, 2015, 9, 8279-8283.	7.3	46
376	Removal of Organic Contamination from Graphene with a Controllable Mass-Selected Argon Gas Cluster Ion Beam. Journal of Physical Chemistry C, 2015, 119, 17836-17841.	1.5	24
377	A binary solvent system for improved liquid phase exfoliation of pristine graphene materials. Carbon, 2015, 94, 405-411.	5.4	31
378	Defect-Engineered Heat Transport in Graphene: A Route to High Efficient Thermal Rectification. Scientific Reports, 2015, 5, 11962.	1.6	96
379	A facile approach to synthesize an oxo-functionalized graphene/polymer composite for low-voltage operating memory devices. Journal of Materials Chemistry C, 2015, 3, 8595-8604.	2.7	30
380	The electronic states of a double carbon vacancy defect in pyrene: a model study for graphene. Physical Chemistry Chemical Physics, 2015, 17, 12778-12785.	1.3	17

#	Article	IF	Citations
381	Transition of graphene oxide-coated fiber bundles from insulator to conductor by chemical reduction. Synthetic Metals, 2015, 204, 90-94.	2.1	29
382	Nanoscale reduction of graphene oxide thin films and its characterization. Nanotechnology, 2015, 26, 285301.	1.3	25
383	Co ₃ ZnC core–shell nanoparticle assembled microspheres/reduced graphene oxide as an advanced electrocatalyst for hydrogen evolution reaction in an acidic solution. Journal of Materials Chemistry A, 2015, 3, 11066-11073.	5.2	31
384	Covalent Modification of Graphene and Graphite Using Diazonium Chemistry: Tunable Grafting and Nanomanipulation. ACS Nano, 2015, 9, 5520-5535.	7.3	274
385	Peptide-based biomaterials. Linking l-tyrosine and poly l-tyrosine to graphene oxide nanoribbons. Journal of Materials Chemistry B, 2015, 3, 3870-3884.	2.9	24
386	In situ FTIR and Raman spectroelectrochemical characterization of graphene oxide upon electrochemical reduction in organic solvents. Physical Chemistry Chemical Physics, 2015, 17, 12115-12123.	1.3	54
387	Defect Control and $\langle i \rangle n \langle i \rangle$ -Doping of Encapsulated Graphene by Helium-Ion-Beam Irradiation. Nano Letters, 2015, 15, 4006-4012.	4.5	61
388	Fast and fully-scalable synthesis of reduced graphene oxide. Scientific Reports, 2015, 5, 10160.	1.6	486
389	Interfacial Nondegenerate Doping of MoS2and Other Two-Dimensional Semiconductors. ACS Nano, 2015, 9, 2227-2230.	7.3	29
390	Water desalination using nanoporous single-layer graphene. Nature Nanotechnology, 2015, 10, 459-464.	15.6	1,372
391	Dispersibilityâ€Dependent Biodegradation of Graphene Oxide by Myeloperoxidase. Small, 2015, 11, 3985-3994.	5.2	215
391	Dispersibilityâ€Dependent Biodegradation of Graphene Oxide by Myeloperoxidase. Small, 2015, 11, 3985-3994. Green and fast synthesis of amino-functionalized graphene quantum dots with deep blue photoluminescence. Journal of Nanoparticle Research, 2015, 17, 1.	5.2	215 27
	3985-3994. Green and fast synthesis of amino-functionalized graphene quantum dots with deep blue		
392	Green and fast synthesis of amino-functionalized graphene quantum dots with deep blue photoluminescence. Journal of Nanoparticle Research, 2015, 17, 1. New transfer method of CVD-grown graphene using a flexible, transparent and conductive polyaniline-rubber thin film for organic electronic applications. Chemical Engineering Journal, 2015,	0.8	27
392 393	Green and fast synthesis of amino-functionalized graphene quantum dots with deep blue photoluminescence. Journal of Nanoparticle Research, 2015, 17, 1. New transfer method of CVD-grown graphene using a flexible, transparent and conductive polyaniline-rubber thin film for organic electronic applications. Chemical Engineering Journal, 2015, 273, 509-518.	0.8 6.6	27 49
392 393 394	Green and fast synthesis of amino-functionalized graphene quantum dots with deep blue photoluminescence. Journal of Nanoparticle Research, 2015, 17, 1. New transfer method of CVD-grown graphene using a flexible, transparent and conductive polyaniline-rubber thin film for organic electronic applications. Chemical Engineering Journal, 2015, 273, 509-518. Raman spectroscopy at the edges of multilayer graphene. Carbon, 2015, 85, 221-224. Functionalized CVD monolayer graphene for label-free impedimetric biosensing. Nano Research, 2015,	0.8 6.6 5.4	27 49 45
392 393 394 395	Green and fast synthesis of amino-functionalized graphene quantum dots with deep blue photoluminescence. Journal of Nanoparticle Research, 2015, 17, 1. New transfer method of CVD-grown graphene using a flexible, transparent and conductive polyaniline-rubber thin film for organic electronic applications. Chemical Engineering Journal, 2015, 273, 509-518. Raman spectroscopy at the edges of multilayer graphene. Carbon, 2015, 85, 221-224. Functionalized CVD monolayer graphene for label-free impedimetric biosensing. Nano Research, 2015, 8, 1698-1709. Patterned Carboxylation of Graphene Using Scanning Electrochemical Microscopy. Langmuir, 2015, 31,	0.8 6.6 5.4 5.8	27 49 45 59

#	Article	IF	CITATIONS
399	Characterizing various types of defects in nuclear graphite using Raman scattering: Heat treatment, ion irradiation and polishing. Carbon, 2015, 95, 364-373.	5.4	167
400	Ultrahigh-throughput exfoliation of graphite into pristine â€~single-layer' graphene using microwaves and molecularly engineered ionic liquids. Nature Chemistry, 2015, 7, 730-736.	6.6	291
401	Effect of Ar ⁺ ion irradiation on the microstructure of pyrolytic carbon. Journal of Applied Physics, 2015, 117, 115101.	1.1	9
402	Raman scattering and electrical resistance of highly disordered graphene. Physical Review B, 2015, 91, .	1.1	29
403	Graphene nanoribbons: Relevance of etching process. Journal of Applied Physics, 2015, 117, 184303.	1.1	15
404	Structural analysis of polycrystalline graphene systems by Raman spectroscopy. Carbon, 2015, 95, 646-652.	5.4	184
405	Lateral damage in graphene carved by high energy focused gallium ion beams. Applied Physics Letters, 2015, 107, .	1.5	24
406	Irradiation effects of graphene and thin layer graphite induced by swift heavy ions. Chinese Physics B, 2015, 24, 086103.	0.7	14
407	Defect engineering as a versatile route to estimate various scattering mechanisms in monolayer graphene on solid substrates. Nanoscale, 2015, 7, 16079-16086.	2.8	15
408	Chiral angle-dependent defect evolution in CVD-grown single-walled carbon nanotubes. Carbon, 2015, 95, 287-291.	5.4	15
409	The effect of filler aspect ratio on the electromagnetic properties of carbon-nanofibers reinforced composites. Journal of Applied Physics, 2015, 118, .	1.1	23
410	Defect-induced Fermi level pinning and suppression of ambipolar behaviour in graphene. Carbon, 2015, 93, 325-334.	5.4	11
411	Increasing the elastic modulus of graphene by controlled defect creation. Nature Physics, 2015, 11, 26-31.	6. 5	298
412	van der Waals Force: A Dominant Factor for Reactivity of Graphene. Nano Letters, 2015, 15, 319-325.	4.5	65
413	Reduction of graphene oxide nanosheets by natural beta carotene and its potential use as supercapacitor electrode. Arabian Journal of Chemistry, 2015, 8, 560-569.	2.3	30
414	Raman and thermal desorption spectroscopy analyses of amorphous graphite-like carbon films with incorporated xenon. Vacuum, 2015, 112, 17-24.	1.6	15
415	Electrospun graphene decorated MnCo2O4 composite nanofibers for glucose biosensing. Biosensors and Bioelectronics, 2015, 66, 308-315.	5. 3	94
416	Graphene oxide: from fundamentals to applications. Journal of Physics Condensed Matter, 2015, 27, 013002.	0.7	113

#	Article	IF	CITATIONS
417	High-yield preparation of graphene oxide from small graphite flakes via an improved Hummers method with a simple purification process. Carbon, 2015, 81, 826-834.	5.4	443
418	Supercritical CO2-assisted preparation of 3D graphene-pyrrole/carbon nanotubes/polyaniline Nanoarchitectures for efficient supercapacitor electrodes. Materials Letters, 2015, 139, 471-474.	1.3	19
419	Graphene nanoribbons formed by a sonochemical graphene unzipping using flavin mononucleotide as a template. Carbon, 2015, 81, 629-638.	5.4	38
420	Effect of substrates on covalent surface modification of graphene using photosensitive functional group. International Journal of Materials Research, 2021, 106, 176-183.	0.1	2
421	Graphene on Mica - Intercalated Water Trapped for Life. Scientific Reports, 2014, 4, 6003.	1.6	65
423	Enhanced End-Contacts by Helium Ion Bombardment to Improve Graphene-Metal Contacts. Nanomaterials, 2016, 6, 158.	1.9	6
424	Effective fluorination of single-layer graphene by high-energy ion irradiation through a LiF overlayer. RSC Advances, 2016, 6, 68525-68529.	1.7	5
425	Chemistry and Structure of Graphene Oxide <i>via</i> Direct Imaging. ACS Nano, 2016, 10, 7515-7522.	7.3	159
426	Controlled Chemistry Approach to the Oxoâ€Functionalization of Graphene. Chemistry - A European Journal, 2016, 22, 7012-7027.	1.7	68
427	Thermal Conductivity of Graphite Thin Films Grown by Low Temperature Chemical Vapor Deposition on Ni (111). Advanced Materials Interfaces, 2016, 3, 1600234.	1.9	35
428	Raman Studies of Carbon Nanostructures. Annual Review of Materials Research, 2016, 46, 357-382.	4.3	112
429	Mono―und ditope Bisfunktionalisierung von Graphen. Angewandte Chemie, 2016, 128, 5956-5960.	1.6	25
430	Enhancing Toughness in Boron Carbide with Reduced Graphene Oxide. Journal of the American Ceramic Society, 2016, 99, 257-264.	1.9	41
431	Characterization of nanocarbon deposited on insulator substrate by alcohol chemical vapor deposition. Japanese Journal of Applied Physics, 2016, 55, 105101.	0.8	2
432	Raman Signatures of Single Layer Graphene Dispersed in Degassed Water, "â€~Eau de Grapheneâ€ê€™. Journa of Physical Chemistry C, 2016, 120, 28204-28214.	al 1.5	25
433	Complex XPS and Raman Study of Graphene on Copper and Si/SiO ₂ Subjected to Ar Ion Treatment. Key Engineering Materials, 0, 721, 258-262.	0.4	6
434	Influence of Different Improved Hummers Method Modifications on the Characteristics of Graphite Oxide in Order to Make a More Easily Scalable Method. Industrial & Engineering Chemistry Research, 2016, 55, 12836-12847.	1.8	118
435	Comparative study of layer by layer assembled multilayer films based on graphene oxide and reduced graphene oxide on flexible polyurethane foam: flame retardant and smoke suppression properties. RSC Advances, 2016, 6, 114304-114312.	1.7	30

#	Article	IF	CITATIONS
436	X-ray photoelectron spectroscopy for identification of morphological defects and disorders in graphene devices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, 041516.	0.9	1
437	Plasma-enhanced chemical vapor deposition of amorphous Si on graphene. Applied Physics Letters, 2016, 108, 193105.	1.5	18
438	Controllable Chemical Vapor Deposition Synthesis of Carbon Layers on Copper Substrate. Key Engineering Materials, 0, 721, 263-266.	0.4	0
439	Modulation of graphene field effect by heavy charged particle irradiation. Applied Physics Letters, 2016, 109, .	1.5	7
440	Defect formation in graphene during low-energy ion bombardment. APL Materials, 2016, 4, .	2.2	68
441	Characterization of chemical doping of graphene by <i>in-situ</i> Raman spectroscopy. Applied Physics Letters, 2016, 108, .	1.5	28
442	Ultrafast electronic response of graphene to a strong and localized electric field. Nature Communications, 2016, 7, 13948.	5.8	125
443	Graphene–bimetallic nanoparticle composites with enhanced electro-catalytic detection of bisphenol A. Nanotechnology, 2016, 27, 484001.	1.3	29
444	The effect of graphite functionalization on electrical and shielding properties of epoxy composites. Molecular Crystals and Liquid Crystals, 2016, 639, 94-104.	0.4	1
445	An integrated nanocarbon–cellulose membrane for solid-state supercapacitors. Science Bulletin, 2016, 61, 368-377.	4.3	5
446	Influence of ageing on Raman spectra and the conductivity of monolayer graphene samples irradiated by heavy and light ions. Journal of Applied Physics, 2016, 120, .	1.1	10
447	Dielectric relaxation and hopping conduction in reduced graphite oxide. Journal of Applied Physics, 2016, 119, .	1.1	32
448	Lubricity of gold nanocrystals on graphene measured using quartz crystal microbalance. Scientific Reports, 2016, 6, 31837.	1.6	18
449	Understanding the interaction between energetic ions and freestanding graphene towards practical 2D perforation. Nanoscale, 2016, 8, 8345-8354.	2.8	64
450	lon beam induced defects in CVD graphene on glass. Surface and Coatings Technology, 2016, 306, 119-122.	2.2	17
451	Enhanced hydrogen storage performance of reduced graphene oxide hybrids with nickel or its metallic mixtures based on spillover mechanism. International Journal of Hydrogen Energy, 2016, 41, 11692-11699.	3.8	54
452	Towards the controlled CVD growth of graphitic B–C–N atomic layer films: The key role of B–C delivery molecular precursor. Nano Research, 2016, 9, 1221-1235.	5.8	16
453	Elucidating Quantum Confinement in Graphene Oxide Dots Based On Excitation-Wavelength-Independent Photoluminescence. Journal of Physical Chemistry Letters, 2016, 7, 2087-2092.	2.1	143

#	Article	IF	CITATIONS
454	Doping graphene with boron: a review of synthesis methods, physicochemical characterization, and emerging applications. Journal of Materials Chemistry A, 2016, 4, 5002-5025.	5.2	390
455	Rethinking Coal: Thin Films of Solution Processed Natural Carbon Nanoparticles for Electronic Devices. Nano Letters, 2016, 16, 2951-2957.	4.5	39
456	Synthesis of single layer graphene on Cu(111) by C $<$ sub $>60sub> supersonic molecular beam epitaxy. RSC Advances, 2016, 6, 37982-37993.$	1.7	31
457	Synthesis of tunable core–shell nanostructures based on TiO2-graphene architectures and their application in the photodegradation of rhodamine dyes. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 81, 326-333.	1.3	12
458	Photo-thermal oxidation of single layer graphene. RSC Advances, 2016, 6, 42545-42553.	1.7	32
459	Nanoscaled zero valent iron/graphene composite as an efficient adsorbent for Co(II) removal from aqueous solution. Journal of Colloid and Interface Science, 2016, 474, 119-128.	5.0	89
460	Chemical functionalization of N-doped carbon nanotubes: a powerful approach to cast light on the electrochemical role of specific N-functionalities in the oxygen reduction reaction. Catalysis Science and Technology, 2016, 6, 6226-6236.	2.1	31
461	Irradiation of graphene field effect transistors with highly charged ions. Nuclear Instruments & Methods in Physics Research B, 2016, 382, 71-75.	0.6	18
462	Synthesis of graphene oxide sheets with controlled sizes from sieved graphite flakes. Carbon, 2016, 110, 34-40.	5 . 4	77
463	From Seeds to Islands: Growth of Oxidized Graphene by Two-Photon Oxidation. Journal of Physical Chemistry C, 2016, 120, 22330-22341.	1.5	21
464	DNA self-assembly on graphene surface studied by SERS mapping. Carbon, 2016, 109, 363-372.	5.4	24
465	Radiation effects on two-dimensional materials. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 3065-3077.	0.8	48
468	The Origin of Improved Electrical Doubleâ€Layer Capacitance by Inclusion of Topological Defects and Dopants in Graphene for Supercapacitors. Angewandte Chemie - International Edition, 2016, 55, 13822-13827.	7.2	161
469	Activation of radical addition to graphene by chemical hydrogenation. RSC Advances, 2016, 6, 93356-93362.	1.7	9
470	The Origin of Improved Electrical Doubleâ€Layer Capacitance by Inclusion of Topological Defects and Dopants in Graphene for Supercapacitors. Angewandte Chemie, 2016, 128, 14026-14031.	1.6	13
471	Investigating change of properties in gallium ion irradiation patterned single-layer graphene. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 3514-3519.	0.9	3
472	Correlation between Chemical Dopants and Topological Defects in Catalytically Active Nanoporous Graphene. Advanced Materials, 2016, 28, 10644-10651.	11.1	110
473	Influence of Structural Defects on the Electrical Properties of Carbon Nanotubes and Their Polymer Composites. Advanced Engineering Materials, 2016, 18, 1897-1905.	1.6	6

#	Article	IF	CITATIONS
474	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.	0.8	11
476	Graphene/polyester staple composite for the removal of oils and organic solvents. Materials Research Express, 2016, 3, 065601.	0.8	4
477	Effects of Dispersion and Ultraviolet/Ozonolysis Functionalization of Graphite Nanoplatelets on the Electrical Properties of Epoxy Nanocomposites. Springer Proceedings in Physics, 2016, , 477-491.	0.1	11
478	Graphene under direct compression: Stress effects and interlayer coupling. Physica Status Solidi (B): Basic Research, 2016, 253, 2336-2341.	0.7	7
480	The effect of pressure on morphological features and quality of synthesized graphene. Research on Chemical Intermediates, 2016, 42, 8261-8272.	1.3	5
481	Mechanical properties of two-dimensional materials and heterostructures. Journal of Materials Research, 2016, 31, 832-844.	1.2	84
482	Oxoâ∈Functionalized Graphene as a Cell Membrane Carrier of Nucleic Acid Probes Controlled by Aging. Chemistry - A European Journal, 2016, 22, 15389-15395.	1.7	13
483	A high-performance current collector-free flexible in-plane micro-supercapacitor based on a highly conductive reduced graphene oxide film. Journal of Materials Chemistry A, 2016, 4, 16213-16218.	5. 2	86
485	Metrology for graphene and 2D materials. Measurement Science and Technology, 2016, 27, 092001.	1.4	13
486	Electrical control of intervalley scattering in graphene via the charge state of defects. Physical Review B, 2016, 93, .	1.1	18
487	Monitoring the operation of a graphene transistor in an integrated circuit by XPS. Organic Electronics, 2016, 37, 178-182.	1.4	7
488	Thermal conductivity of graphene with defects induced by electron beam irradiation. Nanoscale, 2016, 8, 14608-14616.	2.8	187
489	Graphene Synthesis., 2016,, 19-61.		2
490	Facile route to gold-graphene electrodes by exfoliation of natural graphite under electrochemical conditions. Carbon, 2016, 107, 823-830.	5.4	8
491	Ultrasensitive molecular sensor using N-doped graphene through enhanced Raman scattering. Science Advances, 2016, 2, e1600322.	4.7	174
492	Stable, efficient p-type doping of graphene by nitric acid. RSC Advances, 2016, 6, 113185-113192.	1.7	66
493	Band-like transport in highly crystalline graphene films from defective graphene oxides. Scientific Reports, 2016, 6, 28936.	1.6	68
494	Direct–Write Milling and Deposition with Noble Gases. Nanoscience and Technology, 2016, , 355-393.	1.5	19

#	ARTICLE	IF	CITATIONS
495	Control of the Strain in Chemical Vapor Deposition-Grown Graphene over Copper via H ₂ Flow. Journal of Physical Chemistry C, 2016, 120, 25572-25577.	1.5	15
496	Birch-Type Hydrogenation of Few-Layer Graphenes: Products and Mechanistic Implications. Journal of the American Chemical Society, 2016, 138, 14980-14986.	6.6	27
497	Graphene growth from reduced graphene oxide by chemical vapour deposition: seeded growth accompanied by restoration. Scientific Reports, 2016, 6, 22653.	1.6	15
498	Single-Step Synthesis of Halogenated Graphene through Electrochemical Exfoliation and Its Utilization as Electrodes for Zinc Bromine Redox Flow Battery. Journal of the Electrochemical Society, 2016, 163, A2899-A2910.	1.3	41
499	Determining the structure of carbon black using Raman spectroscopy and X-ray diffraction. Tanso, 2016, 2016, 132-138.	0.1	3
500	Poly(vinylferrocene)–Reduced Graphene Oxide as a High Power/High Capacity Cathodic Battery Material. Advanced Energy Materials, 2016, 6, 1600108.	10.2	48
501	Chemistry at the Edge of Graphene. ChemPhysChem, 2016, 17, 785-801.	1.0	120
502	Carrier Type Control of WSe ₂ Fieldâ€Effect Transistors by Thickness Modulation and MoO ₃ Layer Doping. Advanced Functional Materials, 2016, 26, 4223-4230.	7.8	167
503	Functionalizing Arrays of Transferred Monolayer Graphene on Insulating Surfaces by Bipolar Electrochemistry. Langmuir, 2016, 32, 6289-6296.	1.6	17
504	Mechanisms of graphene fabrication through plasma-induced layer-by-layer thinning. Carbon, 2016, 105, 496-509.	5.4	27
505	Simultaneous synthesis of nanodiamonds and graphene via plasma enhanced chemical vapor deposition (MW PE-CVD) on copper. SpringerPlus, 2016, 5, 568.	1.2	20
506	Electrochemical Functionalization of Graphene at the Nanoscale with Self-Assembling Diazonium Salts. ACS Nano, 2016, 10, 7125-7134.	7.3	132
507	Polymerâ€Derived Ceramic Microspheres with Controlled Morphology via Novel Phase Separationâ€Assisted Pyrolysis. Journal of the American Ceramic Society, 2016, 99, 1485-1493.	1.9	17
508	Tip-Enhanced Raman Spectroscopic Imaging of Individual Carbon Nanotubes with Subnanometer Resolution. Nano Letters, 2016, 16, 4040-4046.	4.5	83
509	Mono―and Ditopic Bisfunctionalization of Graphene. Angewandte Chemie - International Edition, 2016, 55, 5861-5864.	7.2	56
510	High-capacity pseudocapacitive Li storage on functional nanoporous carbons with parallel mesopores. Energy Storage Materials, 2016, 2, 14-20.	9.5	12
511	Basic Insights into Tunable Graphene Hydrogenation. Journal of the American Chemical Society, 2016, 138, 1647-1652.	6.6	45
512	Pressure induced structural transition of small carbon nano-onions. RSC Advances, 2016, 6, 2914-2919.	1.7	10

#	Article	IF	CITATIONS
513	Transfer of Chemically Modified Graphene with Retention of Functionality for Surface Engineering. Nano Letters, 2016, 16, 1455-1461.	4.5	19
514	Preparation of graphene oxide by dry planetary ball milling process from natural graphite. RSC Advances, 2016, 6, 12657-12668.	1.7	109
515	Theory of Graphene Raman Scattering. ACS Nano, 2016, 10, 2803-2818.	7.3	94
516	N-Doped Food-Grade-Derived 3D Mesoporous Foams as Metal-Free Systems for Catalysis. ACS Catalysis, 2016, 6, 1408-1419.	5.5	73
517	Bioengineering Applications of Carbon Nanostructures. Nanomedicine and Nanotoxicology, 2016, , .	0.1	5
518	Quantitative investigation of the fragmentation process and defect density evolution of oxo-functionalized graphene due to ultrasonication and milling. Carbon, 2016, 96, 897-903.	5.4	31
519	Effect of boron incorporation on the phase composition and high-temperature behavior of polymer-derived silicon carbide. Journal of the European Ceramic Society, 2016, 36, 967-977.	2.8	32
520	Incorporating nitrogen-doped graphene oxide dots with graphene oxide sheets for stable and effective hydrogen production through photocatalytic water decomposition. Applied Catalysis A: General, 2016, 521, 118-124.	2.2	30
521	Effect of layer number and layer stacking registry on the formation and quantification of defects in graphene. Carbon, 2016, 98, 592-598.	5.4	16
522	Electrochemical capacitors based on the composite of graphene and nickel foam. Science China Chemistry, 2016, 59, 405-411.	4.2	9
523	An integrated nanocarbon–cellulose membrane for solid-state supercapacitors. Science Bulletin, 2016, 61, 368-377.	4.3	4
524	Swift heavy ion induced modifications of single walled carbon nanotube thin films. Nuclear Instruments & Methods in Physics Research B, 2016, 373, 28-34.	0.6	2
525	Single-step synthesis of graphene quantum dots by femtosecond laser ablation of graphene oxide dispersions. Nanoscale, 2016, 8, 8863-8877.	2.8	54
526	Spectroscopic study of energetic helium-ion irradiation effects on nuclear graphite tiles. Nuclear Instruments & Methods in Physics Research B, 2016, 368, 5-8.	0.6	5
527	Quality of graphene on sapphire: long-range order from helium diffraction versus lattice defects from Raman spectroscopy. RSC Advances, 2016, 6, 21235-21245.	1.7	24
528	Synthesis and characterization of highly defective mesoporous carbon and its potential use in electrochemical sensors. RSC Advances, 2016, 6, 33419-33425.	1.7	17
529	Metal nanoparticles reveal the organization of single-walled carbon nanotubes in bundles. RSC Advances, 2016, 6, 15753-15758.	1.7	11
530	Graphene engineering by neon ion beams. Nanotechnology, 2016, 27, 125302.	1.3	21

#	Article	IF	Citations
531	Impact of crystalline quality on neuronal affinity of pristine graphene. Biomaterials, 2016, 86, 33-41.	5.7	56
532	Programmably Shaped Carbon Nanostructure from Shape-Conserving Carbonization of DNA. ACS Nano, 2016, 10, 3069-3077.	7. 3	37
533	Spectroscopic metrics allow in situ measurement of mean size and thickness of liquid-exfoliated few-layer graphene nanosheets. Nanoscale, 2016, 8, 4311-4323.	2.8	194
534	Raman Fingerprints of Atomically Precise Graphene Nanoribbons. Nano Letters, 2016, 16, 3442-3447.	4.5	83
535	Nitrogen-Doped Graphene and Twisted Bilayer Graphene <i>via</i> Hyperthermal Ion Implantation with Depth Control. ACS Nano, 2016, 10, 3714-3722.	7.3	65
536	High quality reduced graphene oxide flakes by fast kinetically controlled and clean indirect UV-induced radical reduction. Nanoscale, 2016, 8, 7572-7579.	2.8	27
537	lonic liquid-assisted synthesis of dual-doped graphene as efficient electrocatalysts for oxygen reduction. Carbon, 2016, 102, 58-65.	5.4	50
538	The green reduction of graphene oxide. RSC Advances, 2016, 6, 27807-27828.	1.7	235
539	Comparative study of irradiation effects in graphite and graphene induced by swift heavy ions and highly charged ions. Carbon, 2016, 100, 16-26.	5.4	48
540	Direct delamination of graphite ore into defect-free graphene using a biphasic solvent system under pressurized ultrasound. RSC Advances, 2016, 6, 6008-6015.	1.7	11
541	Chemical Mass Production of Graphene Nanoplatelets in â^1/4100% Yield. ACS Nano, 2016, 10, 274-279.	7.3	139
542	UV-assisted synthesis of reduced graphene oxide–ZnO nanorod composites immobilized on Zn foil with enhanced photocatalytic performance. Research on Chemical Intermediates, 2016, 42, 4479-4496.	1.3	57
543	Effect of the morphology of thermally reduced graphite oxide on the mechanical and electrical properties of natural rubber nanocomposites. Composites Part B: Engineering, 2016, 87, 350-356.	5.9	75
544	Catalytic etching of monolayer graphene at low temperature via carbon oxidation. Physical Chemistry Chemical Physics, 2016, 18, 101-109.	1.3	16
545	Morphology and electrical conductivity of polyethylene/polypropylene blend filled with thermally reduced graphene oxide and surfactant exfoliated graphene. Polymer Composites, 2017, 38, 2098-2105.	2.3	15
547	Influence of removing PMMA residues on surface of CVD graphene using a contact-mode atomic force microscope. RSC Advances, 2017, 7, 6943-6949.	1.7	68
548	Syngas conversion to higher alcohols: A comparative study of acid and base-treated mesoporous carbon-supported KCoRhMoS2 catalysts. Catalysis Today, 2017, 291, 106-123.	2.2	5
549	Chemical composition of two-photon oxidized graphene. Carbon, 2017, 115, 77-82.	5.4	36

#	Article	IF	CITATIONS
550	Metal organic framework derived NiFe@N-doped graphene microtube composites for hydrogen evolution catalyst. Carbon, 2017, 116, 68-76.	5.4	77
551	Enhancement of graphene thermoelectric performance through defect engineering. 2D Materials, 2017, 4, 025019.	2.0	113
552	Structural, chemical and electrical characterisation of conductive graphene-polymer composite films. Applied Surface Science, 2017, 403, 403-412.	3.1	25
553	Surface functionalization of epitaxial graphene on SiC by ion irradiation for gas sensing application. Applied Surface Science, 2017, 403, 707-716.	3.1	24
554	Additivity of kinetic and potential energy contributions in modification of graphene supported on SiO2. Nuclear Instruments & Methods in Physics Research B, 2017, 397, 62-66.	0.6	2
555	Graphene devices with bottom-up contacts by area-selective atomic layer deposition. 2D Materials, 2017, 4, 025046.	2.0	15
556	Minimizing sputter-induced damage during deposition of WS2 onto graphene. Applied Physics Letters, 2017, 110 , .	1.5	8
557	Controlled density of defects assisted perforated structure in reduced graphene oxide nanosheets-palladium hybrids for enhanced ethanol electro-oxidation. Carbon, 2017, 117, 137-146.	5.4	65
558	Facile Synthesis of 3D Anode Assembly with Si Nanoparticles Sealed in Highly Pure Few Layer Graphene Deposited on Porous Current Collector for Long Life Li″on Battery. Advanced Materials Interfaces, 2017, 4, 1601043.	1.9	65
559	Low-temperature growth of graphene on iron substrate by molecular beam epitaxy. Thin Solid Films, 2017, 627, 39-43.	0.8	15
560	Ion beam modification of two-dimensional materials: Characterization, properties, and applications. Applied Physics Reviews, 2017, 4, 011103.	5.5	168
561	Realization of continuous Zachariasen carbon monolayer. Science Advances, 2017, 3, e1601821.	4.7	46
562	Spectroscopic investigation of defects in two-dimensional materials. Nanophotonics, 2017, 6, 1219-1237.	2.9	94
563	Structure and electron field emission properties of ion beam reduced graphene oxide sheets. Carbon, 2017, 119, 172-178.	5.4	27
564	Exploring molecular and spin interactions of Tellurium adatom in reduced graphene oxide. Materials Chemistry and Physics, 2017, 195, 82-87.	2.0	6
565	Critical influence of reduced graphene oxide mediated binding of M (M = Mg, Mn) with Co ions, chemical stability and charge storability enhancements of spinal-type hierarchical MCo 2 O 4 nanostructures. Electrochimica Acta, 2017, 243, 119-128.	2.6	60
566	Graphene defects induced by ion beam. Nuclear Instruments & Methods in Physics Research B, 2017, 408, 228-234.	0.6	6
568	Structural Modification of Single-Layer Graphene Under Laser Irradiation Featured by Micro-Raman Spectroscopy. Nanoscale Research Letters, 2017, 12, 297.	3.1	30

#	Article	IF	CITATIONS
569	Fluorination of suspended graphene. Nano Research, 2017, 10, 3151-3163.	5.8	25
570	Highâ€Power Graphene–Carbon Nanotube Hybrid Supercapacitors. ChemNanoMat, 2017, 3, 436-446.	1.5	39
571	Hydrazine treatment improves conductivity of bacterial cellulose/graphene nanocomposites obtained by a novel processing method. Carbohydrate Polymers, 2017, 171, 68-76.	5.1	38
572	Modification of graphene by ion beam. Nuclear Instruments & Methods in Physics Research B, 2017, 406, 683-688.	0.6	28
573	Fermi-Level Dependence of the Chemical Functionalization of Graphene with Benzoyl Peroxide. Journal of Physical Chemistry C, 2017, 121, 10546-10551.	1.5	32
574	Hierarchical multiscale modeling of the effect of carbon nanotube damage on the elastic properties of polymer nanocomposites. Journal of Mechanics of Materials and Structures, 2017, 12, 263-287.	0.4	4
575	Thermische Disproportionierung von Oxoâ€funktionalisiertem Graphen. Angewandte Chemie, 2017, 129, 9350-9353.	1.6	8
576	Bromate inhibition by reduced graphene oxide in thermal/PMS process. Water Research, 2017, 122, 701-707.	5.3	44
577	Grapheneâ€Based Organic Electrochemical Capacitors for AC Line Filtering. Advanced Energy Materials, 2017, 7, 1700591.	10.2	64
578	Effects of butanol isomers additions on soot nanostructure and reactivity in normal and inverse ethylene diffusion flames. Fuel, 2017, 205, 109-129.	3.4	77
579	Fabrication, Pressure Testing, and Nanopore Formation of Single-Layer Graphene Membranes. Journal of Physical Chemistry C, 2017, 121, 14312-14321.	1.5	39
580	Experimental review: chemical reduction of graphene oxide (GO) to reduced graphene oxide (rGO) by aqueous chemistry. Nanoscale, 2017, 9, 9562-9571.	2.8	391
581	In situ grown cobalt selenide/graphene nanocomposite counter electrodes for enhanced dye-sensitized solar cell performance. Journal of Materials Chemistry A, 2017, 5, 14583-14594.	5.2	84
582	Phosphorus and nitrogen-containing carbons obtained by the carbonization of conducting polyaniline complex with phosphites. Electrochimica Acta, 2017, 246, 443-450.	2.6	19
583	Thermal Disproportionation of Oxoâ€Functionalized Graphene. Angewandte Chemie - International Edition, 2017, 56, 9222-9225.	7.2	38
584	Enhancing the stiffness of vertical graphene sheets through ion beam irradiation and fluorination. Nanotechnology, 2017, 28, 295701.	1.3	13
585	Informing rational design of graphene oxide through surface chemistry manipulations: properties governing electrochemical and biological activities. Green Chemistry, 2017, 19, 2826-2838.	4.6	19
586	Boron-Enhanced Growth of Micron-Scale Carbon-Based Nanowalls: A Route toward High Rates of Electrochemical Biosensing. ACS Applied Materials & Samp; Interfaces, 2017, 9, 12982-12992.	4.0	7 5

#	Article	IF	Citations
587	Effect of annealing on Raman spectra of monolayer graphene samples gradually disordered by ion irradiation. Journal of Applied Physics, 2017, 121, 114301.	1.1	19
588	Degree of functionalisation dependence of individual Raman intensities in covalent graphene derivatives. Scientific Reports, 2017, 7, 45165.	1.6	44
589	Comparative characterization of graphene grown by chemical vapor deposition, transferred to nonconductive substrate, and subjected to Ar ion bombardment using X-ray photoelectron and Raman spectroscopies. Diamond and Related Materials, 2017, 76, 14-20.	1.8	12
590	Antiresonances in the Mid-Infrared Vibrational Spectrum of Functionalized Graphene. Journal of Physical Chemistry C, 2017, 121, 9053-9062.	1.5	7
591	Sodide and Organic Halides Effect Covalent Functionalization of Single-Layer and Bilayer Graphene. Journal of the American Chemical Society, 2017, 139, 4202-4210.	6.6	27
592	Synthesis, characterization and theoretical studies on novel organic–inorganic hybrid ion–gel polymer thin films from a γ-Fe ₂ O ₃ doped polyvinylpyrrolidone–N-butylpyridinium tetrafluoroborate composite via intramolecular thermal polymerization. RSC Advances, 2017, 7, 16623-16636.	1.7	8
593	Defect concentration in nitrogen-doped graphene grown on Cu substrate: A thickness effect. Physica B: Condensed Matter, 2017, 513, 62-68.	1.3	3
594	Disentangling contributions of point and line defects in the Raman spectra of graphene-related materials. 2D Materials, 2017, 4, 025039.	2.0	146
595	Structural and mechanical properties of free-standing multiwalled carbon nanotube paper prepared by an aqueous mediated process. Journal of Materials Science, 2017, 52, 7503-7515.	1.7	17
596	Unifying Principles of the Reductive Covalent Graphene Functionalization. Journal of the American Chemical Society, 2017, 139, 5175-5182.	6.6	54
597	Enhanced organophilic separations with mixed matrix membranes of polymers of intrinsic microporosity and graphene-like fillers. Journal of Membrane Science, 2017, 526, 437-449.	4.1	57
598	Creating nanoporous graphene with swift heavy ions. Carbon, 2017, 114, 511-518.	5.4	52
599	Palladium nanoparticles supported on graphene sheets incorporating boron oxides (BxOy) for enhanced formic acid oxidation. Electrochemistry Communications, 2017, 74, 48-52.	2.3	14
600	A highly defective mesoporous carbon – ionic liquid paste electrode toward the sensitive electrochemical determination of rutin. Analytical Methods, 2017, 9, 84-93.	1.3	13
601	Highly defective mesoporous carbon – ionic liquid paste electrode as sensitive voltammetric sensor for determination of chlorogenic acid in herbal extracts. Sensors and Actuators B: Chemical, 2017, 243, 838-846.	4.0	45
602	Focused electron beam based direct-write fabrication of graphene and amorphous carbon from oxo-functionalized graphene on silicon dioxide. Physical Chemistry Chemical Physics, 2017, 19, 2683-2686.	1.3	3
603	Large area nanometer thickness graphite freestanding film without transfer process. Chemical Physics Letters, 2017, 690, 101-104.	1.2	7
604	Functional chemically modified graphene film: microstructure and electrical transport behavior. Journal Physics D: Applied Physics, 2017, 50, 435101.	1.3	13

#	Article	IF	CITATIONS
605	Dependence of the features of diamondlike carbon films on their synthesis methods, as analyzed by Raman spectroscopy. Surface and Coatings Technology, 2017, 330, 26-33.	2.2	8
606	Two-Step Electrochemical Intercalation and Oxidation of Graphite for the Mass Production of Graphene Oxide. Journal of the American Chemical Society, 2017, 139, 17446-17456.	6.6	211
607	Investigation of the surface plasmon polariton and electrochemical properties of covalent and non-covalent functionalized reduced graphene oxide. Physical Chemistry Chemical Physics, 2017, 19, 28588-28595.	1.3	19
608	Quantifying defect-enhanced chemical functionalization of single-layer graphene and its application in supramolecular assembly. Journal of Materials Chemistry A, 2017, 5, 24257-24262.	5.2	12
609	Reactive carbons from Kraft lignin pyrolysis: Stabilization of peroxyl radicals at carbon/silica interface. Journal of Analytical and Applied Pyrolysis, 2017, 128, 346-352.	2.6	8
610	Controlling Defect and Dopant Concentrations in Graphene by Remote Plasma Treatments. Physica Status Solidi (B): Basic Research, 2017, 254, 1700214.	0.7	11
611	Fermi surface map of large-scale single-orientation graphene on SiO ₂ . Journal of Physics Condensed Matter, 2017, 29, 475001.	0.7	5
612	Molecular and electronic structures and magnetic properties of multilayer graphene nanoclusters and their changes under the influence of adsorbed molecules. Russian Chemical Bulletin, 2017, 66, 837-848.	0.4	9
613	Influence of the reduction strategy in the synthesis of reduced graphene oxide. Advanced Powder Technology, 2017, 28, 3195-3203.	2.0	116
614	Plasmon-Induced Selective Oxidation Reaction at Single-Walled Carbon Nanotubes. ACS Applied Materials & Samp; Interfaces, 2017, 9, 38992-38998.	4.0	4
615	Raman Spectroscopy of Lithographically Defined Graphene Nanoribbons ―Influence of Size and Defects. Annalen Der Physik, 2017, 529, 1700167.	0.9	5
616	Tuning the aggregation of graphene oxide dispersions to synthesize elastic, low density graphene aerogels. Journal of Materials Chemistry A, 2017, 5, 23123-23130.	5.2	55
617	Vacancyâ€Controlled Contact Friction in Graphene. Advanced Functional Materials, 2017, 27, 1702832.	7.8	21
618	Capitalizing on the molybdenum disulfide/graphene synergy to produce mechanical enhanced flame retardant ethylene-vinyl acetate composites with low aluminum hydroxide loading. Polymer Degradation and Stability, 2017, 144, 155-166.	2.7	43
619	Evolution of the Raman Spectrum with the Chemical Composition of Graphene Oxide. Journal of Physical Chemistry C, 2017, 121, 20489-20497.	1.5	344
620	High yield, solid exfoliation and liquid dispersion of graphite driven by a donor-acceptor interaction. Carbon, 2017, 123, 695-707.	5.4	26
621	Potential effect on the interaction of highly charged ion with graphene. Nuclear Instruments & Methods in Physics Research B, 2017, 407, 291-296.	0.6	3
622	Structural factors controlling size reduction of graphene oxide in liquid processing. Carbon, 2017, 125, 360-369.	5.4	13

#	Article	IF	CITATIONS
623	The influence of an adsorbate and edge covalent bonds on topological zero modes in few-layer nanographenes. Physical Chemistry Chemical Physics, 2017, 19, 26957-26968.	1.3	6
624	Optical Forging of Graphene into Three-Dimensional Shapes. Nano Letters, 2017, 17, 6469-6474.	4.5	29
625	White light induced covalent modification of graphene using a phenazine dye. Chemical Communications, 2017, 53, 10715-10718.	2.2	11
626	Freestanding and flexible graphene papers as bioelectrochemical cathode for selective and efficient CO2 conversion. Scientific Reports, 2017, 7, 9107.	1.6	55
627	Transformation of multiwall carbon nanotubes to onions with layers cross-linked by sp3 bonds under high pressure and shear deformation. AIP Advances, 2017, 7, 085218.	0.6	13
628	Optical Characterization of Graphene and Its Derivatives: An Experimentalist's Perspective. , 2017, , 27-59.		2
629	Negligible Electronic Contribution to Heat Transfer across Intrinsic Metal/Graphene Interfaces. Advanced Materials Interfaces, 2017, 4, 1700559.	1.9	22
630	Mapping the electrical properties of large-area graphene. 2D Materials, 2017, 4, 042003.	2.0	113
631	Raman and X-Ray photoelectron spectroscopic studies of graphene devices for identification of doping. Applied Surface Science, 2017, 425, 1130-1137.	3.1	9
632	Phenomenological Model for Defect Interactions in Irradiated Functional Materials. Scientific Reports, 2017, 7, 5308.	1.6	10
633	Revealing impact of plasma condition on graphite nanostructures and effective charge doping of graphene. Carbon, 2017, 123, 174-185.	5.4	7
634	Graphene Mechanical Properties. , 0, , 52-70.		0
635	Nanometer size hole fabrication in 2d ultrathin films with cluster ion beams. AIP Advances, 2017, 7, 075014.	0.6	3
636	A transistor based on 2D material and silicon junction. Journal of the Korean Physical Society, 2017, 71, 92-100.	0.3	1
637	Strengthening Nickel by In Situ Graphene Synthesis. Advanced Engineering Materials, 2017, 19, 1700475.	1.6	8
638	Reversibility of Grapheneâ€Enhanced Raman Scattering with Fluorinated Graphene. Physica Status Solidi (B): Basic Research, 2017, 254, 1700177.	0.7	4
639	Fabrication and characterization of graphene based film. , 2017, , .		1
640	Near-Field Raman Enhancement of Single Molecules and Point Scatterers. Journal of Physical Chemistry C, 2017, 121, 18800-18806.	1.5	3

#	Article	IF	CITATIONS
641	Effect of defect-induced carrier scattering on the thermoelectric power of graphene. Applied Physics Letters, 2017, 110, 263501.	1.5	14
642	Vibrations in Graphene. , 2017, , 71-89.		7
643	Effect of the graphite oxide composition on the structure of products obtained by sulfuric acid treatment at elevated temperatures. Journal of Structural Chemistry, 2017, 58, 1180-1186.	0.3	11
644	The role of surface chemistry in the charge storage properties of graphene oxide. Electrochimica Acta, 2017, 258, 1228-1243.	2.6	39
645	Very Gradual and Anomalous Oxidation at the Interface of Hydrogen-Intercalated Graphene/4H-SiC(0001). Journal of Physical Chemistry C, 2017, 121, 26389-26396.	1.5	1
646	Novel Silicon Doped Tin Oxide–Carbon Microspheres as Anode Material for Lithium Ion Batteries: The Multiple Effects Exerted by Doped Si. Small, 2017, 13, 1702614.	5.2	26
647	Protection from Below: Stabilizing Hydrogenated Graphene Using Graphene Underlayers. Langmuir, 2017, 33, 13749-13756.	1.6	12
648	Process optimization of graphene growth in a roll-to-roll plasma CVD system. AIP Advances, 2017, 7, .	0.6	33
649	Hypochlorite degrades 2D graphene oxide sheets faster than 1D oxidised carbon nanotubes and nanohorns. Npj 2D Materials and Applications, 2017, 1 , .	3.9	26
650	A graphene-like membrane with an ultrahigh water flux for desalination. Nanoscale, 2017, 9, 18951-18958.	2.8	46
651	How Reliable Are Raman Spectroscopy Measurements of Graphene Oxide?. Journal of Physical Chemistry C, 2017, 121, 16584-16591.	1.5	32
652	Chemical functionalization and characterization of graphene-based materials. Chemical Society Reviews, 2017, 46, 4464-4500.	18.7	356
653	Fabrication of nanoporous graphene/polymer composite membranes. Nanoscale, 2017, 9, 10487-10493.	2.8	55
654	Transformation of multi walled carbon nanotubes irradiated by swift heavy ions. Nuclear Instruments & Methods in Physics Research B, 2017, 407, 172-179.	0.6	6
655	Self-assembly of defect-rich graphene oxide nanosheets with Na ₂ Ti ₃ O ₇ nanowires and their superior absorptive capacity to toxic dyes. Nanotechnology, 2017, 28, 245601.	1.3	2
656	Fundamental transport mechanisms, fabrication and potential applications of nanoporous atomically thin membranes. Nature Nanotechnology, 2017, 12, 509-522.	15.6	596
657	Evolution, structure, and electrical performance of voltage-reduced graphene oxide. FlatChem, 2017, 1, 42-51.	2.8	32
658	Computed electronic structure of polynuclear aromatic hydrocarbon agglomerates. Proceedings of the Combustion Institute, 2017, 36, 957-964.	2.4	39

#	Article	IF	CITATIONS
659	Modeling Fe/N/C Catalysts in Monolayer Graphene. ACS Catalysis, 2017, 7, 139-145.	5. 5	100
660	Graphene oxide nano-domain formation via wet chemical oxidation of graphene. Carbon, 2017, 111, 822-827.	5.4	35
661	Water-soluble graphene dispersion functionalized by Diels–Alder cycloaddition reaction. Journal of the Iranian Chemical Society, 2017, 14, 89-93.	1.2	9
662	Relationships between the optical and Raman behavior of van Hove singularity in twisted bi- and fewlayer graphenes and environmental effects. Carbon, 2017, 111, 238-247.	5.4	10
663	EDOT polymerization at photolithographically patterned functionalized graphene. Carbon, 2017, 113, 33-39.	5.4	9
664	Synthesis and remarkable capacitive performance of reduced graphene oxide/silver/nickel-cobalt sulfide ternary nanocomposites. Chemical Engineering Journal, 2017, 308, 184-192.	6.6	54
665	2. Controlled Functionalization of Graphene by Oxo-addends. , 2017, , .		1
666	Robust mapping of electrical properties of graphene from terahertz time-domain spectroscopy with timing jitter correction. Optics Express, 2017, 25, 2725.	1.7	32
667	Near-field coherence reveals defect densities in atomic monolayers. Optica, 2017, 4, 527.	4.8	4
668	A Guide to and Review of the Use of Multiwavelength Raman Spectroscopy for Characterizing Defective Aromatic Carbon Solids: from Graphene to Amorphous Carbons. Coatings, 2017, 7, 153.	1.2	272
669	Growth Study and Characterization of Single-Layer Graphene Structures Deposited on Copper Substrate by Chemical Vapour Deposition. , 0, , .		0
670	Controlled Functionalization of Graphene by Oxo-addends. ChemistrySelect, 2017, 2, .	0.7	2
671	Interfacial Strength and Surface Damage Characteristics of Atomically Thin h-BN, MoS ₂ , and Graphene. ACS Applied Materials & Interfaces, 2018, 10, 9164-9177.	4.0	45
672	Characterization of Graphene by Confocal Raman Spectroscopy. Springer Series in Surface Sciences, 2018, , 177-194.	0.3	1
673	Influence of postâ€annealing on a diamondlike carbon film analyzed by Raman spectroscopy. Surface and Interface Analysis, 2018, 50, 441-447.	0.8	8
674	Achieving tunability of effective electromagnetic wave absorption between the whole X-band and Ku-band via adjusting PPy loading in SiC nanowires/graphene hybrid foam. Carbon, 2018, 132, 430-443.	5.4	121
675	Defective Carbons Derived from Macadamia Nut Shell Biomass for Efficient Oxygen Reduction and Supercapacitors. ChemElectroChem, 2018, 5, 1874-1879.	1.7	47
676	Effect of friction on oxidative graphite intercalation and high-quality graphene formation. Nature Communications, 2018, 9, 836.	5.8	79

#	Article	IF	CITATIONS
677	Spatially-resolved isotopic study of carbon trapped in â^1/43.43†Ga Strelley Pool Formation stromatolites. Geochimica Et Cosmochimica Acta, 2018, 223, 21-35.	1.6	26
678	A photochemical approach for a fast and self-limited covalent modification of surface supported graphene with photoactive dyes. Nanotechnology, 2018, 29, 275705.	1.3	6
679	Catalytic graphitization in nanocast carbon monoliths by iron, cobalt and nickel nanoparticles. Carbon, 2018, 134, 452-463.	5 . 4	132
680	Defect electrocatalytic mechanism: concept, topological structure and perspective. Materials Chemistry Frontiers, 2018, 2, 1250-1268.	3.2	119
681	Low temperature preparation of pore structure controllable graphene for high volumetric performance supercapacitors. Electrochimica Acta, 2018, 273, 181-190.	2.6	17
682	Formation of nanocrystalline and amorphous carbon by high fluence swift heavy ion irradiation of a plasma polymerized polyterpenol thin film precursor. Journal of Applied Polymer Science, 2018, 135, 46498.	1.3	2
683	Stable Dispersions of Covalently Tethered Polymer Improved Graphene Oxide Nanoconjugates as an Effective Vector for siRNA Delivery. ACS Applied Materials & Interfaces, 2018, 10, 14577-14593.	4.0	45
684	Structural defects controlled oxidation of UV irradiated graphene-based field effect transistors. Diamond and Related Materials, 2018, 85, 112-116.	1.8	4
685	Scalable Synthesis of Sub-Nanosized Platinum-Reduced Graphene Oxide Composite by an Ultraprecise Photocatalytic Method. ACS Sustainable Chemistry and Engineering, 2018, 6, 3773-3782.	3.2	26
686	Modified electrochemical charge storage properties of h-BN/rGO superlattice through the transition from n to p type semiconductor by fluorine doping. Chemical Engineering Journal, 2018, 339, 334-345.	6.6	27
687	Efficient large-scale preparation of defect-free few-layer graphene using a conjugated ionic liquid as green media and its polyetherimide composite. Composites Science and Technology, 2018, 157, 144-151.	3.8	11
688	General Raman-based method for evaluating the carrier mobilities of chemical vapor deposited graphene. Carbon, 2018, 132, 263-270.	5 . 4	15
689	Chemical Approach to Ultrastiff, Strong, and Environmentally Stable Graphene Films. ACS Applied Materials & Samp; Interfaces, 2018, 10, 5812-5818.	4.0	20
690	Creation of nanosized holes in graphene planes for improvement of rate capability of lithium-ion batteries. Nanotechnology, 2018, 29, 134001.	1.3	40
691	Low-temperature thermal reduction of graphene oxide: <i>In situ</i> correlative structural, thermal desorption, and electrical transport measurements. Applied Physics Letters, 2018, 112, .	1.5	42
692	Selective Proton/Deuteron Transport through Nafion Graphene Nafion Sandwich Structures at High Current Density. Journal of the American Chemical Society, 2018, 140, 1743-1752.	6.6	7 5
693	Silicon-carbon composites for lithium-ion batteries: A comparative study of different carbon deposition approaches. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, .	0.6	15
694	Raman spectroscopy of graphene-based materials and its applications in related devices. Chemical Society Reviews, 2018, 47, 1822-1873.	18.7	1,274

#	Article	IF	CITATIONS
695	Sooting structure of a premixed toluene-doped methane flame. Combustion and Flame, 2018, 190, 252-259.	2.8	16
696	Nanographene Aerogels: Size Effect of the Precursor Graphene Oxide on Gelation Process and Electrochemical Properties. ChemNanoMat, 2018, 4, 338-342.	1.5	4
697	Defects in Graphene Oxide as Structural Motifs. ChemNanoMat, 2018, 4, 244-252.	1.5	91
698	Tuning the Doping Types in Graphene Sheets by N Monoelement. Nano Letters, 2018, 18, 386-394.	4.5	44
699	Second-Order Raman Scattering in Exfoliated Black Phosphorus. Nano Letters, 2018, 18, 1018-1027.	4.5	32
700	Synthesis of graphene-based photocatalysts for water splitting by laser-induced doping with ionic liquids. Carbon, 2018, 130, 48-58.	5. 4	26
701	CO Oxidation Catalyzed by a Single Ti Atom Supported on Divacancy Defective Graphene: A Dispersionâ€Corrected DFT Study. ChemistrySelect, 2018, 3, 4471-4479.	0.7	17
702	Activity Origins in Nanocarbons for the Electrocatalytic Hydrogen Evolution Reaction. Small, 2018, 14, e1800235.	5.2	68
703	Engineering active sites on reduced graphene oxide by hydrogen plasma irradiation: mimicking bifunctional metal/supported catalysts in hydrogenation reactions. Green Chemistry, 2018, 20, 2611-2623.	4.6	21
704	Formation process of graphite film on Ni substrate with improved thickness uniformity through precipitation control. Chemical Physics Letters, 2018, 698, 157-162.	1.2	6
705	Ultraviolet-light-driven carrier density modulation of graphene based field effect transistors under oxygen- and argon atmosphere. Applied Surface Science, 2018, 451, 40-44.	3.1	6
706	Structural Evolution of Hydrothermally Derived Reduced Graphene Oxide. Scientific Reports, 2018, 8, 6849.	1.6	196
707	A novel environmental fate of graphene oxide: Biodegradation by a bacterium Labrys sp. WJW to support growth. Water Research, 2018, 143, 260-269.	5.3	35
708	The phonon confinement effect in two-dimensional nanocrystals of black phosphorus with anisotropic phonon dispersions. Nanoscale, 2018, 10, 8704-8711.	2.8	21
709	Intercalation of Bi nanoparticles into graphite results in an ultra-fast and ultra-stable anode material for sodium-ion batteries. Energy and Environmental Science, 2018, 11, 1218-1225.	15.6	212
710	The Effect of Low Energy Nitrogen Ion Implantation on Graphene Nanosheets. Electronic Materials Letters, 2018, 14, 488-498.	1.0	7
711	Electrical Transport Degradation of Chemically Doped Electronic-Type-Separated Single-Wall Carbon Nanotubes From Radiation-Induced Defects. IEEE Transactions on Nuclear Science, 2018, 65, 573-578.	1.2	1
712	Cobalt nanoparticles encapsulated in nitrogen-rich carbon nanotubes as efficient catalysts for organic pollutants degradation via sulfite activation. Journal of Hazardous Materials, 2018, 352, 148-156.	6.5	68

#	Article	IF	CITATIONS
713	Spotting the differences in two-dimensional materials $\hat{a} \in$ the Raman scattering perspective. Chemical Society Reviews, 2018, 47, 3217-3240.	18.7	71
714	Investigation of tip sonication effects on structural quality of graphene nanoplatelets (GNPs) for superior solvent dispersion. Ultrasonics Sonochemistry, 2018, 45, 133-149.	3.8	89
715	Tunable quantum interference in bilayer graphene in double-resonant Raman scattering. Carbon, 2018, 133, 254-259.	5.4	4
716	Characterisation, coverage, and orientation of functionalised graphene using sum-frequency generation spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 8962-8967.	1.3	9
717	Multifunctional anisotropic flexible cycloaliphatic epoxy resin nanocomposites reinforced by aligned graphite flake with non-covalent biomimetic functionalization. Composites Part A: Applied Science and Manufacturing, 2018, 109, 472-480.	3.8	28
718	Biocompatible reinforcement of poly(Lactic acid) with graphene nanoplatelets. Polymer Composites, 2018, 39, E308.	2.3	35
719	Enhanced Electric Tuning of Raman Scattering in Monolayer Graphene by Gold NanoRods. Plasmonics, 2018, 13, 275-280.	1.8	2
720	Effect of the oxidation degree on self-assembly, adsorption and barrier properties of nano-graphene. Microporous and Mesoporous Materials, 2018, 260, 102-115.	2.2	32
721	Comparative study of different scalable routes to synthesize graphene oxide and reduced graphene oxide. Materials Chemistry and Physics, 2018, 203, 284-292.	2.0	92
722	High flux and fouling resistant flat sheet polyethersulfone membranes incorporated with graphene oxide for ultrafiltration applications. Chemical Engineering Journal, 2018, 334, 789-799.	6.6	183
723	Highly anisotropic graphene/boron nitride hybrid aerogels with long-range ordered architecture and moderate density for highly thermally conductive composites. Carbon, 2018, 126, 119-127.	5 . 4	189
724	Tipâ€enhanced Raman scattering of graphene. Journal of Raman Spectroscopy, 2018, 49, 157-167.	1.2	23
725	Applications of Raman spectroscopy in grapheneâ€related materials and the development of parameterized PCA for largeâ€scale data analysis. Journal of Raman Spectroscopy, 2018, 49, 54-65.	1.2	28
726	Analysis of Defectâ€Free Graphene Blocks in Nitrogenâ€Doped Bambooâ€Like Carbon Nanotubes. Physica Status Solidi (B): Basic Research, 2018, 255, 1700253.	0.7	9
727	Annual-ring shaped graphene as a free-standing field emitter with high performance. Materials Letters, 2018, 210, 133-135.	1.3	2
728	Ramanâ€based technique for measuring thermal conductivity of graphene and related materials. Journal of Raman Spectroscopy, 2018, 49, 106-120.	1.2	119
729	Chemical structural analysis of diamondlike carbon films: II. Raman analysis. Surface Science, 2018, 668, 36-41.	0.8	20
730	Hyperspectral Raman imaging using Bragg tunable filters of graphene and other lowâ€dimensional materials. Journal of Raman Spectroscopy, 2018, 49, 174-182.	1.2	32

#	ARTICLE	IF	CITATIONS
731	Reduction of Graphene Oxide Thin Films by Cobaltocene and Decamethylcobaltocene. ACS Applied Materials & Samp; Interfaces, 2018, 10, 2004-2015.	4.0	22
732	Engineering of electronic properties of single layer graphene by swift heavy ion irradiation. Journal of Applied Physics, 2018, 123, .	1.1	30
733	Irradiation-induced defect formation and damage accumulation in single crystal CeO2. Journal of Nuclear Materials, 2018, 498, 400-408.	1.3	19
734	Structural evolution of defective graphene under heat treatment and gamma irradiation. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 97, 151-154.	1.3	10
735	Engineering graphene properties by modulated plasma treatments. Carbon, 2018, 129, 869-877.	5.4	24
736	Chemical structure and electrical characteristics of diamondlike carbon films. Diamond and Related Materials, 2018, 81, 16-26.	1.8	14
737	Optical and Electrical Properties of Graphene Oxide. Optics and Spectroscopy (English Translation of) Tj ETQq0 (0 rgBT /0	Overlock 10 T
738	Sensing Characteristic Enhancement of Oxygen Plasma Treated Graphene. , 2018, , .		0
739	Highly Sensitive Ion Detection With Graphene/Si Schottky Junction Sensors., 2018,,.		0
740	Disorder in H ⁺ -irradiated HOPG: effect of impinging energy and dose on Raman D-band splitting and surface topography. Beilstein Journal of Nanotechnology, 2018, 9, 2708-2717.	1.5	4
741	Surface-Enhanced Raman Spectroscopy Characterization of Pristine and Functionalized Carbon Nanotubes and Graphene. , 0 , , .		6
742	Graphene oxide–phenalenyl composite: transition metal-free recyclable and catalytic C–H functionalization. Chemical Communications, 2018, 54, 13220-13223.	2.2	10
743	Treatment of graphene films in the early and late afterglows of N ₂ plasmas: comparison of the defect generation and N-incorporation dynamics. Plasma Sources Science and Technology, 2018, 27, 124004.	1.3	11
744	Driving chemical interactions at graphene-germanium van der Waals interfaces via thermal annealing. Applied Physics Letters, 2018, 113, .	1.5	9
745	Distinguishing Zigzag and Armchair Edges on Graphene Nanoribbons by X-ray Photoelectron and Raman Spectroscopies. ACS Omega, 2018, 3, 17789-17796.	1.6	58
746	Laser-Based Texturing of Graphene to Locally Tune Electrical Potential and Surface Chemistry. ACS Omega, 2018, 3, 17000-17009.	1.6	11
747	Tailoring Mechanical Properties of Suspended Graphene by Energetic Ion Beams., 2018,,.		1
748	Basic Concepts and Recent Advances of Crystallographic Orientation Determination of Graphene by Raman Spectroscopy. Crystals, 2018, 8, 375.	1.0	21

#	Article	IF	CITATIONS
749	Electrochemical Modification of Large Area Graphene and Characterization by Vibrational Spectroscopy., 2018,, 80-94.		4
750	Enhancement of thermoelectric figure-of-merit of graphene upon BN-doping and sample length reduction. Journal of Applied Physics, 2018, 124, .	1.1	8
751	2D Material Science: Defect Engineering by Particle Irradiation. Materials, 2018, 11, 1885.	1.3	69
752	Catalyst-free, tunable doping content of graphitic-N in arc-discharged graphene via gas and solid nitrogen sources and their formation mechanisms. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	4
753	Defect sizing, separation, and substrate effects in ion-irradiated monolayer two-dimensional materials. Physical Review B, 2018, 98, .	1.1	46
754	Comparative investigation of CO2 and oxygen reduction on Fe/N/C catalysts. Electrochemistry Communications, 2018, 97, 82-86.	2.3	12
755	Raman spectroscopy of gallium ion irradiated graphene. Diamond and Related Materials, 2018, 89, 163-173.	1.8	8
756	Rapid Synthesis of Oxygen-Rich Covalent C ₂ N (CNO) Nanosheets by Sacrifice of HKUST-1: Advanced Metal-Free Nanofillers for Polymers. ACS Applied Materials & Samp; Interfaces, 2018, 10, 32688-32697.	4.0	9
757	Growth of III-N/graphene heterostructures in single vapor phase epitaxial process. Journal of Crystal Growth, 2018, 504, 1-6.	0.7	14
758	Coherence in defect evolution data for the ion beam irradiated graphene. Scientific Reports, 2018, 8, 13973.	1.6	3
759	Synthesize monolayer graphene on SiO2/Si substrate with copper-vapor-assisted CVD method. Materials Research Express, 2018, 5, 125601.	0.8	2
760	Spatially resolved solid-state reduction of graphene oxide thin films. Materials Horizons, 2018, 5, 1176-1184.	6.4	15
761	Changes in the Raman spectra of monolayer MoS ₂ upon thermal annealing. Journal of Raman Spectroscopy, 2018, 49, 1938-1944.	1.2	42
762	Lattice vibrations of single and multi-layer isotopologic graphene. Carbon, 2018, 140, 449-457.	5.4	4
763	Graphene oxide-dye nanocomposites: effect of molecular structure on the quality of laser-induced graphene. Nanotechnology, 2018, 29, 445704.	1.3	3
764	A novel stiffener skeleton strategy in catalytic carbonization system with enhanced carbon layer structure and improved fire retardancy. Composites Science and Technology, 2018, 164, 82-91.	3.8	37
765	Breakdown of water super-permeation in electrically insulating graphene oxide films: role of dual interlayer spacing. Nanotechnology, 2018, 29, 325706.	1.3	4
766	lonic Liquid Originated Synthesis of N,Pâ€doped Graphene for Hydrogen Evolution Reaction. ChemistrySelect, 2018, 3, 6814-6820.	0.7	6

#	Article	IF	Citations
767	Green methodology for the preparation of chitosan/graphene nanomaterial through electrochemical exfoliation and its applicability in Sunset Yellow detection. Electrochimica Acta, 2018, 283, 578-589.	2.6	62
768	An Electrocatalyst for a Hydrogen Evolution Reaction in an Alkaline Medium: Threeâ€Dimensional Graphene Supported CeO ₂ Hollow Microspheres. European Journal of Inorganic Chemistry, 2018, 2018, 3952-3959.	1.0	27
769	Structural integrity versus lateral size: Enhancing graphene-based film materials by reducing planar defects rather than flake boundary. Carbon, 2018, 139, 216-225.	5.4	20
770	Characterization of Carbon Nanomaterials by Raman Spectroscopy. , 2018, , 1-36.		3
771	In-situ synthesis of rGO-ZnO nanocomposite for demonstration of sunlight driven enhanced photocatalytic and self-cleaning of organic dyes and tea stains of cotton fabrics. Journal of Hazardous Materials, 2018, 360, 193-203.	6.5	100
772	Stokes and anti-Stokes Raman scattering in mono- and bilayer graphene. Nanoscale, 2018, 10, 16138-16144.	2.8	8
773	Dual-wavelength, mode-locked erbium-doped fiber laser employing a graphene/polymethyl-methacrylate saturable absorber. Optics Express, 2018, 26, 12790.	1.7	31
774	Tetragonal graphene nanodot as carbon monoxide gas sensor and current rectification device. Journal of Physics and Chemistry of Solids, 2018, 123, 172-182.	1.9	27
775	Fabrication of Defective Single Layers of Hexagonal Boron Nitride on Various Supports for Potential Applications in Catalysis and DNA Sequencing. ACS Applied Nano Materials, 2018, 1, 3765-3773.	2.4	14
776	Interplay of non-uniform charge distribution on the electrochemical modification of graphene. Nanoscale, 2018, 10, 15048-15057.	2.8	27
777	Review Article: Hydrogenated graphene: A user's guide. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	63
778	Stable, Temperature-Dependent Gas Mixture Permeation and Separation through Suspended Nanoporous Single-Layer Graphene Membranes. Nano Letters, 2018, 18, 5057-5069.	4.5	56
779	Scalable preparation of graphene reinforced Zirconium diboride composites with strong dynamic response. Carbon, 2018, 139, 1020-1026.	5.4	15
780	Growth kinetics of Kr nano structures encapsulated by graphene. Nanotechnology, 2018, 29, 385601.	1.3	6
781	Controlled, Lowâ€Temperature Nanogap Propagation in Graphene Using Femtosecond Laser Patterning. Small, 2018, 14, e1801348.	5.2	6
782	High-yield production of 2D crystals by wet-jet milling. Materials Horizons, 2018, 5, 890-904.	6.4	139
783	Scalable graphene composite membranes for enhanced ion selectivity. Journal of Membrane Science, 2018, 564, 159-165.	4.1	12
784	A simple means of producing highly transparent graphene on sapphire using chemical vapor deposition on a copper catalyst. Carbon, 2018, 139, 593-598.	5.4	2

#	Article	IF	CITATIONS
785	Ultralight graphene micro-popcorns for multifunctional composite applications. Carbon, 2018, 139, 545-555.	5.4	24
786	Construction of Bimetallic ZIF-Derived Co–Ni LDHs on the Surfaces of GO or CNTs with a Recyclable Method: Toward Reduced Toxicity of Gaseous Thermal Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products of Unsaturated Polyester Resin. ACS Applied Materials & Decomposition Products On Products	4.0	78
787	Formation of a highly doped ultra-thin amorphous carbon layer by ion bombardment of graphene. Nanotechnology, 2018, 29, 305302.	1.3	10
788	Dual gas sensing properties of graphene-Pd/SnO2 composites for H2 and ethanol: Role of nanoparticles-graphene interface. International Journal of Hydrogen Energy, 2018, 43, 17921-17927.	3.8	36
789	Highly sensitive and selective room-temperature nitrogen dioxide sensors based on porous graphene. Sensors and Actuators B: Chemical, 2018, 275, 78-85.	4.0	39
790	Nanoscopic imaging of oxidized graphene monolayer using tip-enhanced Raman scattering. Nano Research, 2018, 11, 6346-6359.	5.8	13
791	Electrochemical tuning of capacitive response of graphene oxide. Physical Chemistry Chemical Physics, 2018, 20, 22698-22709.	1.3	13
792	Phosphorus-doped carbon nitride as powerful electrocatalyst for high-power vanadium flow battery. Electrochimica Acta, 2018, 286, 22-28.	2.6	24
793	Defect formation and modulation during patterning supported graphene sheets using focused ion beams. Materials Today Communications, 2018, 17, 60-68.	0.9	8
794	Two orders of magnitude suppression of graphene's thermal conductivity by heavy dopants (Si). Carbon, 2018, 138, 98-107.	5.4	28
795	Oxoâ€Functionalized Graphene: A Versatile Precursor for Alkylated Graphene Sheets by Reductive Functionalization. Chemistry - A European Journal, 2018, 24, 13348-13354.	1.7	18
796	Creation of individual few-layer graphene incorporated in an aluminum matrix. Composites Part A: Applied Science and Manufacturing, 2018, 112, 168-177.	3.8	76
797	Proton-Gradient-Driven Oriented Motion of Nanodiamonds Grafted to Graphene by Dynamic Covalent Bonds. ACS Nano, 2018, 12, 7141-7147.	7.3	17
798	Double-resonant Raman scattering with optical and acoustic phonons in carbon nanotubes. Physical Review B, 2018, 97, .	1.1	3
799	Design of an intermediate carbon layer between bimetallic sulfide and a carbon-based substrate for high-performance asymmetric supercapacitors. New Journal of Chemistry, 2018, 42, 12511-12519.	1.4	7
800	Bifunctional Graphene-Based Metal-Free Catalysts for Oxidative Coupling of Amines. ACS Applied Materials & Samp; Interfaces, 2019, 11, 31844-31850.	4.0	35
801	Chemically exfoliated highly conductive layer-tunable graphene by simply controlling the exfoliating temperature. Nanotechnology, 2019, 30, 465602.	1.3	3
802	Cobalt Intercalation of Graphene on Silicon Carbide. Physics of the Solid State, 2019, 61, 1316-1326.	0.2	10

#	Article	IF	CITATIONS
803	Manipulation of Heteroatom Substitution on Nitrogen and Phosphorus Co-Doped Graphene as a High Active Catalyst for Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2019, 123, 22202-22211.	1.5	29
804	Graphene electrical properties modulated by swift heavy ion irradiation. Carbon, 2019, 154, 244-253.	5.4	16
805	Temperature Dependence of Electrical Resistance of Graphene Oxide. High Temperature, 2019, 57, 198-202.	0.1	2
806	Raman spectroscopy of bottom-up synthesized graphene quantum dots: size and structure dependence. Nanoscale, 2019, 11, 16571-16581.	2.8	176
807	Gas sensor based on defective graphene/pristine graphene hybrid towards high sensitivity detection of NO2. AIP Advances, 2019, 9, .	0.6	33
808	Ionic liquid gated 2D-CAP membrane for highly efficient CO2/N2 and CO2/CH4 separation. Applied Surface Science, 2019, 494, 477-483.	3.1	14
809	Preparation and stabilization of C60-carbon nanotube exohedral hybrids with controlled nano-morphology. SN Applied Sciences, 2019, 1, 1.	1.5	2
810	Upgrading coal to multifunctional graphene-based materials by direct laser scribing. Carbon, 2019, 153, 585-591.	5.4	44
811	Single-/Few-Layer Graphene as Long-Lasting Electrocatalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 5373-5379.	2.5	28
812	Graphene oxide-molybdenum oxide composite with improved hole transport in bulk heterojunction solar cells. AIP Advances, 2019, 9, 075215.	0.6	10
813	Supercritical Fluidâ€Facilitated Exfoliation and Processing of 2D Materials. Advanced Science, 2019, 6, 1901084.	5.6	65
814	Spin relaxation in fluorinated single and bilayer graphene. Physical Review B, 2019, 100, .	1.1	10
815	Biochar colloids and their use in contaminants removal. Biochar, 2019, 1, 151-162.	6.2	27
816	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.	0.7	2
817	A comprehensive study on the characteristic spectroscopic features of nitrogen doped graphene. Applied Surface Science, 2019, 495, 143518.	3.1	11
818	Direct Synthesis of Large-Area Graphene on Insulating Substrates at Low Temperature using Microwave Plasma CVD. ACS Omega, 2019, 4, 11263-11270.	1.6	24
819	Oneâ€Step Covalent Immobilization of βâ€Cyclodextrin on sp 2 Carbon Surfaces for Selective Trace Amount Probing of Guests. Advanced Functional Materials, 2019, 29, 1901488.	7.8	11
820	Graphene nanosheets production using liquid-phase exfoliation of pre-milled graphite in dimethylformamide and structural defects evaluation. Ceramics International, 2019, 45, 20051-20057.	2.3	19

#	Article	IF	CITATIONS
821	Defect-moderated oxidative etching of MoS2. Journal of Applied Physics, 2019, 126, .	1.1	12
822	Ionic Conductance through Graphene: Assessing Its Applicability as a Proton Selective Membrane. ACS Nano, 2019, 13, 12109-12119.	7.3	28
823	Electrically Conductive, Reduced Graphene Oxide Structures Fabricated by Inkjet Printing and Low Temperature Plasma Reduction. Advanced Materials Technologies, 2019, 4, 1900834.	3.0	22
824	Nature of the Synergistic Effect of N and S Co-Doped Graphene for the Enhanced Simultaneous Determination of Toxic Pollutants. ACS Applied Materials & Samp; Interfaces, 2019, 11, 44545-44555.	4.0	14
825	Non-Dendritic Zn Electrodeposition Enabled by Zincophilic Graphene Substrates. ACS Applied Materials & Samp; Interfaces, 2019, 11, 44077-44089.	4.0	129
826	Two-Dimensional Carbon: A Review of Synthesis Methods, and Electronic, Optical, and Vibrational Properties of Single-Layer Graphene. Journal of Carbon Research, 2019, 5, 67.	1.4	38
828	Effect of Copper Substrate Surface Orientation on the Reductive Functionalization of Graphene. Chemistry of Materials, 2019, 31, 8639-8648.	3.2	6
829	Preparation of anisotropic conductive graphene aerogel/polydimethylsiloxane composites as LEGO® modulars. European Polymer Journal, 2019, 112, 487-492.	2.6	13
830	Electrochemical functionalization strategy for chemical vapor deposited graphene on silicon substrates: grafting, electronic properties and biosensing. Nanotechnology, 2019, 30, 475703.	1.3	2
831	Raman Techniques: Fundamentals and Frontiers. Nanoscale Research Letters, 2019, 14, 231.	3.1	368
832	Second Youth of a Metal-Free Dehydrogenation Catalyst: When î ³ -Al ₂ O ₃ Meets Coke Under Oxygen- and Steam-Free Conditions. ACS Catalysis, 2019, 9, 9474-9484.	5.5	11
833	Effect of Built-in Stresses on Defects of Graphene Based Gas Sensors. , 2019, , .		2
834	The influence of graphite particle size on the synthesis of graphene-based materials and their adsorption capacity. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 582, 123935.	2.3	8
835	Study of supported CVD graphene irradiated by He and Au ions. Vacuum, 2019, 170, 108952.	1.6	6
836	Point Defects in Blue Phosphorene. Chemistry of Materials, 2019, 31, 8129-8135.	3.2	86
837	Improved near-UV electroluminescence of ZnO nanorod array LEDs by coupling with a graphene plasmon layer. Nanophotonics, 2019, 8, 2203-2213.	2.9	10
838	Effect of interfacial layer on graphene structure in-situ grown on cemented carbide. Journal of Alloys and Compounds, 2019, 806, 1309-1314.	2.8	5
839	Evidence for Site-Specific Reversible Hydrogen Adsorption on Graphene by Sum-Frequency Generation Spectroscopy and Density Functional Theory. Journal of Physical Chemistry C, 2019, 123, 25883-25889.	1.5	6

#	Article	IF	Citations
840	Nanocarbons: Preparation, assessments, and applications in structural engineering, spintronics, gas sensing, EMI shielding, and cloaking in X-band., 2019, , 171-285.		12
841	Cu _x S nanoparticle@carbon nanorod composites prepared from metal–organic frameworks as efficient electrode catalysts for quantum dot sensitized solar cells. Journal of Materials Chemistry A, 2019, 7, 2210-2218.	5.2	15
842	The characterization of electronic defect states of single and double carbon vacancies in graphene sheets using molecular density functional theory. Molecular Physics, 2019, 117, 1519-1531.	0.8	10
843	Electrochemical Reaction in Hydrogen Peroxide and Structural Change of Platinum Nanoparticle-Supported Carbon Nanowalls Grown Using Plasma-Enhanced Chemical Vapor Deposition. Journal of Carbon Research, 2019, 5, 7.	1.4	3
844	Simple Sonochemical Synthesis of Cupric Oxide Sphere Decorated Reduced Graphene Oxide Composite for the Electrochemical Detection of Flutamide Drug in Biological Samples. Journal of the Electrochemical Society, 2019, 166, B68-B75.	1.3	27
845	Irradiation-induced defects in graphene on copper. Nuclear Instruments & Methods in Physics Research B, 2019, 460, 189-192.	0.6	5
846	Rapid and sensitive detection of the activity of ADAM17 using a graphene oxide-based fluorescence sensor. Analyst, The, 2019, 144, 1825-1830.	1.7	10
847	Efficient room-temperature production of high-quality graphene by introducing removable oxygen functional groups to the precursor. Chemical Science, 2019, 10, 1244-1253.	3.7	51
848	Specific Features of Temperature Dependence of Graphene Oxide Resistance. Protection of Metals and Physical Chemistry of Surfaces, 2019, 55, 50-54.	0.3	2
849	Identification of active sites for acidic oxygen reduction on carbon catalysts with and without nitrogen doping. Nature Catalysis, 2019, 2, 688-695.	16.1	423
850	The electrochemical performance of the N-doped graphene aerogels and nickel foam composite electrode prepared by one-pot hydrothermal method. Fullerenes Nanotubes and Carbon Nanostructures, 2019, 27, 582-590.	1.0	6
851	Probing built-in stress effect on the defect density of stretched monolayer graphene membranes. Carbon, 2019, 152, 233-240.	5.4	10
852	Inductive effect of phosphorus atoms on the formation of graphite-like clusters in silicon carbide during irradiation. Journal of Nuclear Materials, 2019, 523, 472-477.	1.3	1
853	Advanced Characterization Methods for Electrical and Sensoric Components and Devices at the Micro and Nano Scales. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900106.	0.8	4
854	Insights into the role of graphene in hybrid photocatalytic system by in-situ shell-isolated nanoparticle-enhanced Raman spectroscopy. Carbon, 2019, 152, 305-315.	5.4	4
855	Outer Divertor Damage Characterization from Deuterium Plasma Bombardment in Graphene-Coated Tungsten in the C-2W Device. Fusion Science and Technology, 2019, 75, 542-550.	0.6	1
856	One-step electrodeposited Ni-graphene composite coating with excellent tribological properties. Surface and Coatings Technology, 2019, 373, 38-46.	2.2	63
857	lonâ€Induced Defects in Graphite: A Combined Kelvin Probe and Raman Microscopy Investigation. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900055.	0.8	8

#	Article	IF	CITATIONS
858	Design of a Functionalized Carbon Cloth Substrate for a Ni and Co-Based High-Performance Supercapacitor. ACS Applied Energy Materials, 2019, 2, 4316-4324.	2.5	11
859	Control of Functionalities in GO: Effect of Bronsted Acids as Supported by Ab Initio Simulations and Experiments. ACS Omega, 2019, 4, 9407-9418.	1.6	10
860	Synthesis of nanoscale zero-valent iron loaded chitosan for synergistically enhanced removal of U(VI) based on adsorption and reduction. Journal of Colloid and Interface Science, 2019, 552, 735-743.	5.0	72
861	Dedicated preparation for in situ transmission electron microscope tensile testing of exfoliated graphene. Applied Microscopy, 2019, 49, 3.	0.8	4
862	Two dimensional graphene oxides converted to three dimensional P, N, F and B, N, F tri-doped graphene by ionic liquid for efficient catalytic performance. Carbon, 2019, 151, 53-67.	5.4	52
863	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.	2.5	76
864	Impact of oxygen plasma treatment on carrier transport and molecular adsorption in graphene. Nanoscale, 2019, 11, 11145-11151.	2.8	20
865	Double resonance Raman scattering process in 2D materials. Journal of Materials Research, 2019, 34, 1976-1992.	1.2	25
866	Cobalt in N-doped carbon matrix catalyst for chemoselective hydrogenation of nitroarenes. Applied Catalysis A: General, 2019, 580, 158-166.	2.2	28
867	Controlled Electrodeposition of Gold on Graphene: Maximization of the Defectâ€Enhanced Raman Scattering Response. Small, 2019, 15, e1901555.	5. 2	40
868	Mn3O4 nanoparticles encapsulated in carbon cages as the electrode of dual-mechanism supercapacitors. Materials Today Chemistry, 2019, 12, 361-372.	1.7	20
869	Temperature control synthesis of platinum nanoparticle-decorated reduced graphene oxide of different functionalities for anode-catalytic oxidation of methanol. FlatChem, 2019, 16, 100111.	2.8	9
870	State-of-the-Art Characterization Methods for Graphene and Its Derivatives., 2019, , 43-86.		5
871	Synthesis high-qulity graphene oxide and temperature-dependent dielectric properties of reduced graphene oxide. Materials Research Express, 2019, 6, 0950b4.	0.8	8
872	Flexible Graphene/Carbon Nanotube Electrochemical Double‣ayer Capacitors with Ultrahigh Areal Performance. ChemPlusChem, 2019, 84, 882-892.	1.3	28
873	Understanding the structural and chemical changes in vertical graphene nanowalls upon plasma nitrogen ion implantation. Physical Chemistry Chemical Physics, 2019, 21, 10773-10783.	1.3	10
874	Brodie's or Hummers' Method: Oxidation Conditions Determine the Structure of Graphene Oxide. Chemistry - A European Journal, 2019, 25, 8955-8959.	1.7	86
875	lon implantation of graphene with keV carbon ions: Defect types, evolution and substrate effects. Vacuum, 2019, 166, 72-78.	1.6	4

#	Article	IF	CITATIONS
876	Engineering Self-Assembly of a High-χ Block Copolymer for Large-Area Fabrication of Transistors Based on Functional Graphene Nanoribbon Arrays. Chemistry of Materials, 2019, 31, 3154-3162.	3.2	12
877	The correlation between electrical conductivity and second-order Raman modes of laser-reduced graphene oxide. Physical Chemistry Chemical Physics, 2019, 21, 10125-10134.	1.3	122
878	Molecular Enantiorecognition of D- and L-Glucose in Urine and Whole Blood Samples. Journal of the Electrochemical Society, 2019, 166, B3109-B3115.	1.3	16
879	Vanadium salt assisted solvothermal reduction of graphene oxide and the thermoelectric characterisation of the reduced graphene oxide in bulk and as composite. Materials Chemistry and Physics, 2019, 229, 319-329.	2.0	12
880	Production and Patterning of Liquid Phase–Exfoliated 2D Sheets for Applications in Optoelectronics. Advanced Functional Materials, 2019, 29, 1901126.	7.8	71
881	Reduced Graphene Oxide Aerogels with Controlled Continuous Microchannels for Environmental Remediation. ACS Applied Nano Materials, 2019, 2, 1210-1222.	2.4	33
882	Controlling Nitrogen Doping in Graphene with Atomic Precision: Synthesis and Characterization. Nanomaterials, 2019, 9, 425.	1.9	67
883	Chemical and Bio Sensing Using Graphene-Enhanced Raman Spectroscopy. Nanomaterials, 2019, 9, 516.	1.9	31
884	Study of field emission properties of pure graphene-CNT heterostructures connected via seamless interface. Nanotechnology, 2019, 30, 385702.	1.3	27
885	"lon sliding―on graphene: a novel concept to boost supercapacitor performance. Nanoscale Horizons, 2019, 4, 1077-1091.	4.1	22
886	Improved Performance of Graphene in Heat Dissipation when Combined with an Orientated Magnetic Carbon Fiber Skeleton under Low-Temperature Thermal Annealing. Materials, 2019, 12, 954.	1.3	3
887	One-step facile synthesis of poly(<i>N</i> -vinylcarbazole)-polypyrrole/graphene oxide nanocomposites: enhanced solubility, thermal stability and good electrical conductivity. Journal of Macromolecular Science - Pure and Applied Chemistry, 2019, 56, 384-391.	1.2	2
888	Fabrication of conductive Lignin/PAN carbon nanofibers with enhanced graphene for the modified electrodes. Carbon, 2019, 147, 262-275.	5.4	79
889	Analysis of Chemical Structure of Reduced Graphite Oxide Synthesized in Different Reduction Atmospheres. ChemistrySelect, 2019, 4, 1745-1752.	0.7	1
890	Highly Sensitive and Large-Range Strain Sensor with a Self-Compensated Two-Order Structure for Human Motion Detection. ACS Applied Materials & Earney; Interfaces, 2019, 11, 8527-8536.	4.0	113
891	A comparative study of graphene oxide: Hummers, intermediate and improved method. FlatChem, 2019, 13, 40-49.	2.8	80
892	The effect of reduced graphene oxide on microstructure and thermoelectric properties of Nb-doped A-site-deficient SrTiO3 ceramics. Journal of Alloys and Compounds, 2019, 786, 884-893.	2.8	55
893	Scalable Production of Graphene Inks via Wetâ€Jet Milling Exfoliation for Screenâ€Printed Microâ€Supercapacitors. Advanced Functional Materials, 2019, 29, 1807659.	7.8	174

#	Article	IF	CITATIONS
894	Irradiation-induced metal-insulator transition in monolayer graphene. FlatChem, 2019, 14, 100084.	2.8	3
895	Size-Dependent Electronic Properties of Uniform Ensembles of Strongly Confined Graphene Quantum Dots. Journal of Physical Chemistry Letters, 2019, 10, 953-959.	2.1	47
896	Study of Implantation Defects in CVD Graphene by Optical and Electrical Methods. Applied Sciences (Switzerland), 2019, 9, 544.	1.3	16
897	Selektive Funktionalisierung von Graphen an defektaktivierten Bereichen durch Arylazocarbonsäreâ€∢i>tert⟨/i>â€butylester. Angewandte Chemie, 2019, 131, 3637-3641.	1.6	3
898	p-Type Doping of Graphene with Cationic Nitrogen. ACS Applied Nano Materials, 2019, 2, 1350-1355.	2.4	48
899	Electrochemical Sensor based on Reduced Graphene Oxide/PDAC for Dimethoate Pesticide Detection. , 2019, , .		2
900	Analyzing the Raman Spectra of Graphenic Carbon Materials from Kerogens to Nanotubes: What Type of Information Can Be Extracted from Defect Bands?. Journal of Carbon Research, 2019, 5, 69.	1.4	91
901	Extreme Ultraviolet Generation of Localized Defects in Single-Layer Graphene: Raman Mapping, Atomic Force Microscopy, and High-Resolution Scanning Electron Microscopy Analysis. ACS Applied Electronic Materials, 2019, 1, 2560-2565.	2.0	7
902	Irradiation-induced broadening of the Raman spectra in monolayer graphene. Journal of Applied Physics, 2019, 126, .	1.1	13
903	Analysis of the structural characteristics of graphene materials obtained by electrochemical exfoliation of graphite. IOP Conference Series: Materials Science and Engineering, 2019, 693, 012025.	0.3	1
904	Laserâ€Assisted Lattice Recovery of Graphene by Carbon Nanodot Incorporation. Small, 2019, 15, e1904918.	5.2	11
905	Solvent effect on the structure and photocatalytic behavior of TiO ₂ -RGO nanocomposites. Journal of Materials Research, 2019, 34, 3918-3930.	1.2	19
906	Increasing dielectric loss of a graphene oxide nanoparticle to enhance the microwave thermoacoustic imaging contrast of breast tumor. Nanoscale, 2019, 11, 22222-2229.	2.8	17
907	Influence of SiO ₂ or h-BN substrate on the room-temperature electronic transport in chemically derived single layer graphene. RSC Advances, 2019, 9, 38011-38016.	1.7	12
908	Step-by-step monitoring of CVD-graphene during wet transfer by Raman spectroscopy. RSC Advances, 2019, 9, 41447-41452.	1.7	8
909	Thermal properties of in situ grown graphene reinforced copper matrix laminated composites. Journal of Alloys and Compounds, 2019, 771, 228-237.	2.8	69
910	Photocatalytic self-cleaning carbon nitride nanotube intercalated reduced graphene oxide membranes for enhanced water purification. Chemical Engineering Journal, 2019, 356, 915-925.	6.6	174
911	Low-damage nitrogen incorporation in graphene films by nitrogen plasma treatment: Effect of airborne contaminants. Carbon, 2019, 144, 532-539.	5.4	18

#	Article	IF	Citations
912	Resonance Raman Spectroscopy of Silicene and Germanene. Journal of Physical Chemistry C, 2019, 123, 1995-2008.	1.5	8
913	Voltage-reduced low-defect graphene oxide: a high conductivity, near-zero temperature coefficient of resistance material. Nanoscale, 2019, 11, 3112-3116.	2.8	14
914	Melamine assisted liquid exfoliation approach for the synthesis of nitrogen doped graphene-like carbon nano sheets from bio-waste bagasse material and its application towards high areal density Li-S batteries. Carbon, 2019, 144, 582-590.	5.4	61
915	An atomically-thin graphene reverse electrodialysis system for efficient energy harvesting from salinity gradient. Nano Energy, 2019, 57, 783-790.	8.2	58
916	Selective Functionalization of Graphene at Defectâ€Activated Sites by Arylazocarboxylic <i>tert</i> àê€Butyl Esters. Angewandte Chemie - International Edition, 2019, 58, 3599-3603.	7.2	13
917	Experimental and theoretical study of Tetrakis(dimethylamino)ethylene induced magnetism in otherwise nonmagnetic graphene derivatives. Materials Chemistry and Physics, 2019, 222, 132-138.	2.0	7
918	Quantifying crystallinity in carbon nanotubes and its influence on mechanical behaviour. Materials Today Communications, 2019, 18, 39-45.	0.9	31
919	Surface roughness regulation of reduced-graphene oxide/iodine – Based electrodes and their application in polymer solar cells. Journal of Colloid and Interface Science, 2019, 540, 272-284.	5.0	16
920	Towards strength-ductility synergy with favorable strengthening effect through the formation of a quasi-continuous graphene nanosheets coated Ni structure in aluminum matrix composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 748, 52-58.	2.6	35
921	Single-Layer Graphene Sandwiched between Proton-Exchange Membranes for Selective Proton Transmission. ACS Applied Nano Materials, 2019, 2, 964-974.	2.4	32
922	Disorder and Defects in Two-Dimensional Materials Probed by Raman Spectroscopy. Springer Series in Materials Science, 2019, , 99-110.	0.4	1
923	Defect Evolution of Ion-Exposed Single-Wall Carbon Nanotubes. Journal of Physical Chemistry C, 2019, 123, 2496-2505.	1.5	4
924	Graphene electrode diagnostic with IR imaging of Joule heat emission. Infrared Physics and Technology, 2019, 97, 48-53.	1.3	1
925	Corrosion Behavior of Zinc–Nickel and Graphene Layered Structures on Steel Substrates. Advanced Engineering Materials, 2019, 21, 1800949.	1.6	2
926	Ornamental morphology of ionic liquid functionalized ternary doped N, P, F and N, B, F-reduced graphene oxide and their prevention activities of bacterial biofilm-associated with orthopedic implantation. Materials Science and Engineering C, 2019, 98, 1122-1132.	3.8	38
927	Materials design for robotic platforms enabling unique mechanisms of projectile protection. , 2019, , 493-521.		0
928	Bi2Se3 decorated recyclable liquid-exfoliated MoS2 nanosheets: Towards suppress smoke emission and improve mechanical properties of epoxy resin. Journal of Hazardous Materials, 2019, 364, 720-732.	6.5	29
929	Raman Spectroscopy Investigation of Laserâ€Irradiated Singleâ€Walled Carbon Nanotube Films. Physica Status Solidi (B): Basic Research, 2019, 256, 1800412.	0.7	3

#	Article	IF	CITATIONS
930	Ionic polyacrylamide hydrogel improved by graphene oxide for efficient adsorption of methylene blue. Research on Chemical Intermediates, 2019, 45, 1545-1563.	1.3	28
931	Quantitative Principles for Precise Engineering of Sensitivity in Graphene Electrochemical Sensors. Advanced Materials, 2019, 31, e1805752.	11.1	20
932	Simultaneous reduction and surface functionalization of graphene oxide for highly conductive and water dispersible graphene derivatives. SN Applied Sciences, 2019, 1, 1.	1.5	15
933	Revealing lattice disorder, oxygen incorporation and pore formation in laser induced two-photon oxidized graphene. Carbon, 2019, 143, 720-727.	5.4	21
934	Graphene Oxide Hybrid with Sulfur–Nitrogen Polymer for High-Performance Pseudocapacitors. Journal of the American Chemical Society, 2019, 141, 482-487.	6.6	61
935	Facile 1D graphene fiber synthesis from an agricultural by-product: A silicon-mediated graphenization route. Carbon, 2019, 142, 78-88.	5.4	14
936	Durability study of platinum nanoparticles supported on gas-phase synthesized graphene in oxygen reduction reaction conditions. Applied Surface Science, 2019, 467-468, 1181-1186.	3.1	29
937	Enhancing the adhesion of graphene to polymer substrates by controlled defect formation. Nanotechnology, 2019, 30, 015704.	1.3	12
938	Fingerprints of heterogeneities from carbon oxidative process: A reactive molecular dynamics study. Microporous and Mesoporous Materials, 2020, 304, 109061.	2.2	6
939	High-quality preparation of graphene oxide via the Hummers' method: Understanding the roles of the intercalator, oxidant, and graphite particle size. Ceramics International, 2020, 46, 2392-2402.	2.3	111
940	Raman spectroscopy on hydrogenated graphene under high pressure. Carbon, 2020, 156, 549-557.	5.4	18
941	Direct growth of mm-size twisted bilayer graphene by plasma-enhanced chemical vapor deposition. Carbon, 2020, 156, 212-224.	5.4	34
942	Influence of the oxidizing agent in the synthesis of graphite oxide. Journal of Materials Science, 2020, 55, 2333-2342.	1.7	7
943	Solvothermal synthesis of magnetically separable reduced graphene oxide/Fe3O4 hybrid nanocomposites with enhanced photocatalytic properties. Physica B: Condensed Matter, 2020, 580, 411752.	1.3	37
944	Enhanced quality of transfer-free graphene membrane for He/CH4 separation. Separation and Purification Technology, 2020, 232, 115972.	3.9	12
945	Surface functionalization of epitaxial graphene using ion implantation for sensing and optical applications. Carbon, 2020, 157, 169-184.	5.4	15
946	Triazine-Based Two-Dimensional Organic Polymer for Selective NO ₂ Sensing with Excellent Performance. ACS Applied Materials & Samp; Interfaces, 2020, 12, 3919-3927.	4.0	48
947	Synthesis and characterization of activated carbon produced from waste human hair mass using chemical activation. Carbon Letters, 2020, 30, 307-313.	3.3	23

#	Article	IF	CITATIONS
948	Ion beam engineered graphene oxide membranes for mono-/di-valent metal ions separation. Carbon, 2020, 158, 598-606.	5.4	18
949	Nitrogen-Doped graphene coated FeS2 microsphere composite as high-performance anode materials for sodium-ion batteries enhanced by the chemical and structural synergistic effect. Applied Surface Science, 2020, 505, 144633.	3.1	18
950	Precise tuning chemistry and tailoring defects of graphene oxide films by low energy ion beam irradiation. Applied Surface Science, 2020, 505, 144651.	3.1	10
951	A simple, low-cost and scale-up synthesis strategy of spherical-graphite/Fe2O3 composites as high-performance anode materials for half/full lithium ion batteries. Journal of Alloys and Compounds, 2020, 822, 153719.	2.8	38
952	High-flux and antifouling polyethersulfone nanocomposite membranes incorporated with zwitterion-functionalized graphene oxide for ultrafiltration applications. Journal of Industrial and Engineering Chemistry, 2020, 84, 131-140.	2.9	58
953	Characteristics of graphene grown through low power capacitive coupled radio frequency plasma enhanced chemical vapor deposition. Carbon, 2020, 159, 570-578.	5.4	18
954	The nature of surface defects in Xe ion-implanted glassy carbon annealed at high temperatures: Raman spectroscopy analysis. Applied Surface Science, 2020, 506, 145001.	3.1	10
955	Research on MWCNT growth process through on-line intermittent monitoring in a fluidized bed reactor. Results in Materials, 2020, 6, 100055.	0.9	8
956	Very low-temperature growth of few-layer graphene by Ni-induced crystallization of amorphous carbon in vacuum. Carbon, 2020, 159, 37-44.	5.4	15
957	Cellular Uptake of Mildly Oxidized Nanographene for Drug-Delivery Applications. ACS Applied Nano Materials, 2020, 3, 428-439.	2.4	21
958	Degradation of thermal transport properties in fine-grained isotropic graphite exposed to swift heavy ion beams. Acta Materialia, 2020, 184, 187-198.	3.8	14
959	The fate and role of in situ formed carbon in polymer-derived ceramics. Progress in Materials Science, 2020, 109, 100623.	16.0	238
960	Doping charge transfer in Pt/CNT systems induced by laser power heating. Chemical Physics, 2020, 530, 110591.	0.9	5
961	Graphene oxide-mesoporous SiO2 hybrid composite for fast and efficient removal of organic cationic contaminants. Carbon, 2020, 158, 193-201.	5.4	36
962	On the Thermal Stability of Aryl Groups Chemisorbed on Graphite. Journal of Physical Chemistry C, 2020, 124, 1980-1990.	1.5	15
963	On the Structural, Morphological, and Electrical Properties of Carbon Nanowalls Obtained by Plasma-Enhanced Chemical Vapor Deposition. Journal of Nanomaterials, 2020, 2020, 1-6.	1.5	6
964	Nanofabrication of plasmon-tunable nanoantennas for tip-enhanced Raman spectroscopy. Journal of Chemical Physics, 2020, 153, 114201.	1.2	14
965	Effects of Thickness and Particle Size on Tribological Properties of Graphene as Lubricant Additive. Tribology Letters, 2020, 68, 1.	1.2	30

#	Article	IF	CITATIONS
966	Cobalt–nickel sulfide nanosheets modified by nitrogen-doped porous reduced graphene oxide as high-conductivity cathode materials for supercapacitor. Electrochimica Acta, 2020, 362, 137156.	2.6	27
967	Dispersion degree and sheet spacing control of graphene products via oxygen functionalities and its effect on electrical conductivities of P3HT-graphene composite coatings. Journal of Materials Science: Materials in Electronics, 2020, 31, 19623-19637.	1.1	3
968	Aryl Migration on Graphene. Journal of the American Chemical Society, 2020, 142, 17876-17880.	6.6	14
969	Graphene Oxide as a Sensing Material for Gas Detection Based on Nanomechanical Sensors in the Static Mode. Chemosensors, 2020, 8, 82.	1.8	17
970	Electrochemical synthesis of carbon nano onions. Inorganic Chemistry Frontiers, 2020, 7, 4404-4411.	3.0	12
971	Interactions of slow highly charged Bismuth ions with highly oriented pyrolytic graphite surface. Nuclear Instruments & Methods in Physics Research B, 2020, 478, 163-168.	0.6	0
972	Design of high-performance Al4C3/Al matrix composites for electric conductor. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 798, 140331.	2.6	15
973	Anomalous versus Normal Room-Temperature Diffusion of Metal Adatoms on Graphene. Journal of Physical Chemistry Letters, 2020, 11, 8930-8936.	2.1	14
974	Splenic Capture and <i>In Vivo</i> Intracellular Biodegradation of Biological-Grade Graphene Oxide Sheets. ACS Nano, 2020, 14, 10168-10186.	7.3	51
975	3D-printed graphene/polymer structures for electron-tunneling based devices. Scientific Reports, 2020, 10, 11373.	1.6	9
976	A Review of Strategies for the Synthesis of N-Doped Graphene-Like Materials. Nanomaterials, 2020, 10, 2286.	1.9	40
977	Monitoring Food Spoilage Based on a Defect-Induced Multiwall Carbon Nanotube Sensor at Room Temperature: Preventing Food Waste. ACS Omega, 2020, 5, 30531-30537.	1.6	16
978	Aerographite phonon density of states affects double resonant Raman scattering. Journal of Applied Physics, 2020, 128, .	1.1	4
979	Selective-Area Remote Epitaxy of ZnO Microrods Using Multilayer–Monolayer-Patterned Graphene for Transferable and Flexible Device Fabrications. ACS Applied Nano Materials, 2020, 3, 8920-8930.	2.4	25
980	Improved synthesis of graphene oxide with controlled oxidation degree by using different dihydrogen phosphate as intercalators. Chemical Physics, 2020, 539, 110938.	0.9	17
981	Role of carbon on the thermal and electrical properties of graphene- enriched silicon oxycarbides. Ceramics International, 2020, 46, 28156-28164.	2.3	23
982	Selective Etching of Graphene Membrane Nanopores: From Molecular Sieving to Extreme Permeance. ACS Applied Materials & Divergases, 2020, 12, 36468-36477.	4.0	22
983	Stone–Wales Defects Cause High Proton Permeability and Isotope Selectivity of Singleâ€Layer Graphene. Advanced Materials, 2020, 32, e2002442.	11.1	32

#	Article	IF	CITATIONS
984	Gold nanorods-coated reduced graphene oxide as a modified electrode for the electrochemical sensory detection of NADH. Journal of Alloys and Compounds, 2020, 847, 156552.	2.8	25
985	Bacteria mediated Fenton-like reaction drives the biotransformation of carbon nanomaterials. Science of the Total Environment, 2020, 746, 141020.	3.9	17
986	Catalysis-free transformation of non-graphitising carbons into highly crystalline graphite. Communications Materials, 2020, 1, .	2.9	17
987	Covalently Doped Graphene Superlattices: Spatially Resolved Supratopic- and Janus-Binding. Journal of the American Chemical Society, 2020, 142, 16016-16022.	6.6	21
988	Nose-to-Brain Translocation and Cerebral Biodegradation of Thin Graphene Oxide Nanosheets. Cell Reports Physical Science, 2020, 1, 100176.	2.8	10
989	Dirac Fermion Kinetics in 3D Curved Graphene. Advanced Materials, 2020, 32, e2005838.	11.1	24
990	High-Power Energy Storage from Carbon Electrodes Using Highly Acidic Electrolytes. Journal of Physical Chemistry C, 2020, 124, 20701-20711.	1.5	3
991	Influence of temperature on growth of graphene on germanium. Journal of Applied Physics, 2020, 128, 045310.	1.1	4
992	Mechanical, electrical and thermal properties of graphene oxide-carbon nanotube/ ABS hybrid polymer nanocomposites. Journal of Polymer Research, 2020, 27, 1.	1.2	17
993	Structure and Paramagnetic Properties of Graphene Nanoplatelets Prepared from Biopolymers Using Self-Propagating High-Temperature Synthesis. Journal of Structural Chemistry, 2020, 61, 826-834.	0.3	11
994	Chemical Vapour Deposition of Grapheneâ€"Synthesis, Characterisation, and Applications: A Review. Molecules, 2020, 25, 3856.	1.7	155
995	Bifacial Multilayer Graphene Float Transfer. Advanced Functional Materials, 2020, 30, 2005103.	7.8	2
996	Polyethylene: grapheneâ€"a magnetic tunable metacomposite. Journal of Materials Science: Materials in Electronics, 2020, 31, 18344-18359.	1.1	0
997	Graphene Oxide-Based Silico-Phosphate Composite Films for Optical Limiting of Ultrashort Near-Infrared Laser Pulses. Nanomaterials, 2020, 10, 1638.	1.9	8
998	Monolayer Graphene Grown on Nanoscale Pt Films Deposited on TiO ₂ Substrates for Micro- and Nanoelectromechanical Systems. ACS Applied Nano Materials, 2020, 3, 9731-9739.	2.4	5
999	Linkage Between Micro- and Nano-Raman Spectroscopy of Defects in Graphene. Physical Review Applied, 2020, 14, .	1.5	15
1000	Effect of the Content and Ordering of the sp2 Free Carbon Phase on the Charge Carrier Transport in Polymer-Derived Silicon Oxycarbides. Molecules, 2020, 25, 5919.	1.7	14
1001	Atomic collapse in disordered graphene quantum dots. Physical Review B, 2020, 102, .	1.1	3

#	ARTICLE	IF	Citations
1002	Preparation of graphene oxide by dry planetary ball milling technique under oxygen atmosphere. IOP Conference Series: Materials Science and Engineering, 2020, 872, 012180.	0.3	4
1003	A multi-layered composite assembly of Bi nanospheres anchored on nitrogen-doped carbon nanosheets for ultrastable sodium storage. Nanoscale, 2020, 12, 23682-23693.	2.8	21
1004	Improvement of graphene scratch resistance by ion beam bombardment. Nuclear Instruments & Methods in Physics Research B, 2020, 474, 10-14.	0.6	3
1005	Defect engineering of graphene using electron-beam chemistry with radiolyzed water. Carbon, 2020, 166, 446-455.	5.4	15
1006	Mechanism of the graphene oxide formation: The role of water, "reversibility―of the oxidation, and mobility of the C–O bonds. Carbon, 2020, 166, 1-14.	5 . 4	39
1007	Chemical and electrochemical synthesis of graphene oxide – a generalized view. Nanoscale, 2020, 12, 12731-12740.	2.8	57
1008	Understanding the Detection Mechanisms and Ability of Molecular Hydrogen on Three-Dimensional Bicontinuous Nanoporous Reduced Graphene Oxide. Materials, 2020, 13, 2259.	1.3	0
1009	Critical inter-defect distance that modulates strength and toughness in defective 2D sp2-lattice. Journal of Applied Physics, 2020, 127, 204301.	1.1	2
1010	Influence of substrate on ultrafast water transport property of multilayer graphene coatings. Nanotechnology, 2020, 31, 375704.	1.3	11
1011	Changes in characteristics of Pt-functionalized RGO nanocomposites by electron beam irradiation for room temperature NO2 sensing. Ceramics International, 2020, 46, 21638-21646.	2.3	19
1012	Femtosecond Luminescence Imaging for Single Nanoparticle Characterization. Journal of Physical Chemistry A, 2020, 124, 4583-4593.	1.1	4
1013	In-situ grown of polyaniline on defective mesoporous carbon as a high performance supercapacitor electrode material. Journal of Energy Storage, 2020, 30, 101429.	3.9	14
1014	Electrostatic forces-controlled electric reductions of graphene oxide. Materials Letters, 2020, 274, 128049.	1.3	2
1015	Origin of optical bandgap fluctuations in graphene oxide. European Physical Journal B, 2020, 93, 1.	0.6	11
1016	Periodic surface functional group density on graphene via laser-induced substrate patterning at Si/SiO2 interface. Nano Research, 2020, 13, 2332-2339.	5.8	14
1017	Influence of surface oxygen clusters upon molecular stacking of paclitaxel over graphene oxide sheets. Materials Science and Engineering C, 2020, 116, 111232.	3.8	13
1018	A versatile route to edge-specific modifications to pristine graphene by electrophilic aromatic substitution. Journal of Materials Science, 2020, 55, 10284-10302.	1.7	8
1019	Water-dispersible few-layer graphene flakes for selective and rapid ion mercury (Hg ²⁺)-rejecting membranes. Materials Advances, 2020, 1, 387-402.	2.6	11

#	Article	IF	CITATIONS
1020	The influence of crystal thickness and interlayer interactions on the properties of heavy ion irradiated MoS ₂ . 2D Materials, 2020, 7, 035011.	2.0	6
1021	Printing of Crumpled CVD Graphene via Blister-Based Laser-Induced Forward Transfer. Nanomaterials, 2020, 10, 1103.	1.9	13
1022	A practical characterisation protocol for liquid-phase synthesised heterogeneous graphene. Carbon, 2020, 167, 307-321.	5.4	4
1023	Cobalt promoted bifunctional graphene composite (Co@pGSC) for heterogeneous peroxymonosulfate activation. Chemical Engineering Journal, 2020, 399, 125752.	6.6	11
1024	Formation and trapping of CO2 due to the decomposition of amide solvents during the chemical reduction of graphene oxide by using the solvothermal method. Diamond and Related Materials, 2020, 108, 107966.	1.8	8
1025	Probing plasma-treated graphene using hyperspectral Raman. Review of Scientific Instruments, 2020, 91, 063903.	0.6	9
1026	Evaluation of the Covalent Functionalization of Carbon Nano-Onions with Pyrene Moieties for Supercapacitor Applications. Materials, 2020, 13, 1141.	1.3	30
1027	Preparation of graphene., 2020,, 39-171.		1
1028	Thermal properties and applications. , 2020, , 415-447.		3
1029	Evidence for Electron Transfer between Graphene and Nonâ€Covalently Bound Ï€â€6ystems. Chemistry - A European Journal, 2020, 26, 6694-6702.	1.7	10
1030	The Effect of Ion Irradiation Density on the Defect of Graphene: A Molecular Dynamics Study. Crystals, 2020, 10, 158.	1.0	3
1031	Structural Modifications in Epitaxial Graphene on SiC Following 10 keV Nitrogen Ion Implantation. Applied Sciences (Switzerland), 2020, 10, 4013.	1.3	7
1032	Low-temperature low-power PECVD synthesis of vertically aligned graphene. Nanotechnology, 2020, 31, 395604.	1.3	28
1033	Towards Understanding the Raman Spectrum of Graphene Oxide: The Effect of the Chemical Composition. Coatings, 2020, 10, 524.	1.2	42
1034	Facile Size-Selective Defect Sealing in Large-Area Atomically Thin Graphene Membranes for Sub-Nanometer Scale Separations. Nano Letters, 2020, 20, 5951-5959.	4.5	38
1035	Porous bambooâ€like <scp>CNTs</scp> prepared by a simple and lowâ€cost steam activation for supercapacitors. International Journal of Energy Research, 2020, 44, 10946-10952.	2.2	10
1036	On the Influences of Carrier Gas Type and Flow Rate on CVD Synthesis of CNTs from Postconsumer Polyethylene. Industrial & Engineering Chemistry Research, 2020, 59, 14004-14014.	1.8	7
1037	Laser Assisted Solution Synthesis of High Performance Graphene Supported Electrocatalysts. Advanced Functional Materials, 2020, 30, 2001756.	7.8	23

#	Article	IF	CITATIONS
1038	Highly conductive porous graphene film with excellent folding resilience for exceptional electromagnetic interference shielding. Journal of Materials Chemistry C, 2020, 8, 8904-8916.	2.7	44
1039	Sunlight-assisted tailoring of surface nanostructures on single-layer graphene nanosheets for highly efficient cation capture and high-flux desalination. Carbon, 2020, 161, 674-684.	5.4	10
1040	Preparation and characterization of lysozyme@carbon nanotubes/waterborne polyurethane composite and the potential application in printing inks. Progress in Organic Coatings, 2020, 142, 105600.	1.9	15
1041	Determining the Level and Location of Functional Groups on Few-Layer Graphene and Their Effect on the Mechanical Properties of Nanocomposites. ACS Applied Materials & Samp; Interfaces, 2020, 12, 13481-13493.	4.0	27
1042	Confinement of Hydrogen Molecules at Graphene–Metal Interface by Electrochemical Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2020, 124, 5300-5307.	1.5	17
1043	Assessing the structural properties of graphitic and non-graphitic carbons by Raman spectroscopy. Carbon, 2020, 161, 359-372.	5.4	289
1044	Preparation and characterization of graphene., 2020,, 51-90.		1
1045	Metallic nickel–cobalt phosphide/multilayer graphene composite for high-performance supercapacitors. New Journal of Chemistry, 2020, 44, 8796-8804.	1.4	23
1046	Tuning Tailored Single-Walled Carbon Nanotubes by Highly Energetic Heavy Ions. Physical Review Applied, 2020, 13, .	1.5	8
1047	Silicon-graphene composite synthesis: Microstructural, spectroscopic and electrical conductivity characterizations. Materials Today: Proceedings, 2020, 33, 5136-5142.	0.9	9
1048	Ethanol electrooxidation on highly active palladium/graphene oxide aerogel catalysts. Chemical Physics, 2020, 534, 110753.	0.9	7
1049	Making Graphene Luminescent by Direct Laser Writing. Journal of Physical Chemistry C, 2020, 124, 8371-8377.	1.5	11
1050	Graphitic Carbon Nitride–Nickel Catalyst: From Material Characterization to Efficient Ethanol Electrooxidation. ACS Sustainable Chemistry and Engineering, 2020, 8, 7244-7255.	3.2	38
1051	Transferless Inverted Graphene/Silicon Heterostructures Prepared by Plasma-Enhanced Chemical Vapor Deposition of Amorphous Silicon on CVD Graphene. Nanomaterials, 2020, 10, 589.	1.9	3
1052	Local current mapping of electrochemically-exfoliated graphene oxide by conductive AFM. Japanese Journal of Applied Physics, 2020, 59, SN1001.	0.8	4
1053	A label-free biosensor based on graphene and reduced graphene oxide dual-layer for electrochemical determination of beta-amyloid biomarkers. Mikrochimica Acta, 2020, 187, 288.	2.5	50
1054	Facile synthesis of high-performance carbon nanosheet/Cu composites from copper formate. Carbon, 2020, 165, 349-357.	5.4	17
1055	3D Holeyâ€Graphene Architecture Expedites Ion Transport Kinetics to Push the OER Performance. Advanced Energy Materials, 2020, 10, 2001005.	10.2	41

#	Article	IF	CITATIONS
1056	Surface defects state analysis of laser induced graphene from 4H-SiC. Journal of Materials Research and Technology, 2020, 9, 5934-5941.	2.6	11
1057	Effects of metal dusting relevant exposures of alloy 601 surfaces on carbon formation and oxide development. Catalysis Today, 2021, 369, 48-61.	2.2	8
1058	Reversible synthesis of GO: Role of differential bond structure transformation in fine-tuning photodetector response. Nanotechnology, 2021, 32, 045601.	1.3	4
1059	Preferential self-healing at grain boundaries in plasma-treated graphene. Nature Materials, 2021, 20, 49-54.	13.3	31
1060	Preparation of titania-reduced graphene oxide composite coatings with electro- and photosensitive properties. Applied Surface Science, 2021, 538, 148029.	3.1	7
1061	Investigation of the usability of nitric acid electrolyte in graphene production by electrochemical method. Fullerenes Nanotubes and Carbon Nanostructures, 2021, 29, 175-182.	1.0	1
1062	Formation of graphitic films on $Cu(111)$ via electron beam induced deposition. Vacuum, 2021, 183, 109824.	1.6	1
1063	Carbon nanotubes, nanochains and quantum dots synthesized through the chemical treatment of charcoal powder. Journal of Molecular Structure, 2021, 1227, 129419.	1.8	3
1064	Functionalized phosphorene/polypyrrole hybrid nanomaterial by covalent bonding and its supercapacitor application. Journal of Industrial and Engineering Chemistry, 2021, 94, 122-126.	2.9	18
1065	Spherical-graphite/nano-Mn2O3 composites as advanced anode materials for lithium half/full batteries. Journal of Alloys and Compounds, 2021, 853, 157109.	2.8	20
1066	Chemical and structural properties of reduced graphene oxideâ€"dependence on the reducing agent. Journal of Materials Science, 2021, 56, 3738-3754.	1.7	91
1067	Fabrication and electrochemical properties of boron-doped SiC. Carbon, 2021, 174, 240-247.	5.4	2
1068	Transfer of printed electronic structures using graphene oxide and gelatin enables reversible and biocompatible interface with living cells. Materials Science and Engineering C, 2021, 120, 111685.	3.8	3
1069	Biogenic fenton-like reaction involvement in aerobic degradation of C60 by Labrys sp. WJW. Environmental Pollution, 2021, 272, 115300.	3.7	6
1070	Tuning plasmonic nanostructures in graphene-based nano-sandwiches using ultraviolet/ozone functionalization. Journal of Materials Science, 2021, 56, 1359-1372.	1.7	6
1071	Aminated N-doped graphene hydrogel for long-term catalytic oxidation in strong acidic environment. Journal of Hazardous Materials, 2021, 401, 123742.	6.5	10
1072	Strategies to improve electrocatalytic and photocatalytic performance of two-dimensional materials for hydrogen evolution reaction. Chinese Journal of Catalysis, 2021, 42, 511-556.	6.9	131
1073	Fix-Time Synchronization of Cyclic Switched Networks. Dynamical Systems and Control, 2021, 10, 70-76.	0.1	O

#	Article	IF	CITATIONS
1074	Raman spectroscopy of graphene. , 2021, , 381-411.		2
1075	Microstructure and electrochemical properties of high performance graphene/manganese oxide hybrid electrodes. RSC Advances, 2021, 11, 31608-31620.	1.7	3
1076	Optical identification of interlayer coupling of graphene/MoS2 van der Waals heterostructures. Nano Research, 2021, 14, 2241.	5.8	14
1077	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.	1.5	4
1078	A graphene film interlayer for enhanced electrical conductivity in a carbon-fibre/PEEK composite. Functional Composite Materials, 2021, 2, .	0.9	16
1079	Intense Raman D Band without Disorder in Flattened Carbon Nanotubes. ACS Nano, 2021, 15, 596-603.	7.3	44
1080	Incorporation-limiting mechanisms during nitrogenation of monolayer graphene films in nitrogen flowing afterglows. Nanoscale, 2021, 13, 2891-2901.	2.8	1
1081	The use of sample positioning to control defect creation by oxygen plasma in isotopically labelled bilayer graphene membranes. RSC Advances, 2021, 11, 10316-10322.	1.7	3
1082	Raman signatures of defects-dependent vibration modes in boron doped monolayer to multilayer graphene. Optik, 2021, 228, 166232.	1.4	6
1083	Towards field-effect controlled graphene-enhanced Raman spectroscopy of cobalt octaethylporphyrin molecules. Nanotechnology, 2021, 32, 205702.	1.3	1
1084	Evolution of structural and electrical properties in coal-derived graphene oxide nanomaterials during high-temperature annealing. Diamond and Related Materials, 2021, 112, 108244.	1.8	9
1085	Ultrafine Ni2P Nanoparticle-Decorated r-GO: A Novel Liquid-Phase Approach and Dibenzothiophene Hydro-desulfurization. Industrial & Engineering Chemistry Research, 2021, 60, 4300-4309.	1.8	1
1086	Impulse laser cutting of diamond accompanied by phase transitions to fullerene-type onions. Diamond and Related Materials, 2021, 113, 108281.	1.8	5
1087	One-Step Plasma Synthesis of Nitrogen-Doped Carbon Nanomesh. Nanomaterials, 2021, 11, 837.	1.9	5
1088	ZnO/graphene ambipolar transistor with low sub-threshold swing. Materials Research Express, 2021, 8, 035901.	0.8	3
1089	Quantification and Healing of Defects in Atomically Thin Molybdenum Disulfide: Beyond the Controlled Creation of Atomic Defects. ACS Nano, 2021, 15, 9658-9669.	7.3	37
1090	Characteristics of Carbon Nanotubes Synthesized from Methane and Acetylene in the Presence of a FeCl3 Catalyst. Technical Physics, 2021, 66, 445-452.	0.2	1
1091	On the Reactivity Enhancement of Graphene by Metallic Substrates towards Aryl Nitrene Cycloadditions. Chemistry - A European Journal, 2021, 27, 7887-7896.	1.7	6

#	Article	IF	CITATIONS
1092	Increasing reaction time in Hummers' method towards well exfoliated graphene oxide of low oxidation degree. Ceramics International, 2021, 47, 22130-22137.	2.3	18
1093	Group VI metallic pillars for assembly of expanded graphite anodes for high-capacity Na-ion batteries. Carbon, 2021, 175, 585-593.	5.4	14
1094	Electrochemical characterization of graphene-type materials obtained by electrochemical exfoliation of graphite. Journal of Electroanalytical Chemistry, 2021, 887, 115084.	1.9	10
1095	A scalable electron beam irradiation platform applied for allotropic carbon transformation. Carbon, 2021, 174, 567-580.	5.4	6
1096	Biomimetic N-Doped Graphene Membrane for Proton Exchange Membranes. Nano Letters, 2021, 21, 4314-4319.	4.5	27
1097	Reducing metal/graphene contact resistance via N, N-dimethylacetamide-assisted clean fabrication process. Nanotechnology, 2021, 32, 315201.	1.3	3
1098	Evolution in size and structural order for incipient soot formed at flame temperatures greater than 2100ÂK. Fuel, 2021, 291, 120196.	3.4	18
1099	Multiple excitations and temperature study of the disorder-induced Raman bands in MoS ₂ . 2D Materials, 2021, 8, 035042.	2.0	6
1100	Real-time imaging of Na ⁺ reversible intercalation in "Janus―graphene stacks for battery applications. Science Advances, 2021, 7, .	4.7	61
1101	Plasma–graphene interactions: combined effects of positive ions, vacuum-ultraviolet photons, and metastable species. Journal Physics D: Applied Physics, 2021, 54, 295202.	1.3	2
1102	Gas Cluster Ion Beam Cleaning of CVD-Grown Graphene for Use in Electronic Device Fabrication. ACS Applied Nano Materials, 2021, 4, 5187-5197.	2.4	5
1103	Ozone Decomposition on Defective Graphene: Insights from Modeling. Journal of Physical Chemistry C, 2021, 125, 10948-10954.	1.5	4
1104	Raman spectroscopy as an evaluation tool of the wear of graphite lubricants in brake pads. Lubrication Science, 2021, 33, 279-289.	0.9	4
1105	Tunable Pore Size from Sub-Nanometer to a Few Nanometers in Large-Area Graphene Nanoporous Atomically Thin Membranes. ACS Applied Materials & Samp; Interfaces, 2021, 13, 29926-29935.	4.0	23
1106	Tribological Behavior of Carbon-Based Nanomaterial-Reinforced Nickel Metal Matrix Composites. Materials, 2021, 14, 3536.	1.3	7
1107	Atomic-Level Structural Engineering of Graphene on a Mesoscopic Scale. Nano Letters, 2021, 21, 5179-5185.	4.5	24
1108	Growth of Defect-Induced Carbon Nanotubes for Low-Temperature Fruit Monitoring Sensor. Chemosensors, 2021, 9, 131.	1.8	13
1109	Structural and spectroscopic investigations on graphene oxide foils irradiated by ion beams for dosimetry application. Vacuum, 2021, 188, 110185.	1.6	20

#	Article	IF	CITATIONS
1110	Enhancement of the mechanical properties of graphene nanoplatelet (GNP) reinforced nickel matrix nanocomposites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 817, 141324.	2.6	22
1111	The effect of pyrolysis temperature, H2 concentration, and residence time on the oxidation temperature and wear resistance of pyrolytic carbon–silicon carbide (PyC–SiC) composites. Journal of the Iranian Chemical Society, 2021, 18, 3357.	1.2	1
1112	Electron scattering by Friedel oscillations in carbon nanotubes. Nano Research, 0, , 1.	5.8	1
1113	Carbonization mechanisms of polyimide: Methodology to analyze carbon materials with nitrogen, oxygen, pentagons, and heptagons. Carbon, 2021, 178, 58-80.	5.4	77
1114	Introduction, production, characterization and applications of defects in graphene. Journal of Materials Science: Materials in Electronics, 2021, 32, 19991-20030.	1.1	15
1115	Investigation of Substrate Swell-Induced Defect Formation in Suspended Graphene upon Helium Ion Implantation. Journal of Physical Chemistry C, 2021, 125, 16166-16174.	1.5	5
1116	The nucleation, radial growth, and bonding of TiO2 deposited via atomic layer deposition on single-walled carbon nanotubes. Applied Surface Science, 2021, 555, 149662.	3.1	3
1117	Coagulation-assisted preparation of graphene oxide/polyamide 6 composites. Materials Chemistry and Physics, 2021, 266, 124579.	2.0	4
1118	Exploration of the temperature-dependent correlations present in the structural, morphological and electrical properties of thermally reduced free-standing graphene oxide papers. Journal of Materials Science, 2021, 56, 15134-15150.	1.7	14
1119	Evolution of large-area reduced graphene oxide nanosheets from carbon dots via thermal treatment. Carbon Trends, 2021, 4, 100074.	1.4	16
1120	Synthesis of copper oxides-graphene composites for glucose sensing. Carbon Trends, 2021, 4, 100050.	1.4	10
1121	Tuning photo-response and electronic behavior of graphene quantum dots synthesized via ion irradiation. Physica B: Condensed Matter, 2021, 613, 412978.	1.3	6
1122	Li intercalation into multilayer graphene with controlled defect densities. Carbon Trends, 2021, 4, 100045.	1.4	6
1123	Impact of nitrogen doping on the band structure and the charge carrier scattering in monolayer graphene. Physical Review Materials, 2021, 5, .	0.9	3
1124	Self-organized hierarchically porous carbon coated on carbon cloth for high-performance freestanding supercapacitor electrodes. Journal of Electroanalytical Chemistry, 2021, 895, 115456.	1.9	18
1125	Synthesis of Wetâ€Chemically Prepared Porousâ€Graphene Single Layers on Si/SiO ₂ Substrate Increasing the Photoluminescence of MoS ₂ in Heterostructures. Advanced Materials Interfaces, 2021, 8, 2100783.	1.9	3
1126	Pd nanoparticles on self-doping-defects mesoporous carbon supports for highly active ethanol oxidation and ethylene glycol oxidation. International Journal of Hydrogen Energy, 2021, 46, 30455-30466.	3.8	13
1127	Tunable anisotropy in ReS2 flakes achieved by Ar+ ion bombardment probed by polarized Raman spectroscopy. Applied Physics Letters, 2021, 119, 053104.	1.5	3

#	Article	IF	CITATIONS
1128	Laser solid-phase synthesis of single-atom catalysts. Light: Science and Applications, 2021, 10, 168.	7.7	27
1129	Tuning Vertical Electron Transfer on Graphene Bilayer Electrochemical Devices. Advanced Materials Interfaces, 2021, 8, 2100550.	1.9	3
1130	Evidence for protosolar graphene in Allende and QUE 94366 CV3 meteorites. Planetary and Space Science, 2021, 203, 105267.	0.9	3
1131	Enhanced Graphene Sensors via Multi-Lasing Fabrication. IEEE Sensors Journal, 2021, 21, 18562-18570.	2.4	3
1132	Characterizations of Carbon Nanotubes and Graphene. Springer Series in Materials Science, 2022, , 65-90.	0.4	0
1133	Effect of Microwave Treatment in a High Pressure Microwave Reactor on Graphene Oxide Reduction Process—TEM, XRD, Raman, IR and Surface Electron Spectroscopic Studies. Materials, 2021, 14, 5728.	1.3	7
1134	Breakdown of Universal Scaling for Nanometer-Sized Bubbles in Graphene. Nano Letters, 2021, 21, 8103-8110.	4.5	23
1135	Direct Chemical Vapor Deposition Synthesis of Porous Singleâ€Layer Graphene Membranes with High Gas Permeances and Selectivities. Advanced Materials, 2021, 33, e2104308.	11.1	28
1136	Open-atmosphere flame synthesis of monolayer graphene. Carbon, 2021, 182, 307-315.	5.4	5
1137	Nanoplates forced alignment of multi-walled carbon nanotubes in alumina composite with high strength and toughness. Journal of the European Ceramic Society, 2021, 41, 5541-5547.	2.8	9
1138	Bicarbonate activated hydrogen peroxide with cobalt nanoparticles embedded in nitrogen-doped carbon nanotubes for highly efficient organic dye degradation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 630, 127645.	2.3	7
1139	Tuning the nanoscale rippling of graphene with PEGylated gold nanoparticles and ion irradiation. Carbon Trends, 2021, 5, 100080.	1.4	0
1140	Temperature-dependent site selection of boron doping in chemically derived graphene. Carbon, 2021, 184, 253-265.	5.4	5
1141	Pore size analysis of carbons with heterogeneous kernels from reactive molecular dynamics model and quenched solid density functional theory. Carbon, 2021, 183, 672-684.	5.4	7
1142	Band gap opening and surface morphology of monolayer graphene induced by single ion impacts of argon monomer and dimer ions. Carbon, 2021, 184, 322-330.	5.4	2
1143	Pyrolysis mechanism of magnesium citrate nonahydrate and microstructural evolution during the process. Ceramics International, 2021, 47, 29607-29619.	2.3	9
1144	Energetic bombardment and defect generation during magnetron-sputter-deposition of metal layers on graphene. Applied Surface Science, 2021, 566, 150661.	3.1	8
1145	Achieving high strength and ductility in copper matrix composites with graphene network. Materials Science & Science & Properties, Microstructure and Processing, 2021, 828, 142107.	2.6	21

#	Article	IF	CITATIONS
1146	Flexible quantum dot light-emitting diodes without sacrificing optical and electrical performance. Applied Surface Science, 2021, 566, 150614.	3.1	9
1147	Wet-chemical synthesis of solution-processible porous graphene via defect-driven etching. Carbon, 2021, 185, 568-577.	5.4	9
1148	Nanoscopic humidity-dependent adhesion behaviors of 2D materials. Applied Surface Science, 2022, 572, 151394.	3.1	15
1149	Controlled covalent functionalization of a graphene-channel of a field effect transistor as an ideal platform for (bio)sensing applications. Nanoscale Horizons, 2021, 6, 819-829.	4.1	24
1150	Synthesis of graphene and other two-dimensional materials. , 2021, , 1-79.		4
1151	Studying 2D materials with advanced Raman spectroscopy: CARS, SRS and TERS. Physical Chemistry Chemical Physics, 2021, 23, 23428-23444.	1.3	26
1152	Modulating thermal conductance across the metal/graphene/SiO ₂ interface with ion irradiation. Physical Chemistry Chemical Physics, 2021, 23, 22760-22767.	1.3	4
1153	Raman spectroscopy for carbon nanotube applications. Journal of Applied Physics, 2021, 129, .	1.1	212
1154	Microscale surface potential gradient disturbances observed in bilayer graphene. Applied Surface Science, 2020, 510, 145504.	3.1	2
1155	High-quality graphene films and nitrogen-doped organogels prepared from the organic dispersions of graphene oxide. Carbon, 2018, 129, 15-20.	5.4	18
1156	Plasma Enhanced Chemical Vapor Deposition synthesis of graphene-like structures from plasma state of CO2 gas. Carbon, 2020, 167, 132-139.	5.4	14
1157	Magnetic graphene/chitosan nanocomposite: A promising nano-adsorbent for the removal of 2-naphthol from aqueous solution and their kinetic studies. International Journal of Biological Macromolecules, 2020, 159, 530-538.	3.6	52
1158	Metrology for Graphene and 2-D Materials. , 2015, , .		1
1159	Nanoscale patterning at the Si/SiO2/graphene interface by focused He+ beam. Nanotechnology, 2020, 31, 505302.	1.3	2
1160	Intrinsic core level photoemission of suspended monolayer graphene. Physical Review Materials, 2018, 2, .	0.9	15
1161	Simultaneous Electrochemical Exfoliation and Chemical Functionalization of Graphene for Supercapacitor Electrodes. Journal of the Electrochemical Society, 2020, 167, 110531.	1.3	11
1162	Application of Raman spectroscopy to the study of graphitic carbons in the Earth Sciences. , 0, , 415-454.		16
1163	Temperature Dependence of G and D' Phonons in Monolayer to Few-Layer Graphene with Vacancies. Nanoscale Research Letters, 2020, 15, 189.	3.1	9

#	Article	IF	Citations
1164	An Introduction to Graphene and Carbon Nanotubes. , 0, , .		23
1165	Template Assisted Synthesis of Nanoporous Carbon from Bio-Weed of Ipomoea carnea Stems for Supercapacitor Applications. Asian Journal of Chemistry, 2019, 31, 1163-1168.	0.1	2
1166	Properties of Graphene Flakes Obtained by Treating Graphite with Ultrasound. Ukrainian Journal of Physics, 2017, 62, 432-440.	0.1	4
1167	Raman Characteristics of Multiwall Carbon Nanotubes on Diatomite. Eurasian Chemico-Technological Journal, 2018, , 319.	0.3	4
1168	Porous Graphene Composite Polymer Fibres. Polymers, 2021, 13, 76.	2.0	10
1169	Raman Spectra in Irradiated Graphene: Line Broadening, Effects of Aging and Annealing. Graphene, 2020, 09, 13-28.	0.3	4
1170	Effect of graphene flake size on functionalisation: quantifying reaction extent and imaging locus with single Pt atom tags. Chemical Science, 2021, 12, 14907-14919.	3.7	5
1171	Tribological characterization of graphene oxide by laser ablation as a grease additive. International Journal of Chemical Reactor Engineering, 2022, 20, 275-284.	0.6	1
1172	Forbidden and Second-Order Phonons in Raman Spectra of Single and Few-Layer MoS2 Close to C Exciton Resonance. Journal of Physical Chemistry C, 2021, 125, 23904-23910.	1.5	13
1173	Hierarchically porous hydrogels and aerogels based on reduced graphene oxide, montmorillonite and hyper-crosslinked resins for water and air remediation. Chemical Engineering Journal, 2022, 430, 133162.	6.6	32
1174	Electrochemically Driven Specific Alkaline Metal Cation Adsorption on a Graphene Interface. Journal of Physical Chemistry C, 2021, 125, 22154-22162.	1.5	11
1175	Regiochemically Oxo-functionalized Graphene, Guided by Defect Sites, as Catalyst for Oxygen Reduction to Hydrogen Peroxide. Journal of Physical Chemistry Letters, 2021, 12, 10009-10014.	2.1	9
1176	Encapsulation of iron atoms between fragments of graphene planes. Nanosystems: Physics, Chemistry, Mathematics, 2015, , 680-688.	0.2	0
1177	Study of Carbon Nanostructures for Soil Fertility Improvement. Nanomedicine and Nanotoxicology, 2016, , 85-104.	0.1	1
1178	Nanostructured Materials: Metrology. , 2016, , .		0
1179	7 Raman Spectra of Graphene and Single-Walled Carbon Nanotubes (SWCNTs)., 2016,, 99-126.		0
1181	Preparation of Anisotropic Conductive Graphene Aerogel/Polydimethylsiloxane Composites as LEGO® Modulars. SSRN Electronic Journal, 0, , .	0.4	0
1182	Chemical structure analysis of diamond-like carbon by Raman spectroscopy. Tanso, 2019, 2019, 14-25.	0.1	2

#	Article	IF	Citations
1183	Effects of ion irradiation and oxidation on point defects in IG-110 nuclear grade graphite. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 128102.	0.2	2
1184	Optical Inspection of 2D Materials: From Mechanical Exfoliation to Waferâ€scale Growth and Beyond. Advanced Science, 2022, 9, e2102128.	5.6	11
1185	Performance Improvement of Residue-Free Graphene Field-Effect Transistor Using Au-Assisted Transfer Method. Sensors, 2021, 21, 7262.	2.1	3
1186	Atmospheric Pressure Catalytic Vapor Deposition of Graphene on Liquid In and Cu-In Alloy Substrates. Catalysts, 2021, 11, 1318.	1.6	1
1187	Synergic Effects of the Nanopore Size and Surface Charge on the Ion Selectivity of Graphene Membranes. Journal of Physical Chemistry C, 2021, 125, 507-514.	1.5	11
1188	Periodic Surface Functional Group Density on Graphene Induced by Pulsed Laser Patterning of SiO2/Si Substrate., 2020,,.		0
1189	Graphene. Springer Handbooks, 2020, , 1171-1198.	0.3	2
1191	Effect of He ion irradiation on microstructure and electrical properties of graphene. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 016101.	0.2	3
1192	Carbon material Raman spectroscopy metamorphic thermometer and its application in reconstruction and evolution of orogenic belt thermal structure. Acta Petrologica Sinica, 2020, 36, 526-540.	0.3	2
1193	GaN and InGaN Based Nanocomposites for Ammonia Gas Sensing Applications. Physica Status Solidi (B): Basic Research, 2022, 259, 2100362.	0.7	2
1194	Surface Characterization of Low Energy Si Ion Implanted Graphene. Applied Surface Science, 2021, 576, 151816.	3.1	2
1195	Fabrication of an novel <scp>NiCo</scp> â€based bimetallic hydroxide encapsulated with polyphosphazene with simultaneously improved the flame retardancy and smoke suppression for polypropylene. Journal of Applied Polymer Science, 2022, 139, .	1.3	2
1196	Metrology for Graphene and 2-D Materials. , 2015, , .		0
1197	How to induce superconductivity in epitaxial graphene via remote proximity effect through an intercalated gold layer. 2D Materials, 2021, 8, 015002.	2.0	6
1198	Role of defects and grain boundaries in the thermal response of wafer-scale hBN films. Nanotechnology, 2021, 32, 075702.	1.3	6
1199	In situ functionalization of graphene. 2D Materials, 2021, 8, 015022.	2.0	5
1200	Roles of structural and chemical defects in graphene on quenching of nearby fluorophores. Carbon, 2020, 165, 412-420.	5.4	0
1201	Electrochemical synthesis and property characterisation of graphene oxide using water as electrolyte. Chemical Physics Letters, 2022, 786, 139206.	1.2	6

#	Article	IF	CITATIONS
1202	Substrate-assisted Fermi level shifting of CVD graphene by swift heavy ions. Surfaces and Interfaces, 2022, 28, 101625.	1.5	1
1203	Fabrication of amorphous molybdenum sulfide/nitrogen-doped reduced graphene oxide nanocomposites with a tailored composition and hydrogen evolution activity via plasma treatment. Carbon, 2022, 187, 386-395.	5.4	13
1204	N/Ce doped graphene supported Pt nanoparticles for the catalytic oxidation of formaldehyde at room temperature. Journal of Environmental Sciences, 2023, 125, 135-147.	3.2	6
1205	High dose 30 MeV 58Ni5+ ion irradiation causes microstructure evolution in nuclear graphite at 400 ŰC. Journal of Nuclear Materials, 2022, 559, 153460.	1.3	7
1206	Electrostatic self-assembly assisted hydrothermal synthesis of bimetallic NiCo2S4@N, S co-doped graphene for high performance asymmetric supercapacitors. Electrochimica Acta, 2022, 404, 139751.	2.6	16
1207	Dual-templating strategy for the fabrication of graphene oxide, reduced graphene oxide and composite scaffolds with hierarchical architectures. Carbon, 2022, 189, 186-198.	5.4	6
1208	Charge distribution in turbostratic few-layer graphene studied by carbon isotope labeling. Carbon, 2022, 189, 21-26.	5.4	6
1209	<scp>Oneâ€step</scp> synthesis of nitrogenâ€doped graphene powders and application of them as <scp>highâ€performance</scp> symmetrical coin cell supercapacitors in different aqueous electrolyte. International Journal of Energy Research, 2022, 46, 7348-7373.	2.2	15
1210	Reduction of metal nanoparticle decorated flexible graphene oxide by laser at various temperatures and under selected atmospheres. Carbon Trends, 2022, 6, 100140.	1.4	5
1211	Synergistic Effect of Hexagonal Boron Nitride-Coated Separators and Multi-Walled Carbon Nanotube Anodes for Thermally Stable Lithium-Ion Batteries. Crystals, 2022, 12, 125.	1.0	7
1212	Cu ions irradiation-induced defects in graphene and their effects on optical properties. Radiation Physics and Chemistry, 2022, 193, 110008.	1.4	1
1213	Highly sensitive graphene ammonia sensor enhanced by concentrated nitric acid treatment. Applied Surface Science, 2022, 586, 152689.	3.1	13
1214	Investigating the Performances of Wide-Field Raman Microscopy with Stochastic Optical Reconstruction Post-Processing. Applied Spectroscopy, 2022, 76, 340-351.	1.2	7
1215	Adiabatic versus non-adiabatic electron transfer at 2D electrode materials. Nature Communications, 2021, 12, 7110.	5.8	24
1216	Physics and theory of defects in 2D materials: the role of reduced dimensionality., 2022, , 7-41.		5
1217	Two-dimensional materials under ion irradiation: from defect production to structure and property engineering., 2022,, 259-301.		2
1218	GaN LEDs with <i>in situ</i> synthesized transparent graphene heat-spreading electrodes fabricated by PECVD and penetration etching. Journal of Materials Chemistry C, 2022, 10, 6794-6804.	2.7	3
1219	Enhanced nonlinear optical absorption in defect enriched graphene oxide and reduced graphene oxide using continuous wave laser z-scan technique. Materials Today: Proceedings, 2022, 55, 186-193.	0.9	5

#	Article	IF	Citations
1220	Laserâ€Induced Graphene Superhydrophobic Surface Transition from Pinning to Rolling for Multiple Applications. Small Methods, 2022, 6, e2200096.	4.6	13
1221	Memristive FG–PVA Structures Fabricated with the Use of High Energy Xe Ion Irradiation. Materials, 2022, 15, 2085.	1.3	O
1222	Inhalable MOFâ€Derived Nanoparticles for Sonodynamic Therapy of Bacterial Pneumonia. Advanced Functional Materials, 2022, 32, .	7.8	31
1223	Electrical and Structural Properties of CVD-Graphene Oxidized Using KMnO4/H2SO4 Solution. Crystals, 2022, 12, 439.	1.0	0
1224	Spatial Control of Graphene Functionalization by Patterning a 2D Substrate: Implications for Graphene Based van-der-Waals Heterostructures. ACS Applied Nano Materials, 0, , .	2.4	2
1225	Evidence of defectâ€annealing effect in swift heavyâ€ionâ€irradiated indium phosphide. Journal of Raman Spectroscopy, 2022, 53, 1003-1011.	1.2	1
1226	Nanostructured Material and its Application in Membrane Separation Technology. Micro and Nanosystems, 2023, 15, 16-27.	0.3	0
1227	Graphene nanopores in broadband wide-angle optical cavity resonance absorbers. Surfaces and Interfaces, 2022, 30, 101956.	1.5	8
1228	New Structural Insights into Densely Assembled Reduced Graphene Oxide Membranes. Advanced Functional Materials, 2022, 32, .	7.8	27
1229	Raman Spectroscopy Investigation on the Stability of C-Isotope Labeled Twisted and AB-Stacked Bilayer Graphene. Materials Science Forum, 0, 1058, 85-90.	0.3	0
1230	From GO to rGO: An analysis of the progressive rippling induced by energetic ion irradiation. Applied Surface Science, 2022, 586, 152789.	3.1	14
1231	Graphene on SiC as a promising platform for magnetic field detection under neutron irradiation. Applied Surface Science, 2022, 590, 152992.	3.1	13
1232	The Mechanism for the Effect of Nanocarbons Added to Electroplating Electrolytes on the Tribotechnical Properties of Chromium Coatings. Journal of Machinery Manufacture and Reliability, 2021, 50, 475-480.	0.1	0
1233	Predoped Oxygenated Defects Activate Nitrogen-Doped Graphene for the Oxygen Reduction Reaction. ACS Catalysis, 2022, 12, 173-182.	5.5	17
1234	Effect of long-term ageing on graphene oxide: structure and thermal decomposition. Royal Society Open Science, 2021, 8, 202309.	1.1	15
1235	Influence of C=O groups on the optical extinction coefficient of graphene exfoliated in liquid phase. Journal of Physics Condensed Matter, 2022, 34, 105701.	0.7	2
1236	Porous SiC and SiC/Cf Ceramic Microspheres Derived from Polyhydromethylsiloxane by Carbothermal Reduction. Materials, 2022, 15, 81.	1.3	1
1237	Absolute Quantification of sp ³ Defects in Semiconducting Single-Wall Carbon Nanotubes by Raman Spectroscopy. Journal of Physical Chemistry Letters, 2022, 13, 3542-3548.	2.1	28

#	Article	IF	CITATIONS
1238	Fabrication of reduced graphene oxide with high electrical conductivity by thermal-assisted photoreduction of electrochemically-exfoliated graphene oxide. Japanese Journal of Applied Physics, 2022, 61, SL1012.	0.8	1
1239	Variations in the Effective Work Function of Graphene in a Sliding Electrical Contact Interface under Ambient Conditions. ACS Applied Materials & Samp; Interfaces, 2022, 14, 27328-27338.	4.0	2
1240	Grafting Ink for Direct Writing: Solvation Activated Covalent Functionalization of Graphene. Advanced Science, 2022, 9, e2105017.	5.6	8
1241	Macroporous nitrogen-containing carbon for electrochemical capacitors. Electrochimica Acta, 2022, 418, 140370.	2.6	2
1244	Activated Hopping Transport in Nematic Conducting Aerogels. Journal of Experimental and Theoretical Physics, 2022, 134, 222-234.	0.2	0
1245	International interlaboratory comparison of Raman spectroscopic analysis of CVD-grown graphene. 2D Materials, 2022, 9, 035010.	2.0	7
1246	Mechanism of graphene adhesion to SiO2 after He+ ion beam bombardment determined by SERS. Surfaces and Interfaces, 2022, 31, 101990.	1.5	0
1247	Significant enhancement in sensitivity of graphene gas detectors induced by highly charged ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2022, 522, 14-20.	0.6	0
1248	Holes distribution in bilayer graphene. Applied Surface Science, 2022, 595, 153517.	3.1	3
1249	Core-shell GaSn@rGO nanoparticles as high-performance cathodes for room-temperature liquid metal batteries. Scripta Materialia, 2022, 217, 114792.	2.6	10
1250	Laccase-mediator system for enzymatic degradation of carbonaceous matter in the sequential pretreatment of double refractory gold ore from Syama mine, Mali. Hydrometallurgy, 2022, 212, 105894.	1.8	2
1251	Evidence of structural changes in ion-irradiated graphene independent of the incident ions mass. Applied Surface Science, 2022, 597, 153701.	3.1	3
1252	Graphene Oxide/Elastin Nanostructure-Based Membranes for Bone Regeneration. ACS Applied Nano Materials, 2022, 5, 6890-6900.	2.4	4
1253	Highâ€Quality Monolayer Reduced Graphene Oxide Films via Combined Chemical Reduction and Ethanolâ€Assisted Defect Restoration. Advanced Materials Interfaces, 2022, 9, .	1.9	5
1254	Effect of topological non-hexagonal rings and Stone Wale defects on the vibrational response of single and multi-layer ion irradiated graphene. Physica E: Low-Dimensional Systems and Nanostructures, 2022, , 115329.	1.3	1
1255	Reversible functionalization and exfoliation of graphite by a Diels–Alder reaction with furfuryl amine. RSC Advances, 2022, 12, 17249-17256.	1.7	0
1256	Roll-to-Roll Deposition of Thin Graphitic Films and Dependence on Discharge Modes in Radio Frequency Capacitively Coupled Plasma. IEEE Transactions on Plasma Science, 2022, 50, 2126-2137.	0.6	1
1257	Fluorine-doped graphene as triboelectric material. 2D Materials, 0, , .	2.0	1

#	Article	IF	CITATIONS
1258	Charge State Effects in Swift-Heavy-Ion-Irradiated Nanomaterials. Crystals, 2022, 12, 865.	1.0	6
1259	Low-Temperature Ethanol Sensor via Defective Multiwalled Carbon Nanotubes. Materials, 2022, 15, 4439.	1.3	5
1260	Kinetic, isotherm and thermodynamic adsorption studies of organophosphorus compound (phosmet) on reduced graphene oxide. Diamond and Related Materials, 2022, 127, 109191.	1.8	4
1261	Carbon Nanotubes Synthesized by CCVD Method using Diatomite and Shungite Minerals. Eurasian Chemico-Technological Journal, 2022, 24, 3.	0.3	0
1262	Effect of pH, ionic strength, and temperature on the adsorption behavior of Acid Blue 113 onto mesoporous carbon. Environmental Science and Pollution Research, 2022, 29, 77188-77198.	2.7	2
1263	A Hexagonal Nutâ€Like Metal–Organic Framework and Its Conformal Transformation. Small, 2022, 18, .	5.2	7
1264	Photo- and Radiofrequency-Induced Heating of Photoluminescent Colloidal Carbon Dots. Nanomaterials, 2022, 12, 2426.	1.9	4
1265	Controlled introduction of defects into single-walled carbon nanotubes via a fluorination–defluorination strategy using xenon difluoride and their alkaline oxygen reduction reaction catalytic activity. Journal of Colloid and Interface Science, 2022, 627, 168-179.	5.0	2
1267	A Comprehensive Photocatalysis Study of Promising Zirconia/Laser-Induced Graphene Nanocomposite for Wastewater Treatment-Based Methylene Blue Pollution. Separations, 2022, 9, 185.	1.1	4
1268	Modifications of Epitaxial Graphene on SiC for the Electrochemical Detection and Identification of Heavy Metal Salts in Seawater. Sensors, 2022, 22, 5367.	2.1	5
1269	Effect of Ultrasonic Treatment on the Functional Groups and Lateral Size of Graphene Oxide Flakes. Nanobiotechnology Reports, 2022, 17, 402-410.	0.2	0
1270	Fabrication of binderless electrodes via non-destructive electrochemical oxidation/reduction of graphite sheets using BF4 salts. Electrochimica Acta, 2022, 430, 141087.	2.6	4
1271	Combined Raman Spectroscopy and Magneto-Transport Measurements in Disordered Graphene: Correlating Raman D Band and Weak Localization Features. Coatings, 2022, 12, 1137.	1.2	1
1272	Selective Catalytic Electro-Oxidation of Water with Cobalt Oxide in Ion Impermeable Reduced Graphene Oxide Porous Electrodes. ACS Nano, 2022, 16, 12488-12499.	7.3	11
1273	Synergistic Effect of NiO-Ga2O2-Graphene Heterostructures on Congo Red Photodegradation in Water. Separations, 2022, 9, 201.	1.1	3
1274	Determination of Paracetamol on Electrochemically Reduced Graphene Oxide–Antimony Nanocomposite Modified Pencil Graphite Electrode Using Adsorptive Stripping Differential Pulse Voltammetry. Sensors, 2022, 22, 5784.	2.1	4
1275	Facile preparation of poly($\langle i\rangle N\langle i\rangle$ -isopropylacrylamide)/graphene oxide nanocomposites for chemo-photothermal therapy. Designed Monomers and Polymers, 2022, 25, 245-253.	0.7	3
1276	Rationalized design of hyperbranched trans-scale graphene arrays for enduring high-energy lithium metal batteries. Science Advances, 2022, 8, .	4.7	14

#	Article	IF	CITATIONS
1277	Performance evaluation of Fe-loaded regenerated activated carbon prepared from waste mercuric chloride catalysts. Journal of Materials Research and Technology, 2022, 20, 791-800.	2.6	1
1278	Time-evolved doping of graphene on an oxidized polycrystalline Cu surface. Carbon, 2022, 199, 279-287.	5.4	1
1279	Eco-friendly synthesis of sulphur-doped graphenes with applicability in caffeic acid electrochemical assay. Bioelectrochemistry, 2022, 148, 108228.	2.4	3
1280	Heteroatom doping effect of Pt/rGO catalysts for formaldehyde abatement at ambient temperature. Chemical Physics Impact, 2022, 5, 100103.	1.7	3
1281	Incorporation of single-atom copper into nitrogen-doped graphene for acetaminophen electrocatalytic degradation. Applied Surface Science, 2022, 604, 154561.	3.1	11
1282	High entropy alloy nanoparticle - graphene (HEA:G) composite for non-enzymatic glucose oxidation : optimization for enhanced catalytic performance. Carbon Trends, 2022, 9, 100216.	1.4	4
1283	Bond Defects in Graphene Created by Ultralow Energy Ion Implantation. SSRN Electronic Journal, 0, , .	0.4	0
1284	Stages of Defect Formation in a Graphene Coating on a Copper Substrate under Irradiation with Helium and Argon Ions. Moscow University Physics Bulletin (English Translation of Vestnik) Tj ETQq1 1 0.784314	rgBI /Ove	erl o ck 10 Tf
1285	A Novel Sustainable Process for Multilayer Graphene Synthesis Using CO2 from Ambient Air. Materials, 2022, 15, 5894.	1.3	1
1286	Deconvolution and quantification of defect types from the first order Raman spectra of graphene oxide derivatives. FlatChem, 2022, 35, 100422.	2.8	7
1287	Effect of Substrate Roughness on the Friction and Wear Behaviors of Laser-Induced Graphene Film. Lubricants, 2022, 10, 239.	1.2	4
1288	Structure and function of hard carbon negative electrodes for sodium-ion batteries. JPhys Energy, 2022, 4, 042001.	2.3	12
1289	Parametric investigation on laser interaction with polyimide for graphene synthesis towards flexible devices. Journal Physics D: Applied Physics, 2023, 56, 015305.	1.3	2
1290	Reduced Graphene Oxide Quantum Dot Light Emitting Diodes Fabricated Using an Ultraviolet Light Emitting Diode Photolithography Technique. ACS Applied Materials & Emitting Diode Photolithography Technique. ACS Applied Materials & Emitting Diode Photolithography Technique. ACS Applied Materials & Emitting Diodes Fabricated Using an Ultraviolet Light Emitting Diodes Fabricated Using E	4.0	6
1291	Vacancy clustering effect on the electronic and transport properties of bilayer graphene nanoribbons. Nanotechnology, 2023, 34, 055706.	1.3	1
1292	Ultrasensitive graphene sensor for nitrate detection using triethylamine as a probe molecule. Microchemical Journal, 2022, 183, 108043.	2.3	2
1293	Single process of pulsed wire discharge for defect healing and reduction of graphene oxide. Carbon, 2023, 201, 1184-1192.	5.4	3
1294	Transfer-Free CVD Growth of High-Quality Wafer-Scale Graphene at 300 °C for Device Mass Fabrication. ACS Applied Materials & Samp; Interfaces, 2022, 14, 53174-53182.	4.0	4

#	ARTICLE	IF	CITATIONS
1295	Eco-Friendly Reduction of Graphene Oxide by Aqueous Extracts for Photocatalysis Applications. Nanomaterials, 2022, 12, 3882.	1.9	5
1296	Effects of hot extrusion on the microstructure and mechanical properties of 2024Al-GNPs composites. Diamond and Related Materials, 2023, 131, 109551.	1.8	1
1297	Differences in water and vapor transport through angstrom-scale pores in atomically thin membranes. Nature Communications, 2022, 13 , .	5.8	9
1298	Enhancing charge extraction in inverted perovskite solar cells contacts <i>via</i> ultrathin graphene:fullerene composite interlayers. Journal of Materials Chemistry A, 2023, 11, 12866-12875.	5.2	7
1299	Bond defects in graphene created by ultralow energy ion implantation. Carbon, 2023, 203, 590-600.	5.4	4
1300	Highly conductive quasi-defect-free reduced graphene oxide for qualitative scalable production. Carbon, 2023, 203, 221-229.	5.4	8
1301	Effects on graphene of electron irradiation at 25 keV and dosages up to 1018 electrons/cm2. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2023, 41, .	0.9	3
1302	Formation of Diamane Nanostructures in Bilayer Graphene on Langasite under Irradiation with a Focused Electron Beam. Nanomaterials, 2022, 12, 4408.	1.9	5
1303	Fully desktop fabricated flexible graphene electrocorticography (ECoG) arrays. Journal of Neural Engineering, 2023, 20, 016019.	1.8	1
1304	Insights into the Stability of Graphene Oxide Aqueous Dispersions. Nanomaterials, 2022, 12, 4489.	1.9	5
1305	Applicability of OECD TG 201, 202, 203 for the aquatic toxicity testing and assessment of 2D Graphene material nanoforms to meet regulatory needs. NanoImpact, 2023, 29, 100447.	2.4	3
1306	Conductive double-network hydrogel composed of sodium alginate, polyacrylamide, and reduced graphene oxide. Korean Journal of Chemical Engineering, 2023, 40, 352-360.	1.2	5
1307	Operability timescale of defect-engineered graphene. Surfaces and Interfaces, 2023, 37, 102662.	1.5	4
1308	Doped graphene characterized via Raman spectroscopy and magneto-transport measurements. Journal of Applied Physics, 2023, 133, 025304.	1.1	1
1309	Graphene memristors based on humidity-mediated reduction of graphene oxide. Journal of Materials Chemistry C, 2023, 11, 1690-1695.	2.7	2
1310	Surface functionalization of carbon materials. , 2023, , .		0
1311	Silver/reduced graphene oxide nanocomposite materials synthesized via a green molecular level mixing. Journal of Composite Materials, 2023, 57, 1213-1222.	1.2	0
1312	Highly Sensitive Humidity Sensor Based on Freestanding Graphene Oxide Sheets for Respiration and Moisture Detection. Journal of Electronic Materials, 2023, 52, 2396-2408.	1.0	5

#	Article	IF	CITATIONS
1313	Synthesis of reduced graphene oxide quantum dots from graphene oxide via hydrothermal process and theirs structural, luminescence and magnetic properties. Journal of the Taiwan Institute of Chemical Engineers, 2023, 142, 104667.	2.7	10
1314	Fabrication of a Biomass-Derived Activated Carbon-Based Anode for High-Performance Li-lon Batteries. Micromachines, 2023, 14, 192.	1.4	5
1315	Deterministic organic functionalization of monolayer graphene <i>via</i> high resolution surface engineering. Journal of Materials Chemistry C, 2023, 11, 2630-2639.	2.7	4
1317	Raman Study of the Diamond to Graphite Transition Induced by the Single Femtosecond Laser Pulse on the (111) Face. Nanomaterials, 2023, 13, 162.	1.9	4
1318	Influence of thermal interfacings on reduced graphene oxide characteristics and its photocatalytic activity degrading Rhodamine B. Journal of Materials Science: Materials in Electronics, 2023, 34, .	1.1	1
1319	Electrochemical Performance of Potassium Bromate Active Electrolyte for Laser-Induced KBr-Graphene Supercapacitor Electrodes. Inorganics, 2023, 11, 109.	1.2	1
1320	Reduced graphene oxides prepared via explosive and non-explosive thermal reduction: Structural evolution, functional properties and reinforcing efficacy. Carbon, 2023, 209, 118007.	5.4	3
1321	Effect of Ni-modified reduced graphene oxide on the mechanical properties of Sn–58Bi solder joints. Vacuum, 2023, 211, 111943.	1.6	4
1322	Edge-boron-functionalized coal-derived graphite nanoplatelets prepared via mechanochemical modification for enhanced Li-ion storage at low-voltage plateau. Applied Surface Science, 2023, 621, 156870.	3.1	16
1323	Raman spectroscopy of carbon materials and their composites: Graphene, nanotubes and fibres. Progress in Materials Science, 2023, 135, 101089.	16.0	120
1324	Tribological study of beeswax-thickened biogrease and its modification with carbon nanoparticles. Tribology International, 2023, 184, 108465.	3.0	2
1325	Evolution of the Raman spectra features of defective monolayer graphene in back-gate configuration: Experimental study. Diamond and Related Materials, 2023, 136, 109919.	1.8	1
1326	Macroscale superlubricity and durability of in situ grown hydrogenated graphene coatings. Chemical Engineering Journal, 2023, 459, 141521.	6.6	12
1327	Top-Down Fabrication of Luminescent Graphene Quantum Dots Using Self-Assembled Au Nanoparticles. ACS Omega, 2023, 8, 5885-5892.	1.6	15
1328	Response of Bilayer and Trilayer Graphene to High-Energy Heavy Ion Irradiation. Materials, 2023, 16, 1332.	1.3	1
1329	Charge carrier density dependent Raman spectra of graphene encapsulated in hexagonal boron nitride. Physical Review B, 2023, 107, .	1.1	5
1330	Structural, morphological and electrochemical characterization of the degradation processes during the oxygen reduction reaction of iron(II) phthalocyanine supported on carbon nanotubes. Electrochimica Acta, 2023, 446, 142060.	2.6	1
1331	H2O2-free strategy derived from Hummers method for preparing graphene oxide with high oxidation degree. FlatChem, 2023, 38, 100487.	2.8	10

#	Article	IF	CITATIONS
1332	Effect of microstrain on the magnetic properties of reduced graphene oxide by Fe3O4 nanoparticles: insight from experimental and density functional theory. Applied Physics A: Materials Science and Processing, 2023, 129, .	1.1	1
1333	Using combustion synthesis to convert emissions into useful solid materials. , 2023, , 599-630.		0
1334	Vacuum-Filtration-Assisted Ice-Templated Freeze Drying for Preparing Capacitive Graphene Aerogel for Thermal Management. Crystals, 2023, 13, 458.	1.0	0
1335	Edgeâ€Siteâ€Free and Topologicalâ€Defectâ€Rich Carbon Cathode for Highâ€Performance Lithiumâ€Oxygen Batteries. Advanced Science, 2023, 10, .	5.6	12
1336	Probing symmetry-breaking defects in polished graphitizable <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>s</mml:mi><mml:msup><mml:mi>carbons using angle-resolved polarized Raman scattering. Physical Review B, 2023, 107, .</mml:mi></mml:msup></mml:mrow></mml:math>	• p x./ mml:m	nm:lmm>kin
1337	Improved electrical and thermal properties of silicon oxycarbide/spodumene composites. Journal of the European Ceramic Society, 2023, 43, 4958-4967.	2.8	1
1338	Tuning Quantum Capacitance in 2D graphene electrodes: The Role of Defects and Charge Carriers Concentration. Journal of Materials Chemistry C, 0, , .	2.7	0
1339	Grain Size Engineering of CVDâ€Grown Largeâ€Area Graphene Films. Small Methods, 2023, 7, .	4.6	2
1340	Rearrangement of GO nanosheets with inner and outer forces under high-speed spin for supercapacitor. Journal of Colloid and Interface Science, 2023, 644, 167-176.	5.0	4
1343	The Characterization Analysis of Graphene. Engineering Materials, 2023, , 105-126.	0.3	0
1353	Recent progresses on ion beam irradiation induced structure and performance modulation of two-dimensional materials. Nanoscale, 2023, 15, 8925-8947.	2.8	3
1357	Characterization Techniques for Graphene-Based Materials. , 2023, , 118-153.		0
1365	Analyzing Fundamental Properties of Two-Dimensional Materials by Raman Spectroscopy from Microscale to Nanoscale. Analytical Chemistry, 2023, 95, 10821-10838.	3.2	3
1409	Understanding the Redox Mechanism of Layered Transition Metal Oxide During Electrochemical Cycling in Sodium-lon Batteries. Springer Proceedings in Materials, 2024, , 171-176.	0.1	0
1416	Toward three-dimensionally ordered nanoporous graphene materials: template synthesis, structure, and applications. Chemical Science, 2024, 15, 1953-1965.	3.7	0