Mauricio Terrones

List of Publications by Year
in descending order

714 papers	67,993 citations	668 122 h-index	983 237 g-index
751 all docs	751 docs citations	751 times ranked	55205 citing authors

#	Article	IF	Citations
1	Progress, Challenges, and Opportunities in Two-Dimensional Materials Beyond Graphene. ACS Nano, 2013, 7, 2898-2926.	14.6	4,062
2	Recent Advances in Two-Dimensional Materials beyond Graphene. ACS Nano, 2015, 9, 11509-11539.	14.6	2,069
3	Vertical and in-plane heterostructures from WS2/MoS2 monolayers. Nature Materials, 2014, 13, 1135-1142.	27.5	1,918
4	Extraordinary Room-Temperature Photoluminescence in Triangular WS₂ Monolayers. Nano Letters, 2013, 13, 3447-3454.	9.1	1,375
5	Identification of individual and few layers of WS2 using Raman Spectroscopy. Scientific Reports, 2013, 3, .	3.3	1,185
6	Transition Metal Dichalcogenides and Beyond: Synthesis, Properties, and Applications of Single- and Few-Layer Nanosheets. Accounts of Chemical Research, 2015, 48, 56-64.	15.6	1,089
7	Evaluating the characteristics of multiwall carbon nanotubes. Carbon, 2011, 49, 2581-2602.	10.3	951
8	Science and Technology of the Twenty-First Century: Synthesis, Properties, and Applications of Carbon Nanotubes. Annual Review of Materials Research, 2003, 33, 419-501.	9.3	871
9	Graphene and graphite nanoribbons: Morphology, properties, synthesis, defects and applications. Nano Today, 2010, 5, 351-372.	11.9	817
10	Controlled production of aligned-nanotube bundles. Nature, 1997, 388, 52-55.	27.8	763
11	Defect engineering of two-dimensional transition metal dichalcogenides. 2D Materials, 2016, 3, 022002.	4.4	736
12	Identification of Electron Donor States in N-Doped Carbon Nanotubes. Nano Letters, 2001, 1, 457-460.	9.1	727
13	Molecular Junctions by Joining Single-Walled Carbon Nanotubes. Physical Review Letters, 2002, 89, 075505.	7.8	656
14	Controlled Formation of Sharp Zigzag and Armchair Edges in Graphitic Nanoribbons. Science, 2009, 323, 1701-1705.	12.6	655
15	Fast and Efficient Preparation of Exfoliated 2H MoS₂ Nanosheets by Sonication-Assisted Lithium Intercalation and Infrared Laser-Induced 1T to 2H Phase Reversion. Nano Letters, 2015, 15, 5956-5960.	9.1	603
16	Bulk Production of a New Form of sp² Carbon: Crystalline Graphene Nanoribbons. Nano Letters, 2008, 8, 2773-2778.	9.1	588
17	Nitrogen-doped graphene: beyond single substitution and enhanced molecular sensing. Scientific Reports, 2012, 2, 586.	3.3	563
18	Effect of defects on the intrinsic strength and stiffness of graphene. Nature Communications, 2014, 5, 3186.	12.8	560

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19	â€˜Buckypaperâ€™ from coaxial nanotubes. Nature, 2005, 433, 476-476.	27.8	548
20	Photosensor Device Based on Fewâ€Layered WS₂ Films. Advanced Functional Materials, 2013, 23, 5511-5517.	14.9	546
21	Ultrahigh humidity sensitivity of graphene oxide. Scientific Reports, 2013, 3, 2714.	3.3	542
22	Beyond Graphene: Progress in Novel Two-Dimensional Materials and van der Waals Solids. Annual Review of Materials Research, 2015, 45, 1-27.	9.3	537
23	Controlled Synthesis and Transfer of Large-Area WS₂ Sheets: From Single Layer to Few Layers. ACS Nano, 2013, 7, 5235-5242.	14.6	534
24	Selective Attachment of Gold Nanoparticles to Nitrogen-Doped Carbon Nanotubes. Nano Letters, 2003, 3, 275-277.	9.1	518
25	Structure and Electronic Properties ofMoS2Nanotubes. Physical Review Letters, 2000, 85, 146-149.	7.8	497
26	New Metallic Allotropes of Planar and Tubular Carbon. Physical Review Letters, 2000, 84, 1716-1719.	7.8	485
27	The role of defects and doping in 2D graphene sheets and 1D nanoribbons. Reports on Progress in Physics, 2012, 75, 062501.	20.1	475
28	Coalescence of Single-Walled Carbon Nanotubes. Science, 2000, 288, 1226-1229.	12.6	469
29	Band Gap Engineering and Layer-by-Layer Mapping of Selenium-Doped Molybdenum Disulfide. Nano Letters, 2014, 14, 442-449.	9.1	463
30	Three-dimensionally bonded spongy graphene material with super compressive elasticity and near-zero Poissonâ€™s ratio. Nature Communications, 2015, 6, 6141.	12.8	458
31	Novel hetero-layered materials with tunable direct band gaps by sandwiching different metal disulfides and diselenides. Scientific Reports, 2013, 3, 1549.	3.3	437
32	Graphene edges: a review of their fabrication and characterization. Nanoscale, 2011, 3, 86-95.	5.6	410
33	2D materials advances: from large scale synthesis and controlled heterostructures to improved characterization techniques, defects and applications. 2D Materials, 2016, 3, 042001.	4.4	408
34	N-doping and coalescence of carbon nanotubes: synthesis and electronic properties. Applied Physics A: Materials Science and Processing, 2002, 74, 355-361.	2.3	392
35	Carbon Nanotubes and Related Nanomaterials: Critical Advances and Challenges for Synthesis toward Mainstream Commercial Applications. ACS Nano, 2018, 12, 11756-11784.	14.6	388
36	Ex-MWNTs: Graphene Sheets and Ribbons Produced by Lithium Intercalation and Exfoliation of Carbon Nanotubes. Nano Letters, 2009, 9, 1527-1533.	9.1	369

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37	New First Order Raman-active Modes in Few Layered Transition Metal Dichalcogenides. Scientific Reports, 2014, 4, 4215.	3.3	367
38	Structural characterization of cup-stacked-type nanofibers with an entirely hollow core. Applied Physics Letters, 2002, 80, 1267-1269.	3.3	361
39	Manganese Doping of Monolayer MoS₂: The Substrate Is Critical. Nano Letters, 2015, 15, 6586-6591.	9.1	357
40	Protein immobilization on carbon nanotubes via a two-step process of diimide-activated amidation. Journal of Materials Chemistry, 2004, 14, 37.	6.7	354
41	Field-Effect Transistors Based on Few-Layered Î±-MoTe₂. ACS Nano, 2014, 8, 5911-5920.	14.6	333
42	Biocompatibility and Toxicological Studies of Carbon Nanotubes Doped with Nitrogen. Nano Letters, 2006, 6, 1609-1616.	9.1	332
43	Covalently bonded three-dimensional carbon nanotube solids via boron induced nanojunctions. Scientific Reports, 2012, 2, 363.	3.3	329
44	Longitudinal Cutting of Pure and Doped Carbon Nanotubes to Form Graphitic Nanoribbons Using Metal Clusters as Nanoscalpels. Nano Letters, 2010, 10, 366-372.	9.1	323
45	Flexible Piezoelectric ZnOâ€“Paper Nanocomposite Strain Sensor. Small, 2010, 6, 1641-1646.	10.0	318
46	Effective NaCl and dye rejection of hybrid graphene oxide/graphene layered membranes. Nature Nanotechnology, 2017, 12, 1083-1088.	31.5	307
47	Enhanced magnetic coercivities in Fe nanowires. Applied Physics Letters, 1999, 75, 3363-3365.	3.3	303
48	Defects and impurities in graphene-like materials. Materials Today, 2012, 15, 98-109.	14.2	298
49	Spectroscopic Signatures for Interlayer Coupling in MoS₂â€“WSe₂ van der Waals Stacking. ACS Nano, 2014, 8, 9649-9656.	14.6	288
50	Carbon Nanotubes as High-Pressure Cylinders and Nanoextruders. Science, 2006, 312, 1199-1202.	12.6	283
51	Metal particle catalysed production of nanoscale BN structures. Chemical Physics Letters, 1996, 259, 568-573.	2.6	282
52	Condensed-phase nanotubes. Nature, 1995, 377, 687-687.	27.8	277
53	Interphases in Graphene Polymerâ€based Nanocomposites: Achievements and Challenges. Advanced Materials, 2011, 23, 5302-5310.	21.0	272
54	Electron and phonon renormalization near charged defects in carbon nanotubes. Nature Materials, 2008, 7, 878-883.	27.5	263

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55	Extraordinary Second Harmonic Generation in Tungsten Disulfide Monolayers. Scientific Reports, 2014, 4, 5530.	3.3	262
56	Carbon science in 2016: Status, challenges and perspectives. Carbon, 2016, 98, 708-732.	10.3	261
57	Nanotubes in a Flash--Ignition and Reconstruction. Science, 2002, 296, 705-705.	12.6	256
58	Direct Synthesis of van der Waals Solids. ACS Nano, 2014, 8, 3715-3723.	14.6	253
59	Carbon Nitride Nanocomposites: Formation of Aligned CxNy Nanofibers. Advanced Materials, 1999, 11, 655-658.	21.0	252
60	Raman Spectroscopy of Boron-Doped Single-Layer Graphene. ACS Nano, 2012, 6, 6293-6300.	14.6	245
61	Efficient route to large arrays of CNx nanofibers by pyrolysis of ferrocene/melamine mixtures. Applied Physics Letters, 1999, 75, 3932-3934.	3.3	242
62	Carbon nanotubes: synthesis and properties, electronic devices and other emerging applications. International Materials Reviews, 2004, 49, 325-377.	19.3	231
63	Toxicity Evaluation for Safe Use of Nanomaterials: Recent Achievements and Technical Challenges. Advanced Materials, 2009, 21, 1549-1559.	21.0	231
64	Electronic Transport and Mechanical Properties of Phosphorus- and Phosphorusâ^'Nitrogen-Doped Carbon Nanotubes. ACS Nano, 2009, 3, 1913-1921.	14.6	228
65	Conducting linear chains of sulphur inside carbon nanotubes. Nature Communications, 2013, 4, 2162.	12.8	228
66	In situ nucleation of carbon nanotubes by the injection of carbon atoms into metal particles. Nature Nanotechnology, 2007, 2, 307-311.	31.5	226
67	New direction in nanotube science. Materials Today, 2004, 7, 30-45.	14.2	225
68	Pyrolytically grown BxCyNz nanomaterials: nanofibres and nanotubes. Chemical Physics Letters, 1996, 257, 576-582.	2.6	223
69	Covalent 2D and 3D Networks from 1D Nanostructures:Â Designing New Materials. Nano Letters, 2007, 7, 570-576.	9.1	223
70	Electrolytic formation of carbon nanostructures. Chemical Physics Letters, 1996, 262, 161-166.	2.6	221
71	Thermal stability and structural changes of double-walled carbon nanotubes by heat treatment. Chemical Physics Letters, 2004, 398, 87-92.	2.6	213
72	Optical identification of sulfur vacancies: Bound excitons at the edges of monolayer tungsten disulfide. Science Advances, 2017, 3, e1602813.	10.3	213

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73	Applications of carbon nanotubes in the twentyâ€“first century. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 2223-2238.	3.4	212
74	Selective and Efficient Impregnation of Metal Nanoparticles on Cup-Stacked-Type Carbon Nanofibers. Nano Letters, 2003, 3, 723-726.	9.1	208
75	Nitrogen-Mediated Carbon Nanotube Growth: Diameter Reduction, Metallicity, Bundle Dispersability, and Bamboo-like Structure Formation. ACS Nano, 2007, 1, 369-375.	14.6	207
76	Excited Excitonic States in 1L, 2L, 3L, and Bulk WSe₂ Observed by Resonant Raman Spectroscopy. ACS Nano, 2014, 8, 9629-9635.	14.6	207
77	Controlled Exfoliation of MoS₂ Crystals into Trilayer Nanosheets. Journal of the American Chemical Society, 2016, 138, 5143-5149.	13.7	207
78	Pyrolytic production of aligned carbon nanotubes from homogeneously dispersed benzene-based aerosols. Chemical Physics Letters, 2001, 338, 101-107.	2.6	205
79	A roadmap for electronic grade 2D materials. 2D Materials, 2019, 6, 022001.	4.4	205
80	Pure and doped boron nitride nanotubes. Materials Today, 2007, 10, 30-38.	14.2	204
81	Synthesis and characterization of long strands of nitrogen-doped single-walled carbon nanotubes. Chemical Physics Letters, 2006, 424, 345-352.	2.6	198
82	Towards new graphene materials: Doped graphene sheets and nanoribbons. Materials Letters, 2012, 78, 209-218.	2.6	196
83	Intervalley scattering by acoustic phonons in two-dimensional MoS2 revealed by double-resonance Raman spectroscopy. Nature Communications, 2017, 8, 14670.	12.8	196
84	CVD-grown monolayered MoS ₂ as an effective photosensor operating at low-voltage. 2D Materials, 2014, 1, 011004.	4.4	195
85	Heterodoped Nanotubes: Theory, Synthesis, and Characterization of Phosphorusâˆ’Nitrogen Doped Multiwalled Carbon Nanotubes. ACS Nano, 2008, 2, 441-448.	14.6	192
86	Dislocation motion and grain boundary migration in two-dimensional tungsten disulphide. Nature Communications, 2014, 5, 4867.	12.8	192
87	Wetting of Mono and Few-Layered WS₂ and MoS₂ Films Supported on Si/SiO₂ Substrates. ACS Nano, 2015, 9, 3023-3031.	14.6	186
88	Fullerene Coalescence in Nanopeapods:â€‰ A Path to Novel Tubular Carbon. Nano Letters, 2003, 3, 1037-1042.	9.1	185
89	Metallic and ferromagnetic edges in molybdenum disulfide nanoribbons. Nanotechnology, 2009, 20, 325703.	2.6	185
90	Rice Huskâ€Derived Graphene with Nanoâ€Sized Domains and Clean Edges. Small, 2014, 10, 2766-2770.	10.0	181

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91	Synthesis of thick and crystalline nanotube arrays by spray pyrolysis. Applied Physics Letters, 2000, 77, 3385-3387.	3.3	179
92	Fabrication of vapor and gas sensors using films of aligned CNx nanotubes. Chemical Physics Letters, 2004, 386, 137-143.	2.6	178
93	Ultrasensitive gas detection of large-area boron-doped graphene. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14527-14532.	7.1	177
94	Non-oxidative intercalation and exfoliation of graphite by BrÃ¸nsted acids. Nature Chemistry, 2014, 6, 957-963.	13.6	175
95	Microstructural changes induced in â€œstacked cupâ€•carbon nanofibers by heat treatment. Carbon, 2003, 41, 1941-1947.	10.3	174
96	Ultrasensitive molecular sensor using N-doped graphene through enhanced Raman scattering. Science Advances, 2016, 2, e1600322.	10.3	174
97	Curved nanostructured materials. New Journal of Physics, 2003, 5, 126-126.	2.9	170
98	Thermal stability studies of CVD-grown graphene nanoribbons: Defect annealing and loop formation. Chemical Physics Letters, 2009, 469, 177-182.	2.6	170
99	Super-stretchable Graphene Oxide Macroscopic Fibers with Outstanding Knotability Fabricated by Dry Film Scrolling. ACS Nano, 2014, 8, 5959-5967.	14.6	170
100	Production and Characterization of Single-Crystal FeCo Nanowires Inside Carbon Nanotubes. Nano Letters, 2005, 5, 467-472.	9.1	167
101	Synthetic routes to nanoscale BxCyNz architectures. Carbon, 2002, 40, 1665-1684.	10.3	164
102	Synthesis of Mesoporous BN and BCN Exhibiting Large Surface Areas via Templating Methods. Chemistry of Materials, 2005, 17, 5887-5890.	6.7	164
103	Low-temperature Synthesis of Heterostructures of Transition Metal Dichalcogenide Alloys (W_{<i>x</i>}Mo_{1â€“<i>x</i>}S₂) and Graphene with Superior Catalytic Performance for Hydrogen Evolution. ACS Nano, 2017, 11, 5103-5112.	14.6	157
104	A rapid and label-free platform for virus capture and identification from clinical samples. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 895-901.	7.1	157
105	Tungsten oxide tree-like structures. Chemical Physics Letters, 1999, 309, 327-334.	2.6	152
106	Hydrogen storage in nanoporous carbon materials: myth and facts. Physical Chemistry Chemical Physics, 2007, 9, 1786-1792.	2.8	151
107	Novel nanotubes and encapsulated nanowires. Applied Physics A: Materials Science and Processing, 1998, 66, 307-317.	2.3	150
108	Graphitic cones in palladium catalysed carbon nanofibres. Chemical Physics Letters, 2001, 343, 241-250.	2.6	150

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109	Magnetic Behavior in Zinc Oxide Zigzag Nanoribbons. Nano Letters, 2008, 8, 1562-1565.	9.1	150
110	Graphene Shape Control by Multistage Cutting and Transfer. Advanced Materials, 2009, 21, 4487-4491.	21.0	149
111	Wafer-Scale Epitaxial Growth of Unidirectional WS₂ Monolayers on Sapphire. ACS Nano, 2021, 15, 2532-2541.	14.6	149
112	Efficient Anchoring of Silver Nanoparticles on N-Doped Carbon Nanotubes. Small, 2006, 2, 346-350.	10.0	143
113	Building Complex Hybrid Carbon Architectures by Covalent Interconnections: Grapheneâ€“Nanotube Hybrids and More. ACS Nano, 2014, 8, 4061-4069.	14.6	140
114	Defect Engineering and Surface Functionalization of Nanocarbons for Metalâ€Free Catalysis. Advanced Materials, 2019, 31, e1805717.	21.0	139
115	Enhanced Electron Field Emission in B-doped Carbon Nanotubes. Nano Letters, 2002, 2, 1191-1195.	9.1	136
116	Single-atom doping of MoS ₂ with manganese enables ultrasensitive detection of dopamine: Experimental and computational approach. Science Advances, 2020, 6, eabc4250.	10.3	136
117	Synthesis, Electronic Structure, and Raman Scattering of Phosphorus-Doped Single-Wall Carbon Nanotubes. Nano Letters, 2009, 9, 2267-2272.	9.1	134
118	Nanotubes: A Revolution in Materials Science and Electronics. Topics in Current Chemistry, 1999, , 189-234.	4.0	133
119	Observation of magnetic edge state in graphene nanoribbons. Physical Review B, 2010, 81, .	3.2	132
120	Selective Co-catalysed growth of novel MgO fishbone fractal nanostructures. Chemical Physics Letters, 2001, 347, 337-343.	2.6	130
121	Angstrom-Size Defect Creation and Ionic Transport through Pores in Single-Layer MoS₂. Nano Letters, 2018, 18, 1651-1659.	9.1	129
122	Novel nanoscale gas containers: encapsulation of N2 in CNx nanotubes. Chemical Communications, 2000, , 2335-2336.	4.1	128
123	Nanotubes unzipped. Nature, 2009, 458, 845-846.	27.8	128
124	Resonance effects on the Raman spectra of graphene superlattices. Physical Review B, 2013, 88, .	3.2	128
125	Nanotube composites: novel SiO2 coated carbon nanotubesElectronic supplementary information (ESI) available: TGA studies, SEM image of an MWNT/SiOx composite after TEM measurement, and mechanical properties. See http://www.rsc.org/suppdata/cc/b1/b109441f/. Chemical Communications, 2002, , 34-35.	4.1	125
126	Tellurium-Assisted Low-Temperature Synthesis of MoS₂ and WS₂ Monolayers. ACS Nano, 2015, 9, 11658-11666.	14.6	123

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127	Extraordinary toughening enhancement and flexural strength in Si3N4 composites using graphene sheets. Journal of the European Ceramic Society, 2014, 34, 161-169.	5.7	122
128	Electrochemical Characterization of Liquid Phase Exfoliated Two-Dimensional Layers of Molybdenum Disulfide. ACS Applied Materials & Interfaces, 2014, 6, 2125-2130.	8.0	121
129	On the electronic structure of WS2 nanotubes. Solid State Communications, 2000, 114, 245-248.	1.9	120
130	Boron-Mediated Growth of Long Helicity-Selected Carbon Nanotubes. Physical Review Letters, 1999, 83, 5078-5081.	7.8	119
131	Carbon doping of WS ₂ monolayers: Bandgap reduction and p-type doping transport. Science Advances, 2019, 5, eaav5003.	10.3	119
132	Atypical Excitonâ€"Phonon Interactions in WS₂ and WSe₂ Monolayers Revealed by Resonance Raman Spectroscopy. Nano Letters, 2016, 16, 2363-2368.	9.1	118
133	Largeâ€Area Siâ€Doped Graphene: Controllable Synthesis and Enhanced Molecular Sensing. Advanced Materials, 2014, 26, 7593-7599.	21.0	116
134	Hysteresis shift in Fe-filled carbon nanotubes due to Î³-Fe. Physical Review B, 2002, 65, .	3.2	114
135	Chemical Vapor Deposition Synthesis of N-, P-, and Si-Doped Single-Walled Carbon Nanotubes. ACS Nano, 2010, 4, 1696-1702.	14.6	113
136	Aligned CN[sub x] nanotubes by pyrolysis of ferrocene/C[sub 60] under NH[sub 3] atmosphere. Applied Physics Letters, 2000, 77, 1807.	3.3	112
137	Boron-doping effects in carbon nanotubes. Journal of Materials Chemistry, 2000, 10, 1425-1429.	6.7	112
138	Extremeâ€Performance Rubber Nanocomposites for Probing and Excavating Deep Oil Resources Using Multiâ€Walled Carbon Nanotubes. Advanced Functional Materials, 2008, 18, 3403-3409.	14.9	112
139	The Rise of Two-Dimensional Materials. Accounts of Chemical Research, 2015, 48, 1-2.	15.6	111
140	Heterojunctions between metals and carbon nanotubes as ultimate nanocontacts. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4591-4595.	7.1	110
141	Three-Dimensional Nitrogen-Doped Multiwall Carbon Nanotube Sponges with Tunable Properties. Nano Letters, 2013, 13, 5514-5520.	9.1	110
142	Effects of 45-nm silver nanoparticles on coronary endothelial cells and isolated rat aortic rings. Toxicology Letters, 2009, 191, 305-313.	0.8	109
143	Production of WS2Nanotubes. Chemistry of Materials, 2000, 12, 1190-1194.	6.7	108
144	Intrinsic carrier mobility of multi-layered MoS2 field-effect transistors on SiO2. Applied Physics Letters, 2013, 102, 123105.	3.3	108

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145	3D Silicon oxide nanostructures: from nanoflowers to radiolaria. Journal of Materials Chemistry, 1998, 8, 1859-1864.	6.7	107
146	Hall and field-effect mobilities in few layered p-WSe2 field-effect transistors. Scientific Reports, 2015, 5, 8979.	3.3	107
147	Two-dimensional transition metal dichalcogenides: Clusters, ribbons, sheets and more. Nano Today, 2015, 10, 559-592.	11.9	107
148	Defect-Controlled Nucleation and Orientation of WSe₂ on hBN: A Route to Single-Crystal Epitaxial Monolayers. ACS Nano, 2019, 13, 3341-3352.	14.6	107
149	SiOx-coating of carbon nanotubes at room temperature. Chemical Physics Letters, 2001, 339, 41-46.	2.6	106
150	In situ processing of electrically conducting graphene/SiC nanocomposites. Journal of the European Ceramic Society, 2013, 33, 1665-1674.	5.7	105
151	One-dimensional extended lines of divacancy defects in graphene. Nanoscale, 2011, 3, 2868.	5.6	104
152	Monolayer Vanadiumâ€Doped Tungsten Disulfide: A Roomâ€Temperature Dilute Magnetic Semiconductor. Advanced Science, 2020, 7, 2001174.	11.2	104
153	Extreme Superheating and Supercooling of Encapsulated Metals in Fullerenelike Shells. Physical Review Letters, 2003, 90, 185502.	7.8	103
154	Enhanced thermal conductivity of carbon fiber/phenolic resin composites by the introduction of carbon nanotubes. Applied Physics Letters, 2007, 90, 093125.	3.3	103
155	Formation and Interlayer Decoupling of Colloidal MoSe₂ Nanoflowers. Chemistry of Materials, 2015, 27, 3167-3175.	6.7	103
156	Pentagonal rings and nitrogen excess in fullerene-based BN cages and nanotube caps. Chemical Physics Letters, 1999, 299, 359-367.	2.6	102
157	Phosphorus and phosphorusâ€“nitrogen doped carbon nanotubes for ultrasensitive and selective molecular detection. Nanoscale, 2011, 3, 1008-1013.	5.6	102
158	Monolayer WS₂ Nanopores for DNA Translocation with Light-Adjustable Sizes. ACS Nano, 2017, 11, 1937-1945.	14.6	102
159	Preparation of aligned carbon nanotubes catalysed by laser-etched cobalt thin films. Chemical Physics Letters, 1998, 285, 299-305.	2.6	101
160	Fabrication of High-Purity, Double-Walled Carbon Nanotube Buckypaper. Chemical Vapor Deposition, 2006, 12, 327-330.	1.3	101
161	High-performance multi-functional reverse osmosis membranes obtained by carbon nanotubeÂ·polyamide nanocomposite. Scientific Reports, 2015, 5, 13562.	3.3	101
162	Metal to Insulator Quantum-Phase Transition in Few-Layered ReS₂. Nano Letters, 2015, 15, 8377-8384.	9.1	101

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163	Sharpening the Chemical Scissors to Unzip Carbon Nanotubes: Crystalline Graphene Nanoribbons. ACS Nano, 2010, 4, 1775-1781.	14.6	100
164	Universal <i>In Situ</i> Substitutional Doping of Transition Metal Dichalcogenides by Liquid-Phase Precursor-Assisted Synthesis. ACS Nano, 2020, 14, 4326-4335.	14.6	100
165	Synthesis of macroporous poly(acrylic acid)â€“carbon nanotube composites by frontal polymerization in deep-eutectic solvents. Journal of Materials Chemistry A, 2013, 1, 3970.	10.3	97
166	Covalent three-dimensional networks of graphene and carbon nanotubes: synthesis and environmental applications. Nano Today, 2017, 12, 116-135.	11.9	97
167	Novel NbS2 metallic nanotubes. Solid State Communications, 2000, 115, 635-638.	1.9	95
168	Distinct photoluminescence and Raman spectroscopy signatures for identifying highly crystalline WS₂ monolayers produced by different growth methods. Journal of Materials Research, 2016, 31, 931-944.	2.6	95
169	Magnetism in Fe-based and carbon nanostructures: Theory and applications. Solid State Sciences, 2006, 8, 303-320.	3.2	94
170	Growth and Tunable Surface Wettability of Vertical MoS₂ Layers for Improved Hydrogen Evolution Reactions. ACS Applied Materials & Interfaces, 2016, 8, 22190-22195.	8.0	94
171	Cutting Single-Walled Carbon Nanotubes with an Electron Beam: Evidence for Atom Migration Inside Nanotubes. Small, 2005, 1, 953-956.	10.0	93
172	Facile synthesis of MoS2 and MoxW1-xS2 triangular monolayers. APL Materials, 2014, 2, .	5.1	93
173	A Simple Route to Silicon-Based Nanostructures. Advanced Materials, 1999, 11, 844-847.	21.0	91
174	Comparison study of semi-crystalline and highly crystalline multiwalled carbon nanotubes. Applied Physics Letters, 2001, 79, 1531-1533.	3.3	91
175	Efficient anchorage of Pt clusters on N-doped carbon nanotubes and their catalytic activity. Chemical Physics Letters, 2008, 463, 124-129.	2.6	91
176	Importance of open, heteroatom-decorated edges in chemically doped-graphene for supercapacitor applications. Journal of Materials Chemistry A, 2014, 2, 9532-9540.	10.3	91
177	Heteroatom doping of two-dimensional materials: From graphene to chalcogenides. Nano Today, 2020, 30, 100829.	11.9	91
178	Structure, transport and field-emission properties of compound nanotubes: CN x vs. BNC x (x <0.1). Applied Physics A: Materials Science and Processing, 2003, 76, 499-507.	2.3	89
179	Direct observation of the structure of gold nanoparticles by total scattering powder neutron diffraction. Chemical Physics Letters, 2004, 393, 385-388.	2.6	89
180	Electrically functional 3D-architectured graphene/SiC composites. Carbon, 2016, 100, 318-328.	10.3	89

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181	Experimental and Theoretical Studies Suggesting the Possibility of Metallic Boron Nitride Edges in Porous Nanourchins. Nano Letters, 2008, 8, 1026-1032.	9.1	88
182	Reversible Intercalation of Hexagonal Boron Nitride with BrÃ¸nsted Acids. Journal of the American Chemical Society, 2013, 135, 8372-8381.	13.7	88
183	Second Harmonic Generation in WSe ₂. 2D Materials, 2015, 2, 045015.	4.4	88
184	Tunable Fano Resonance and Plasmonâ€“Exciton Coupling in Single Au Nanotriangles on Monolayer WS₂ at Room Temperature. Advanced Materials, 2018, 30, e1705779.	21.0	88
185	The transformation of polyhedral particles into graphitic onions. Journal of Physics and Chemistry of Solids, 1997, 58, 1789-1796.	4.0	86
186	Graphene Sandwiched Mesostructured Liâ€Ion Battery Electrodes. Advanced Materials, 2016, 28, 7696-7702.	21.0	86
187	Resonance Raman study of linear carbon chains formed by the heat treatment of double-wall carbon nanotubes. Physical Review B, 2006, 73, .	3.2	85
188	Large Area Films of Alternating Grapheneâ€“Carbon Nanotube Layers Processed in Water. ACS Nano, 2013, 7, 10788-10798.	14.6	85
189	Activation routes for high surface area graphene monoliths from graphene oxide colloids. Carbon, 2014, 76, 220-231.	10.3	85
190	Doping two-dimensional materials: ultra-sensitive sensors, band gap tuning and ferromagnetic monolayers. Nanoscale Horizons, 2017, 2, 72-80.	8.0	85
191	Alloy nanowires: Invar inside carbon nanotubes. Chemical Communications, 2001, , 471-472.	4.1	84
192	Lowâ€Temperature Solution Synthesis of Fewâ€Layer 1Tâ€‰â€²â€MoTe₂ Nanostructures Exhibiting Lattice Compression. Angewandte Chemie - International Edition, 2016, 55, 2830-2834.	13.8	84
193	Generation of hollow crystalline tungsten oxide fibres. Applied Physics A: Materials Science and Processing, 2000, 70, 231-233.	2.3	83
194	An Alternative Route to Molybdenum Disulfide Nanotubes. Journal of the American Chemical Society, 2000, 122, 10155-10158.	13.7	83
195	Pore structure and oxidation stability of double-walled carbon nanotube-derived bucky paper. Chemical Physics Letters, 2005, 414, 444-448.	2.6	83
196	Effects of Uniaxial and Biaxial Strain on Few-Layered Terrace Structures of MoS₂ Grown by Vapor Transport. ACS Nano, 2016, 10, 3186-3197.	14.6	83
197	Raman Spectroscopy Study of Isolated Double-Walled Carbon Nanotubes with Different Metallic and Semiconducting Configurations. Nano Letters, 2008, 8, 3879-3886.	9.1	82
198	Ultrasensitive Pressure Detection of Fewâ€Layer MoS₂. Advanced Materials, 2017, 29, 1603266.	21.0	82

#	Article	IF	Citations
199	Tunable Resonance Coupling in Single Si Nanoparticleâ€“Monolayer WS₂ Structures. ACS Applied Materials & Interfaces, 2018, 10, 16690-16697.	8.0	82
200	Nanocarbons from rice husk by microwave plasma irradiation: From graphene and carbon nanotubes to graphenated carbon nanotube hybrids. Carbon, 2015, 94, 479-484.	10.3	81
201	Synthesis of conducting graphene/Si3N4 composites by spark plasma sintering. Carbon, 2013, 57, 425-432.	10.3	80
202	Formation of Nitrogen-Doped Graphene Nanoribbons <i>via</i> Chemical Unzipping. ACS Nano, 2013, 7, 2192-2204.	14.6	80
203	A carbon science perspective in 2018: Current achievements and future challenges. Carbon, 2018, 132, 785-801.	10.3	80
204	Electrical Transport and Field-Effect Transistors Using Inkjet-Printed SWCNT Films Having Different Functional Side Groups. ACS Nano, 2010, 4, 3318-3324.	14.6	79
205	Stable Sulfurâ€Intercalated 1Tâ€² MoS₂ on Graphitic Nanoribbons as Hydrogen Evolution Electrocatalyst. Advanced Functional Materials, 2018, 28, 1802744.	14.9	79
206	Zipper Mechanism of Nanotube Fusion: Theory and Experiment. Physical Review Letters, 2004, 92, 075504.	7.8	78
207	Ultra-light carbon nanotube sponge as an efficient electromagnetic shielding material in the GHz range. Physica Status Solidi - Rapid Research Letters, 2014, 8, 698-704.	2.4	78
208	Nonlinear Behavior in the Thermopower of Doped Carbon Nanotubes Due to Strong, Localized States. Nano Letters, 2003, 3, 839-842.	9.1	77
209	Nanotube Coalescence-Inducing Mode: A Novel Vibrational Mode in Carbon Systems. Small, 2006, 2, 1031-1036.	10.0	77
210	Carbon science perspective in 2020: Current research and future challenges. Carbon, 2020, 161, 373-391.	10.3	77
211	Advances in the Creation of Filled Nanotubes and Novel Nanowires. MRS Bulletin, 1999, 24, 43-49.	3.5	76
212	An Atomistic Branching Mechanism for Carbon Nanotubes: Sulfur as the Triggering Agent. Angewandte Chemie - International Edition, 2008, 47, 2948-2953.	13.8	76
213	Mechanical behavior of polystyrene grafted carbon nanotubes/polystyrene nanocomposites. Composites Science and Technology, 2008, 68, 3265-3271.	7.8	76
214	Coalescence of Double-Walled Carbon Nanotubes:â€‰ Formation of Novel Carbon Bicables. Nano Letters, 2004, 4, 1451-1454.	9.1	75
215	Development of highly microporous activated carbon from the alcoholic beverage industry organic by-products. Biomass and Bioenergy, 2011, 35, 103-112.	5.7	74
216	Zone-center phonons of bulk, few-layer, and monolayer1Tâˆ'TaS2: Detection of commensurate charge density wave phase through Raman scattering. Physical Review B, 2016, 93, .	3.2	74

#	Article	IF	Citations
217	In Situ Raman Study on Single- and Double-Walled Carbon Nanotubes as a Function of Lithium Insertion. Small, 2006, 2, 667-676.	10.0	73
218	Flexible ZnOâ€“Cellulose Nanocomposite for Multisource Energy Conversion. Small, 2011, 7, 2173-2178.	10.0	73
219	Tunable and label-free virus enrichment for ultrasensitive virus detection using carbon nanotube arrays. Science Advances, 2016, 2, e1601026.	10.3	73
220	pKa determination of graphene-like materials: Validating chemical functionalization. Journal of Colloid and Interface Science, 2016, 467, 239-244.	9.4	73
221	Nobleâ€Metalâ€Free Hybrid Membranes for Highly Efficient Hydrogen Evolution. Advanced Materials, 2017, 29, 1603617.	21.0	73
222	Interface-mediated noble metal deposition on transition metal dichalcogenide nanostructures. Nature Chemistry, 2020, 12, 284-293.	13.6	73
223	SiCâ€“SiOx heterojunctions in nanowires. Journal of Materials Chemistry, 1999, 9, 3173-3178.	6.7	72
224	Efficient encapsulation of gaseous nitrogen inside carbon nanotubes with bamboo-like structure using aerosol thermolysis. Chemical Physics Letters, 2004, 396, 167-173.	2.6	72
225	MoS ₂ monolayers on nanocavities: enhancement in lightâ€“matter interaction. 2D Materials, 2016, 3, 025017.	4.4	72
226	Defect Dynamics in 2-D MoS₂ Probed by Using Machine Learning, Atomistic Simulations, and High-Resolution Microscopy. ACS Nano, 2018, 12, 8006-8016.	14.6	72
227	Atomic Nanotube Welders:â€‰ Boron Interstitials Triggering Connections in Double-Walled Carbon Nanotubes. Nano Letters, 2005, 5, 1099-1105.	9.1	72
228	NanoTeflons:â€‰ Structure and EELS Characterization of Fluorinated Carbon Nanotubes and Nanofibers. Nano Letters, 2002, 2, 491-496.	9.1	71
229	Quantum Transport in Graphene Nanonetworks. Nano Letters, 2011, 11, 3058-3064.	9.1	71
230	Hydroxyl-Functionalized and N-Doped Multiwalled Carbon Nanotubes Decorated with Silver Nanoparticles Preserve Cellular Function. ACS Nano, 2011, 5, 2458-2466.	14.6	71
231	METAL ATOMS IN CARBON NANOTUBES AND RELATED NANOPARTICLES. International Journal of Modern Physics B, 2001, 15, 4037-4069.	2.0	70
232	A theoretical and experimental study on manipulating the structure and properties of carbon nanotubes using substitutional dopants. International Journal of Quantum Chemistry, 2009, 109, 97-118.	2.0	70
233	Discovery of Wall-Selective Carbon Nanotube Growth Conditions <i>via</i> Automated Experimentation. ACS Nano, 2014, 8, 10214-10222.	14.6	70
234	Beyond C60: graphite structures for the future. Chemical Society Reviews, 1995, 24, 341.	38.1	69

#	Article	IF	Citations
235	Fabrication of Transparent, Tough, and Conductive Shapeâ€Memory Polyurethane Films by Incorporating a Small Amount of Highâ€Quality Graphene. Macromolecular Rapid Communications, 2012, 33, 628-634.	3.9	69
236	Banning carbon nanotubes would be scientifically unjustified and damaging to innovation. Nature Nanotechnology, 2020, 15, 164-166.	31.5	69
237	Low-Temperature Solution Synthesis of Transition Metal Dichalcogenide Alloys with Tunable Optical Properties. Journal of the American Chemical Society, 2017, 139, 11096-11105.	13.7	68
238	Tunable Ferromagnetism and Thermally Induced Spin Flip in Vanadiumâ€Doped Tungsten Diselenide Monolayers at Room Temperature. Advanced Materials, 2020, 32, e2003607.	21.0	68
239	Collapsing carbon nanotubes and diamond formation under shock waves. Chemical Physics Letters, 1998, 287, 689-693.	2.6	67
240	Thermolysis of C 60 thin films yields Ni-filled tapered nanotubes. Applied Physics A: Materials Science and Processing, 1998, 67, 595-598.	2.3	67
241	Stable BC2N nanostructures: low-temperature production of segregated C/BN layered materials. Chemical Physics Letters, 1999, 310, 459-465.	2.6	67
242	Morphology, structure and growth of WS2 nanotubes. Journal of Materials Chemistry, 2000, 10, 2570-2577.	6.7	67
243	Metastable One-Dimensional AgCl1-xIxSolid-Solution Wurzite â€œTunnelâ€•Crystals Formed within Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2002, 124, 2116-2117.	13.7	67
244	Controlling Nitrogen Doping in Graphene with Atomic Precision: Synthesis and Characterization. Nanomaterials, 2019, 9, 425.	4.1	67
245	Controlling the dimensions, reactivity and crystallinity of multiwalled carbon nanotubes using low ethanol concentrations. Chemical Physics Letters, 2008, 453, 55-61.	2.6	66
246	Intricate Resonant Raman Response in Anisotropic ReS₂. Nano Letters, 2017, 17, 5897-5907.	9.1	66
247	Metallic behaviour of boron-containing carbon nanotubes. Chemical Physics Letters, 2000, 323, 572-579.	2.6	65
248	How to Identify Haeckelite Structures: A Theoretical Study of Their Electronic and Vibrational Properties. Nano Letters, 2004, 4, 805-810.	9.1	64
249	Selective Optical Property Modification of Double-Walled Carbon Nanotubes by Fluorination. ACS Nano, 2008, 2, 485-488.	14.6	64
250	Hydrogen storage in spherical nanoporous carbons. Chemical Physics Letters, 2005, 403, 363-366.	2.6	63
251	Guiding Electrical Current in Nanotube Circuits Using Structural Defects: A Step Forward in Nanoelectronics. ACS Nano, 2008, 2, 2585-2591.	14.6	63
252	A novel route to aligned nanotubes and nanofibres using laser-patterned catalytic substrates. Applied Physics A: Materials Science and Processing, 2000, 70, 175-183.	2.3	62

#	Article	IF	Citations
253	Production and Characterization of Coaxial Nanotube Junctions and Networks of CN_x/CNT. Nano Letters, 2007, 7, 2220-2226.	9.1	62
254	Marked Adsorption Irreversibility of Graphitic Nanoribbons for CO₂ and H₂O. Journal of the American Chemical Society, 2011, 133, 14880-14883.	13.7	62
255	Synthesis and Isolation of Molybdenum Atomic Wires. Nano Letters, 2008, 8, 237-240.	9.1	61
256	Simultaneous adsorption of Cd2+ and phenol on modified N-doped carbon nanotubes: Experimental and DFT studies. Journal of Colloid and Interface Science, 2009, 334, 124-131.	9.4	61
257	MÃ¶ssbauer Study of Iron-Containing Carbon Nanotubes. Hyperfine Interactions, 2002, 139/140, 535-542.	0.5	60
258	Spin Polarized Conductance in Hybrid Graphene Nanoribbons Using 5âˆ7 Defects. ACS Nano, 2009, 3, 3606-3612.	14.6	60
259	Enhanced electrical conductivities of N-doped carbon nanotubes by controlled heat treatment. Nanoscale, 2011, 3, 4359.	5.6	60
260	Doped Carbon Nanotubes: Synthesis, Characterization and Applications. Topics in Applied Physics, 2007, , 531-566.	0.8	59
261	Viability Studies of Pure Carbonâ€•and Nitrogenâ€Doped Nanotubes with <i>Entamoeba histolytica</i>: From Amoebicidal to Biocompatible Structures. Small, 2007, 3, 1723-1729.	10.0	59
262	Controlling high coercivities of ferromagnetic nanowires encapsulated in carbon nanotubes. Journal of Materials Chemistry, 2010, 20, 5906.	6.7	59
263	Towards the understanding of the graphene oxide structure: How to control the formation of humic- and fulvic-like oxidized debris. Carbon, 2015, 84, 299-309.	10.3	59
264	Nitrogen-doped porous carbon monoliths from polyacrylonitrile (PAN) and carbon nanotubes as electrodes for supercapacitors. Scientific Reports, 2017, 7, 40259.	3.3	59
265	Photoluminescence Segmentation within Individual Hexagonal Monolayer Tungsten Disulfide Domains Grown by Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2017, 9, 15005-15014.	8.0	59
266	Ultralight Flexible Electrodes of Nitrogenâ€Doped Carbon Macrotube Sponges for Highâ€Performance Supercapacitors. Small, 2021, 17, e2004827.	10.0	59
267	Robust, Conducting, and Transparent Polymer Composites Using Surfaceâ€Modified and Individualized Doubleâ€Walled Carbon Nanotubes. Advanced Materials, 2008, 20, 4509-4512.	21.0	58
268	Molecular Dynamics Study of Carbon Nanotubes/Polyamide Reverse Osmosis Membranes: Polymerization, Structure, and Hydration. ACS Applied Materials & Interfaces, 2015, 7, 24566-24575.	8.0	58
269	Considerations for Utilizing Sodium Chloride in Epitaxial Molybdenum Disulfide. ACS Applied Materials & Interfaces, 2018, 10, 40831-40837.	8.0	58
270	Nanotube brushes: polystyrene grafted covalently on CNx nanotubes by nitroxide-mediated radical polymerization. Chemical Communications, 2005, , 5349.	4.1	57

#	Article	IF	Citations
271	Ultrafast Intrinsic Photoresponse and Direct Evidence of Sub-gap States in Liquid Phase Exfoliated MoS2Thin Films. Scientific Reports, 2015, 5, 11272.	3.3	57
272	Production and State-of-the-Art Characterization of Aligned Nanotubes with Homogeneous BCxN (1â€‰â‰â€‰xâ€‰â‰â€‰5) Compositions. Advanced Materials, 2003, 15, 1899-1903.	21.0	56
273	Controlling Edge Morphology in Graphene Layers Using Electron Irradiation: From Sharp Atomic Edges to Coalesced Layers Forming Loops. Physical Review Letters, 2010, 105, 045501.	7.8	56
274	Carbon-Based Nanomaterials From a Historical Perspective. Proceedings of the IEEE, 2013, 101, 1522-1535.	21.3	56
275	Spontaneous chemical functionalization via coordination of Au single atoms on monolayer MoS ₂. Science Advances, 2020, 6, .	10.3	56
276	The Role Of Defects In Graphitic Structures. Fullerenes, Nanotubes, and Carbon Nanostructures, 1996, 4, 517-533.	0.6	55
277	Nanostructured carbon materials for enhanced nitrobenzene adsorption: Physical vs. chemical surface properties. Carbon, 2018, 139, 833-844.	10.3	55
278	Clean Nanotube Unzipping by Abrupt Thermal Expansion of Molecular Nitrogen: Graphene Nanoribbons with Atomically Smooth Edges. ACS Nano, 2012, 6, 2261-2272.	14.6	54
279	Electrochemical production of low-melting metal nanowires. Chemical Physics Letters, 1999, 301, 159-166.	2.6	53
280	Structure, Chirality, and Formation of Giant Icosahedral Fullerenes and Spherical Graphitic Onions. Structural Chemistry, 2002, 13, 373-384.	2.0	53
281	Efficient coating of N-doped carbon nanotubes with polystyrene using atomic transfer radical polymerization. Chemical Physics Letters, 2006, 419, 567-573.	2.6	53
282	Metallic edges in zinc oxide nanoribbons. Chemical Physics Letters, 2007, 448, 258-263.	2.6	53
283	Ordered and Atomically Perfect Fragmentation of Layered Transition Metal Dichalcogenides <i>via</i> Mechanical Instabilities. ACS Nano, 2017, 11, 9191-9199.	14.6	53
284	Structural and electrochemical properties of babassu coconut mesocarp-generated activated carbon and few-layer graphene. Carbon, 2019, 145, 175-186.	10.3	52
285	The Role of Sulfur in the Synthesis of Novel Carbon Morphologies: From Covalent Yâ€Junctions to Seaâ€Urchinâ€Like Structures. Advanced Functional Materials, 2009, 19, 1193-1199.	14.9	51
286	Transfer of monolayer TMD WS2 and Raman study of substrate effects. Scientific Reports, 2017, 7, 43037.	3.3	51
287	Electrochemical formation of novel nanowires and their dynamic effects. Chemical Physics Letters, 1998, 284, 177-183.	2.6	50
288	Millimeter-Long Carbon Nanotubes: Outstanding Electron-Emitting Sources. ACS Nano, 2011, 5, 5072-5077.	14.6	50

#	Article	IF	Citations
289	The Formation of ReS2 Inorganic Fullerene-like Structures Containing Re4 Parallelogram Units and Metalâ^'Metal Bonds. Journal of the American Chemical Society, 2002, 124, 11580-11581.	13.7	49
290	Hybrid Films with Graphene Oxide and Metal Nanoparticles Could Now Replace Indium Tin Oxide. ACS Nano, 2012, 6, 4565-4572.	14.6	49
291	Enhanced Nonlinear Transmittance by Complementary Nonlinear Mechanisms: A Reverse-Saturable Absorbing Dye Blended with Nonlinear-Scattering Carbon Nanotubes. Advanced Materials, 2005, 17, 1239-1243.	21.0	48
292	Spontaneous Formation of Atomically Thin Stripes in Transition Metal Dichalcogenide Monolayers. Nano Letters, 2016, 16, 6982-6987.	9.1	48
293	Nb-doped WS2 nanotubes. Chemical Physics Letters, 2001, 342, 15-21.	2.6	47
294	Super-Robust, Lightweight, Conducting Carbon Nanotube Blocks Cross-Linked by De-fluorination. ACS Nano, 2008, 2, 348-356.	14.6	46
295	Third order nonlinear optical response exhibited by mono- and few-layers of WS 2. 2D Materials, 2016, 3, 021005.	4.4	46
296	Nitrogen-doped porous carbon monoliths from molecular-level dispersion of carbon nanotubes into polyacrylonitrile (PAN) and the effect of carbonization process for supercapacitors. Carbon, 2019, 143, 776-785.	10.3	46
297	Strain Modulated Superlattices in Graphene. Nano Letters, 2020, 20, 3113-3121.	9.1	46
298	Nanoscale Encapsulation of Molybdenum Carbide in Carbon Clusters. Chemistry of Materials, 1996, 8, 6-8.	6.7	45
299	Electrolytic Formation of Carbon-Sheathed Mixed Snâ^'Pb Nanowires. Chemistry of Materials, 1999, 11, 1747-1751.	6.7	45
300	Electron emission from individual nitrogen-doped multi-walled carbon nanotubes. Chemical Physics Letters, 2004, 396, 126-130.	2.6	45
301	Controlled Fragmentation of Single-Atom-Thick Polycrystalline Graphene. Matter, 2020, 2, 666-679.	10.0	45
302	Mixed-Phase WxMoyCzS2Nanotubes. Chemistry of Materials, 2000, 12, 3541-3546.	6.7	44
303	The carbon nanocosmos: novel materials for the twenty-first century. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 2789-2806.	3.4	44
304	Differential Response of Doped/Defective Graphene and Dopamine to Electric Fields: A Density Functional Theory Study. Journal of Physical Chemistry C, 2015, 119, 13972-13978.	3.1	44
305	Polymer-coated graphene films as anti-reflective transparent electrodes for Schottky junction solar cells. Journal of Materials Chemistry A, 2016, 4, 13795-13802.	10.3	44
306	Secure Electronics Enabled by Atomically Thin and Photosensitive Two-Dimensional Memtransistors. ACS Nano, 2021, 15, 19815-19827.	14.6	44

#	Article	IF	Citations
307	Selective Tuning of the Electronic Properties of Coaxial Nanocables through Exohedral Doping. Nano Letters, 2007, 7, 2383-2388.	9.1	43
308	Simple Synthesis of Multiwalled Carbon Nanotubes from Natural Resources. ChemSusChem, 2008, 1, 820-822.	6.8	43
309	Properties of One-Dimensional Molybdenum Nanowires in a Confined Environment. Nano Letters, 2009, 9, 1487-1492.	9.1	43
310	Peroxyformic Acid Pulping of Eucalyptus Grandis Wood Chips and Sugar Cane Bagasse in one Stage and Characterization of the Isolated Lignins. Journal of Wood Chemistry and Technology, 1998, 18, 333-365.	1.7	42
311	Synthesis and state of art characterization of BN bamboo-like nanotubes: Evidence of a root growth mechanism catalyzed by Fe. Chemical Physics Letters, 2005, 416, 342-348.	2.6	42
312	Mechanical properties of hypothetical graphene foams: Giant Schwarzites. Carbon, 2016, 96, 1191-1199.	10.3	42
313	Defect Coupling and Sub-Angstrom Structural Distortions in W_{1â€“<i>x</i>}Mo_{<i>x</i>}S₂ Monolayers. Nano Letters, 2017, 17, 2802-2808.	9.1	42
314	Graphene oxide films, fibers, and membranes. Nanotechnology Reviews, 2016, 5, .	5.8	41
315	High electrical conductivity of double-walled carbon nanotube fibers by hydrogen peroxide treatments. Journal of Materials Chemistry A, 2016, 4, 74-82.	10.3	41
316	Robust water desalination membranes against degradation using high loads of carbon nanotubes. Scientific Reports, 2018, 8, 2748.	3.3	41
317	Scalable BEOL compatible 2D tungsten diselenide. 2D Materials, 2020, 7, 015029.	4.4	41
318	Decorating carbon nanotubes with nanostructured nickel particles via chemical methods. Chemical Physics Letters, 2006, 431, 104-109.	2.6	40
319	Design of graphene electronic devices using nanoribbons of different widths. Applied Physics Letters, 2009, 95, .	3.3	40
320	Bilayers of transition metal dichalcogenides: Different stackings and heterostructures. Journal of Materials Research, 2014, 29, 373-382.	2.6	40
321	Dynamics of cleaning, passivating and doping monolayer MoS ₂ by controlled laser irradiation. 2D Materials, 2019, 6, 045031.	4.4	40
322	Electrochemically Exfoliated Graphene Electrode for High-Performance Rechargeable Chloroaluminate and Dual-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 23261-23270.	8.0	40
323	Broadband, Ultra-High-Responsive Monolayer MoS₂/SnS₂ Quantum-Dot-Based Mixed-Dimensional Photodetector. ACS Applied Materials & Interfaces, 2022, 14, 15415-15425.	8.0	40
324	Excitonic Effects in Tungsten Disulfide Monolayers on Two-Layer Graphene. ACS Nano, 2016, 10, 7840-7846.	14.6	39

#	Article	IF	Citations
325	â€œStructural instabilityâ€•induced high-performance NiFe layered double hydroxides as oxygen evolution reaction catalysts for pH-near-neutral borate electrolyte: The role of intercalates. Applied Catalysis B: Environmental, 2020, 263, 118343.	20.2	39
326	Quantitative density-functional study of nested fullerenes. Physical Review B, 1998, 57, 13339-13342.	3.2	38
327	Bright Photoluminescence from the Inner Tubes of â€œPeapodâ€â€Derived Doubleâ€Walled Carbon Nanotubes. Small, 2009, 5, 2678-2682.	10.0	38
328	Catalytic Twistâ€Spun Yarns of Nitrogenâ€Doped Carbon Nanotubes. Advanced Functional Materials, 2012, 22, 1069-1075.	14.9	38
329	Efficient photovoltaic conversion of grapheneâ€“carbon nanotube hybrid films grown from solid precursors. 2D Materials, 2015, 2, 034003.	4.4	38
330	Deep-Eutectic Solvents as MWCNT Delivery Vehicles in the Synthesis of Functional Poly(HIPE) Nanocomposites for Applications as Selective Sorbents. ACS Applied Materials & Interfaces, 2016, 8, 31295-31303.	8.0	38
331	Composites of Proteins and 2D Nanomaterials. Advanced Functional Materials, 2018, 28, 1704990.	14.9	38
332	New Insights in the Natural Organic Matter Fouling Mechanism of Polyamide and Nanocomposite Multiwalled Carbon Nanotubes-Polyamide Membranes. Environmental Science & Technology, 2019, 53, 6255-6263.	10.0	38
333	Carbon Nanotubes as Nanoreactors for Boriding Iron Nanowires. Advanced Materials, 2000, 12, 1356-1359.	21.0	37
334	Nonlinear optical absorption and reflection of single wall carbon nanotube thin films by Z-scan technique. Applied Physics Letters, 2008, 92, .	3.3	37
335	Acid modified bambooâ€type carbon nanotubes and cupâ€stackedâ€type carbon nanofibres as adsorbent materials: cadmium removal from aqueous solution. Journal of Chemical Technology and Biotechnology, 2009, 84, 519-524.	3.2	37
336	Effect of boron doping on the electrical conductivity of metallicity-separated single walled carbon nanotubes. Nanoscale, 2018, 10, 12723-12733.	5.6	37
337	Quantification and Healing of Defects in Atomically Thin Molybdenum Disulfide: Beyond the Controlled Creation of Atomic Defects. ACS Nano, 2021, 15, 9658-9669.	14.6	37
338	Quasiperiodic icosahedral graphite sheets and high-genus fullereneswith nonpositive Gaussian curvature. Physical Review B, 1997, 55, 9969-9974.	3.2	36
339	Cables of BN-insulated Bâ€“Câ€“N nanotubes. Applied Physics Letters, 2003, 82, 1275-1277.	3.3	36
340	Enhanced ferromagnetism in ZnO nanoribbons and clusters passivated with sulfur. Nano Research, 2008, 1, 420-426.	10.4	36
341	Antiorganic Fouling and Low-Protein Adhesion on Reverse-Osmosis Membranes Made of Carbon Nanotubes and Polyamide Nanocomposite. ACS Applied Materials & Interfaces, 2017, 9, 32192-32201.	8.0	36
342	Few-layer graphene coated current collectors for safe and powerful lithium ion batteries. Carbon, 2019, 153, 495-503.	10.3	36

#	Article	IF	Citations
343	Transitional behaviour in the transformation from active end planes to stable loops caused by annealing. New Journal of Physics, 2003, 5, 121-121.	2.9	35
344	Magnetism in Corrugated Carbon Nanotori:â€‰ The Importance of Symmetry, Defects, and Negative Curvature. Nano Letters, 2004, 4, 2179-2183.	9.1	35
345	Formation of indium-doped zinc oxide thin films using chemical spray techniques: The importance of acetic acid content in the aerosol solution and the substrate temperature for enhancing electrical transport. Thin Solid Films, 2006, 503, 212-218.	1.8	35
346	Electronic and vibrational properties of defective transition metal dichalcogenide Haeckelites: new 2D semi-metallic systems. 2D Materials, 2014, 1, 011003.	4.4	35
347	Aligned carbon nanotube/zinc oxide nanowire hybrids as high performance electrodes for supercapacitor applications. Journal of Applied Physics, 2017, 121, .	2.5	35
348	Plasmonâ€“trion and plasmonâ€“exciton resonance energy transfer from a single plasmonic nanoparticle to monolayer MoS2. Nanoscale, 2017, 9, 13947-13955.	5.6	35
349	Atomically Thin Layers of Graphene and Hexagonal Boron Nitride Made by Solvent Exfoliation of Their Phosphoric Acid Intercalation Compounds. ACS Nano, 2017, 11, 6746-6754.	14.6	35
350	Double-walled carbon nanotubes: synthesis, structural characterization, and application. Carbon Letters, 2014, 15, 77-88.	5.9	35
351	Preparation of aligned multi-walled BN and B/C/N nanotubular arrays and their characterization using HRTEM, EELS and energy-filtered TEM. Physica B: Condensed Matter, 2002, 323, 60-66.	2.7	34
352	Pyrolytic synthesis of long strands of large diameter single-walled carbon nanotubes at atmospheric pressure in the absence of sulphur and hydrogen. Chemical Physics Letters, 2005, 410, 384-390.	2.6	34
353	Strong and stable photoluminescence from the semiconducting inner tubes within double walled carbon nanotubes. Applied Physics Letters, 2009, 94, 083106.	3.3	34
354	Spectroscopic Characterization of N-Doped Single-Walled Carbon Nanotube Strands: An X-ray Photoelectron Spectroscopy and Raman Study. Journal of Nanoscience and Nanotechnology, 2010, 10, 3959-3964.	0.9	34
355	Correlation in structure and properties of highly-porous graphene monoliths studied with a thermal treatment method. Carbon, 2016, 96, 174-183.	10.3	34
356	Nonlinear Dark-Field Imaging of One-Dimensional Defects in Monolayer Dichalcogenides. Nano Letters, 2020, 20, 284-291.	9.1	34
357	Ultrashort optical pulse characterization using WS_2 monolayers. Optics Letters, 2014, 39, 383.	3.3	33
358	Linear carbon chains inside multi-walled carbon nanotubes: Growth mechanism, thermal stability and electrical properties. Carbon, 2016, 107, 217-224.	10.3	33
359	Fabrication and characterization of ultraviolet photosensors from ZnO nanowires prepared using chemical bath deposition method. Journal of Applied Physics, 2016, 119, 084306.	2.5	33
360	Clean Transfer of 2D Transition Metal Dichalcogenides Using Cellulose Acetate for Atomic Resolution Characterizations. ACS Applied Nano Materials, 2019, 2, 5320-5328.	5.0	33

#	Article	IF	Citations
361	Electrochemical Polishing of Two-Dimensional Materials. ACS Nano, 2019, 13, 78-86.	14.6	33
362	Theoretical characterization of several models of nanoporous carbon. New Journal of Physics, 2003, 5, 123-123.	2.9	32
363	An anticorrosive magnesium/carbon nanotube composite. Applied Physics Letters, 2008, 92, 063105.	3.3	32
364	Pressure-Induced Selectivity for Probing Inner Tubes in Double- and Triple-Walled Carbon Nanotubes: A Resonance Raman Study. Journal of Physical Chemistry C, 2014, 118, 8153-8158.	3.1	32
365	Carbon nanotubes and manganese oxide hybrid nanostructures as high performance fiber supercapacitors. Communications Chemistry, 2018, 1, .	4.5	32
366	Mechanical properties of nanocomposites reinforced by carbon nanotube sponges. Journal of Materiomics, 2018, 4, 157-164.	5.7	32
367	On the Role of Transition Metal Salts During Electrochemical Exfoliation of Graphite: Antioxidants or Metal Oxide Decorators for Energy Storage Applications. Advanced Functional Materials, 2018, 28, 1804357.	14.9	32
368	Thicker carbon-nanotube/manganese-oxide hybridized nanostructures as electrodes for the creation of fiber-shaped high-energy-density supercapacitors. Carbon, 2019, 154, 169-177.	10.3	32
369	Microscopy Study of the Growth Process and Structural Features of Silicon Oxide Nanoflowers. Chemistry of Materials, 1999, 11, 2709-2715.	6.7	31
370	Femtosecond Laser Nanosurgery of Defects in Carbon Nanotubes. Nano Letters, 2005, 5, 1361-1365.	9.1	31
371	Optically and Biologically Active Mussel Proteinâ€Coated Doubleâ€Walled Carbon Nanotubes. Small, 2011, 7, 3292-3297.	10.0	31
372	Nitrogenâ€Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport. Advanced Functional Materials, 2013, 23, 3755-3762.	14.9	31
373	Study of the growth of CeO2 nanoparticles onto titanate nanotubes. Journal of Physics and Chemistry of Solids, 2015, 87, 213-220.	4.0	31
374	Carbon-rich shungite as a natural resource for efficient Li-ion battery electrodes. Carbon, 2018, 130, 105-111.	10.3	31
375	CO2 Sensing by in-situ Raman spectroscopy using activated carbon generated from mesocarp of babassu coconut. Vibrational Spectroscopy, 2018, 98, 111-118.	2.2	31
376	Chemical and Bio Sensing Using Graphene-Enhanced Raman Spectroscopy. Nanomaterials, 2019, 9, 516.	4.1	31
377	The effect of CNT functionalization on electrical and relaxation phenomena in MWCNT/chitosan composites. Materials Chemistry and Physics, 2015, 155, 252-261.	4.0	30
378	Research Update: Recent progress on 2D materials beyond graphene: From ripples, defects, intercalation, and valley dynamics to straintronics and power dissipation. APL Materials, 2018, 6, .	5.1	30

#	Article	IF	Citations
379	Defect-mediated selective hydrogenation of nitroarenes on nanostructured WS₂. Chemical Science, 2019, 10, 10310-10317.	7.4	30
380	Defect creation in WSe₂ with a microsecond photoluminescence lifetime by focused ion beam irradiation. Nanoscale, 2020, 12, 2047-2056.	5.6	30
381	Surfactant-Mediated Growth and Patterning of Atomically Thin Transition Metal Dichalcogenides. ACS Nano, 2020, 14, 6570-6581.	14.6	30
382	Photoreactivity of lignin model compounds in the photobleaching of chemical pulps 2. Study of the degradation of 4-hydroxy-3-methoxy-benzaldehyde and two lignin fragments induced by singlet oxygen. Journal of Photochemistry and Photobiology A: Chemistry, 1997, 110, 99-106.	3.9	29
383	Electrical behavior of polymer grafted nanotubes/polymer nanocomposites using N-doped carbon nanotubes. Chemical Physics Letters, 2007, 444, 1-8.	2.6	29
384	Gate-modulated conductance of few-layer WSe2 field-effect transistors in the subgap regime: Schottky barrier transistor and subgap impurity states. Applied Physics Letters, 2015, 106, 152104.	3.3	29
385	Colloidal Nanostructures of Transition-Metal Dichalcogenides. Accounts of Chemical Research, 2021, 54, 1517-1527.	15.6	29
386	Nanocomposites: synthesis and elemental mapping of aligned Bâ€“Câ€“N nanotubes. Chemical Physics Letters, 2002, 360, 1-7.	2.6	28
387	Creation of Helical Vortices during Magnetization of Aligned Carbon Nanotubes Filled with Fe: Theory and Experiment. Physical Review Letters, 2005, 94, 216102.	7.8	28
388	Chirality-Dependent Transport in Double-Walled Carbon Nanotube Assemblies: The Role of Inner Tubes. ACS Nano, 2011, 5, 7547-7554.	14.6	28
389	Graphene nanoribbon ceramic composites. Carbon, 2015, 90, 207-214.	10.3	28
390	High flex cycle testing of CVD monolayer WS ₂ TFTs on thin flexible polyimide. 2D Materials, 2016, 3, 021008.	4.4	28
391	Towards band structure and band offset engineering of monolayer Mo _(1âˆ' <i>x</i>) W _(<i>x</i>) S ₂ via Strain. 2D Materials, 2018, 5, 015008.	4.4	28
392	The Role of Boron Nitride in Graphite Plasma Arcs. Fullerenes, Nanotubes, and Carbon Nanostructures, 1998, 6, 787-800.	0.6	27
393	C-MoS2 and C-WS2 nanocomposites. Applied Physics Letters, 2000, 77, 4130-4132.	3.3	27
394	Lithiation induced corrosive fracture in defective carbon nanotubes. Applied Physics Letters, 2013, 103, .	3.3	27
395	Effects of nitrogen-doped multi-walled carbon nanotubes compared to pristine multi-walled carbon nanotubes on human small airway epithelial cells. Toxicology, 2015, 333, 25-36.	4.2	27
396	Beryllium doping graphene, graphene-nanoribbons, C60-fullerene, and carbon nanotubes. Carbon, 2015, 84, 317-326.	10.3	27

#	Article	IF	Citations
397	Programmable molecular composites of tandem proteins with graphene oxide for efficient bimorph actuators. Carbon, 2017, 118, 404-412.	10.3	27
398	Loop formation in graphitic nanoribbon edges using furnace heating or Joule heating. Journal of Vacuum Science & Technology B, 2009, 27, 1996.	1.3	26
399	Enhanced X-Ray Shielding Effects of Carbon Nanotubes. Materials Express, 2011, 1, 273-278.	0.5	26
400	Oil sorption by exfoliated graphite from dilute oilâ€“water emulsion for practical applications in produced water treatments. Journal of Water Process Engineering, 2015, 8, 91-98.	5.6	26
401	Raman spectroscopy revealing noble gas adsorption on single-walled carbon nanotube bundles. Carbon, 2018, 127, 312-319.	10.3	26
402	Understanding Interlayer Coupling in TMD-hBN Heterostructure by Raman Spectroscopy. IEEE Transactions on Electron Devices, 2018, 65, 4059-4067.	3.0	26
403	Monolayer MoS₂ on sapphire: an azimuthal reflection high-energy electron diffraction perspective. 2D Materials, 2021, 8, 025003.	4.4	26
404	Raman Characterization of Nitrogen Doped Multiwalled Carbon Nanotubes. Materials Research Society Symposia Proceedings, 2003, 772, 781.	0.1	25
405	The two peaks Gâ€² band in carbon nanotubes. Physica Status Solidi (B): Basic Research, 2008, 245, 2197-2200.	1.5	25
406	Electron transport properties of ordered networks using carbon nanotubes. Nanotechnology, 2008, 19, 315704.	2.6	25
407	Raman and Fluorescence Spectroscopic Studies of a DNA-Dispersed Double-Walled Carbon Nanotube Solution. ACS Nano, 2010, 4, 1060-1066.	14.6	25
408	Wall-to-wall stress induced in (6,5) semiconducting nanotubes by encapsulation in metallic outer tubes of different diameters: A resonance Raman study of individual C60-derived double-wall carbon nanotubes. Nanoscale, 2010, 2, 406-411.	5.6	25
409	Bulk Synthesis of Narrow Diameter and Highly Crystalline Tripleâ€Walled Carbon Nanotubes by Coalescing Fullerene Peapods. Advanced Materials, 2011, 23, 1761-1764.	21.0	25
410	Edgeâ€“Edge Interactions in Stacked Graphene Nanoplatelets. ACS Nano, 2013, 7, 2834-2841.	14.6	25
411	The influence of carbon nanotubes characteristics in their performance as positive electrodes in vanadium redox flow batteries. Sustainable Energy Technologies and Assessments, 2015, 9, 105-110.	2.7	25
412	Structural evolution of hydrothermal carbon spheres induced by high temperatures and their electrical properties under compression. Carbon, 2017, 121, 426-433.	10.3	25
413	Effective Antiscaling Performance of Reverse-Osmosis Membranes Made of Carbon Nanotubes and Polyamide Nanocomposites. ACS Omega, 2018, 3, 6047-6055.	3.5	25
414	Darkâ€Excitonâ€Mediated Fano Resonance from a Single Gold Nanostructure on Monolayer WS₂ at Room Temperature. Small, 2019, 15, e1900982.	10.0	25

#	Article	IF	Citations
415	Large-scale preparation of electrically conducting cellulose nanofiber/carbon nanotube aerogels: Ambient-dried, recyclable, and 3D-Printable. Carbon, 2022, 194, 23-33.	10.3	25
416	KCl crystallization within the space between carbon nanotube walls. Chemical Physics Letters, 2000, 317, 77-82.	2.6	24
417	An efficient method for the carboxylation of few-wall carbon nanotubes with little damage to their sidewalls. Materials Chemistry and Physics, 2013, 140, 499-507.	4.0	24
418	Electronic, magnetic, optical, and edge-reactivity properties of semiconducting and metallic WS 2 nanoribbons. 2D Materials, 2015, 2, 015002.	4.4	24
419	Electron transport study on functionalized armchair graphene nanoribbons: DFT calculations. RSC Advances, 2016, 6, 21954-21960.	3.6	24
420	Mitsui-7, heat-treated, and nitrogen-doped multi-walled carbon nanotubes elicit genotoxicity in human lung epithelial cells. Particle and Fibre Toxicology, 2019, 16, 36.	6.2	24
421	Epitaxial growth of few-layer Î²-In2Se3 thin films by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2020, 533, 125471.	1.5	24
422	Second- and third-order optical susceptibilities across excitons states in 2D monolayer transition metal dichalcogenides. 2D Materials, 2021, 8, 035010.	4.4	24
423	Nanocages of layered BN: Super-high-pressure nanocells for formation of solid nitrogen. Journal of Chemical Physics, 2002, 116, 8523.	3.0	23
424	The possible way to evaluate the purity of double-walled carbon nanotubes over single wall carbon nanotubes by chemical doping. Chemical Physics Letters, 2006, 420, 377-381.	2.6	23
425	Synthesis, characterization and magnetic properties of Co@Au core-shell nanoparticles encapsulated by nitrogen-doped multiwall carbon nanotubes. Carbon, 2014, 77, 722-737.	10.3	23
426	Intrinsic Chirality Origination in Carbon Nanotubes. ACS Nano, 2017, 11, 9941-9949.	14.6	23
427	Solution synthesis of few-layer WTe₂and Mo_xW_{1âˆ’x}Te₂nanostructures. Journal of Materials Chemistry C, 2017, 5, 11317-11323.	5.5	23
428	Water Diffusion Mechanism in Carbon Nanotube and Polyamide Nanocomposite Reverse Osmosis Membranes: A Possible Percolation-Hopping Mechanism. Physical Review Applied, 2018, 9, .	3.8	23
429	Rapid Size-Based Isolation of Extracellular Vesicles by Three-Dimensional Carbon Nanotube Arrays. ACS Applied Materials & Interfaces, 2020, 12, 13134-13139.	8.0	23
430	Tunable Raman spectroscopy study of CVD and peapod-derived bundled and individual double-wall carbon nanotubes. Physical Review B, 2010, 82, .	3.2	22
431	Doping (10, 0)-Semiconductor Nanotubes with Nitrogen and Vacancy Defects. Materials Express, 2011, 1, 127-135.	0.5	22
432	Carbon nanotube bundles self-assembled in double helix microstructures. Carbon, 2012, 50, 3688-3693.	10.3	22

#	Article	IF	Citations
433	Controlling the Optical, Electrical and Chemical Properties of Carbon Inverse Opal by Nitrogen Doping. Advanced Functional Materials, 2014, 24, 2612-2619.	14.9	22
434	Aligned carbon nanotube/silicon carbide hybrid materials with high electrical conductivity, superhydrophobicity and superoleophilicity. Carbon, 2014, 80, 120-126.	10.3	22
435	Microwave plasma-induced graphene-sheet fibers from waste coffee grounds. Journal of Materials Chemistry A, 2015, 3, 14545-14549.	10.3	22
436	Lowâ€Temperature Solution Synthesis of Fewâ€Layer 1Tâ€‰â€²â€MoTe 2 Nanostructures Exhibiting Lattice Compression. Angewandte Chemie, 2016, 128, 2880-2884.	2.0	22
437	Nanoscale doping heterogeneity in few-layer WSe ₂ exfoliated onto noble metals revealed by correlated SPM and TERS imaging. 2D Materials, 2018, 5, 035003.	4.4	22
438	Controlled synthesis of N-type single-walled carbon nanotubes with 100% of quaternary nitrogen. Carbon, 2020, 167, 881-887.	10.3	22
439	Intentional carbon doping reveals CH as an abundant charged impurity in nominally undoped synthetic WS₂ and WSe₂. 2D Materials, 2020, 7, 031003.	4.4	22
440	Electronic properties of fullerenes with nonpositive Gaussian curvature: Finite zeolites. Physical Review B, 1997, 56, 12143-12146.	3.2	21
441	Fullerenes and nanotubes with non-positive Gaussian curvature. Carbon, 1998, 36, 725-730.	10.3	21
442	Photochemical bleaching of chemical pulps catalyzed by titanium dioxide. Journal of Photochemistry and Photobiology A: Chemistry, 1998, 115, 73-80.	3.9	21
443	Carbon Nanotube Supported Single Phospholipid Bilayer. Langmuir, 2006, 22, 10909-10911.	3.5	21
444	Magnetic response in finite carbon graphene sheets and nanotubes. Optical Materials, 2006, 29, 110-115.	3.6	21
445	Synthesis and Characterization of Seleniumâˆ'Carbon Nanocables. Nano Letters, 2008, 8, 3651-3655.	9.1	21
446	Boron, nitrogen and phosphorous substitutionally doped singleâ€wall carbon nanotubes studied by resonance Raman spectroscopy. Physica Status Solidi (B): Basic Research, 2009, 246, 2432-2435.	1.5	21
447	Photoconductivity of few-layered <i>p</i> -WSe ₂ phototransistors via multi-terminal measurements. 2D Materials, 2016, 3, 041004.	4.4	21
448	Two-dimensional and three-dimensional hybrid assemblies based on graphene oxide and other layered structures: A carbon science perspective. Carbon, 2017, 125, 437-453.	10.3	21
449	Functional hetero-interfaces in atomically thin materials. Materials Today, 2020, 37, 74-92.	14.2	21
450	Graphene oxide-CuFe2O4 nanohybrid material as an adsorbent of Congo red dye. Carbon Trends, 2022, 7, 100147.	3.0	21

#	Article	IF	Citations
451	Magnetic and hysteretic properties of Fe-filled nanotubes. IEEE Transactions on Magnetics, 2001, 37, 2117-2119.	2.1	20
452	Effect of doping in carbon nanotubes on the viability of biomimetic chitosanâ€carbon nanotubesâ€hydroxyapatite scaffolds. Journal of Biomedical Materials Research - Part A, 2014, 102, 3341-3351.	4.0	20
453	Transferrable polymeric carbon nitride/nitrogen-doped graphene films for solid state optoelectronics. Carbon, 2018, 138, 69-75.	10.3	20
454	Nanoscale mapping of quasiparticle band alignment. Nature Communications, 2019, 10, 3283.	12.8	20
455	New Horizons in Carbon Chemistry and Materials Science. MRS Bulletin, 1994, 19, 51-55.	3.5	19
456	Tungstenâ€“niobiumâ€“sulfur composite nanotubes. Chemical Communications, 2001, , 121-122.	4.1	19
457	Synthesis of SWCNT Rings Made by Two Y Junctions and Possible Applications in Electron Interferometry. Small, 2007, 3, 1900-1905.	10.0	19
458	Synthesis and structural characterization of novel flower-like titanium dioxide nanostructures. Physica B: Condensed Matter, 2007, 390, 143-146.	2.7	19
459	Geometric and Electronic Structure of Closed Graphene Edges. Journal of Physical Chemistry Letters, 2012, 3, 2097-2102.	4.6	19
460	Nitrogenâ€“Silicon Heterodoping of Carbon Nanotubes. Journal of Physical Chemistry C, 2013, 117, 8481-8490.	3.1	19
461	Photoluminescence Enhancement of Titanate Nanotubes by Insertion of Rare Earth Ions in Their Interlayer Spaces. Journal of Nanomaterials, 2017, 2017, 1-9.	2.7	19
462	Phase Modulators Based on High Mobility Ambipolar ReSe2 Field-Effect Transistors. Scientific Reports, 2018, 8, 12745.	3.3	19
463	Synthesis of V-MoS₂ Layered Alloys as Stable Li-Ion Battery Anodes. ACS Applied Energy Materials, 2019, 2, 8625-8632.	5.1	19
464	2D Materials for Universal Thermal Imaging of Micro- and Nanodevices: An Application to Gallium Oxide Electronics. ACS Applied Electronic Materials, 2020, 2, 2945-2953.	4.3	19
465	Confined Crack Propagation in MoS₂ Monolayers by Creating Atomic Vacancies. ACS Nano, 2021, 15, 1210-1216.	14.6	19
466	Rapid Biomarker Screening of Alzheimerâ€™s Disease by Interpretable Machine Learning and Graphene-Assisted Raman Spectroscopy. ACS Nano, 2022, 16, 6426-6436.	14.6	19
467	Carbon science perspective in 2022: Current research and future challenges. Carbon, 2022, 195, 272-291.	10.3	19
468	Accurate virus identification with interpretable Raman signatures by machine learning. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	19

#	Article	IF	Citations
469	Diameter-selective separation of double-walled carbon nanotubes. Applied Physics Letters, 2008, 93, 223107.	3.3	18
470	Production and detailed characterization of bean husk-based carbon: Efficient cadmium (II) removal from aqueous solutions. Water Research, 2008, 42, 3473-3479.	11.3	18
471	Defectâ€Enhanced Dispersion of Carbon Nanotubes in DNA Solutions. ChemPhysChem, 2009, 10, 2414-2417.	2.1	18
472	Effect of impurities on the electronic and magnetic properties of zinc oxide nanostructures. Chemical Physics Letters, 2010, 492, 82-88.	2.6	18
473	Novel Nanocarbons for Adsorption. , 2012, , 3-34.		18
474	3D Nanocomposites of Covalently Interconnected Multiwalled Carbon Nanotubes with SiC with Enhanced Thermal and Electrical Properties. Advanced Functional Materials, 2015, 25, 4985-4993.	14.9	18
475	Optoelectronic Properties of Heterostructures: The Most Recent Developments Based on Graphene and Transition-Metal Dichalcogenides. IEEE Nanotechnology Magazine, 2017, 11, 18-32.	1.3	18
476	Avian and human influenza virus compatible sialic acid receptors in little brown bats. Scientific Reports, 2017, 7, 660.	3.3	18
477	Negative Differential Conductance & Hot-Carrier Avalanching in Monolayer WS2 FETs. Scientific Reports, 2017, 7, 11256.	3.3	18
478	Pyrolytic carbon supported alloying metal dichalcogenides as free-standing electrodes for efficient hydrogen evolution. Carbon, 2018, 132, 512-519.	10.3	18
479	Locally Induced Spin States on Graphene by Chemical Attachment of Boron Atoms. Nano Letters, 2018, 18, 5482-5487.	9.1	18
480	Microwave plasma-induced growth of vertical graphene from fullerene soot. Carbon, 2021, 172, 26-30.	10.3	18
481	Facile synthesis of graphene sheets intercalated by carbon spheres for high-performance supercapacitor electrodes. Carbon, 2020, 167, 11-18.	10.3	18
482	The effects of substitutional Fe-doping on magnetism in MoS₂ and WS₂ monolayers. Nanotechnology, 2021, 32, 095708.	2.6	18
483	Electronic properties of giant fullerenes and complex graphitic nanostructures with novel morphologies. Chemical Physics Letters, 2003, 381, 683-690.	2.6	17
484	Shape and complexity at the atomic scale: the case of layered nanomaterials. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 2039-2063.	3.4	17
485	Defect-Assisted Heavily and Substitutionally Boron-Doped Thin Multiwalled Carbon Nanotubes Using High-Temperature Thermal Diffusion. Journal of Physical Chemistry C, 2014, 118, 4454-4459.	3.1	17
486	CO2 adsorption on crystalline graphitic nanostructures. Journal of CO2 Utilization, 2014, 5, 60-65.	6.8	17

#	Article	IF	Citations
487	Nanostructured carbon-based membranes: nitrogen doping effects on reverse osmosis performance. NPG Asia Materials, 2016, 8, e258-e258.	7.9	17
488	Electro-graphitization and exfoliation of graphene on carbon nanofibers. Carbon, 2017, 117, 201-207.	10.3	17
489	Catalysis-free transformation of non-graphitising carbons into highly crystalline graphite. Communications Materials, 2020, 1, .	6.9	17
490	Electric field induced metallic behavior in thin crystals of ferroelectric <i>Î±</i> -In2Se3. Applied Physics Letters, 2020, 117, .	3.3	17
491	Lightâ€Controlled Room Temperature Ferromagnetism in Vanadiumâ€Doped Tungsten Disulfide Semiconducting Monolayers. Advanced Electronic Materials, 2021, 7, 2100030.	5.1	17
492	Photodelignification of Eucalyptus grandis organosolv chemical pulp. Journal of Photochemistry and Photobiology A: Chemistry, 1996, 94, 253-262.	3.9	16
493	Morphology-controlled fabrication of a three-dimensional mesoporous poly(vinyl alcohol) monolith through the incorporation of graphene oxide. Carbon, 2016, 98, 334-342.	10.3	16
494	Pressure Sensors: Ultrasensitive Pressure Detection of Fewâ€Layer MoS₂ (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	21.0	16
495	Improved supercapacitors by implanting ultra-long single-walled carbon nanotubes into manganese oxide domains. Journal of Power Sources, 2020, 479, 228795.	7.8	16
496	Luminescence enhancement and Raman characterization of defects in WS2 monolayers treated with low-power N2 plasma. Applied Surface Science, 2021, 535, 147685.	6.1	16
497	Direct growth of monolayer 1Tâ€“2H MoS₂ heterostructures using KCl-assisted CVD process. 2D Materials, 2021, 8, 025033.	4.4	16
498	Low temperature activation of inert hexagonal boron nitride for metal deposition and single atom catalysis. Materials Today, 2021, 51, 108-116.	14.2	16
499	Self-assembly of Si nanostructures. Chemical Physics Letters, 2000, 322, 312-320.	2.6	15
500	Controlling Nanotube Chirality and Crystallinity by Doping. Small, 2005, 1, 1032-1034.	10.0	15
501	Nitrogen-doped-CNTs/Si3N4 nanocomposites with high electrical conductivity. Journal of the European Ceramic Society, 2014, 34, 1097-1104.	5.7	15
502	Graphene nanoribbons inducing cube-shaped Ag nanoparticle assemblies. Carbon, 2015, 93, 800-811.	10.3	15
503	Potassium intercalated multiwalled carbon nanotubes. Carbon, 2016, 105, 90-95.	10.3	15
504	Temperature- and power-dependent phonon properties of suspended continuous WS2 monolayer films. Vibrational Spectroscopy, 2016, 86, 270-276.	2.2	15

#	Article	IF	Citations
505	Elucidating the local interfacial structure of highly photoresponsive carbon nanotubes/PbS-QDs based nanohybrids grown by pulsed laser deposition. Carbon, 2016, 96, 145-152.	10.3	15
506	Directional Modulation of Exciton Emission Using Single Dielectric Nanospheres. Advanced Materials, 2021, 33, e2007236.	21.0	15
507	Spin-dependent vibronic response of a carbon radical ion in two-dimensional WS2. Nature Communications, 2021, 12, 7287.	12.8	15
508	Experimental observation and quantum modeling of electron irradiation on single-wall carbon nanotubes. IEEE Nanotechnology Magazine, 2003, 2, 349-354.	2.0	14
509	Ground-state electronic structure of nanoscale carbon cones. Physical Review B, 2005, 72, .	3.2	14
510	Anomalous Paramagnetism in Doped Carbon Nanostructures. Small, 2007, 3, 120-125.	10.0	14
511	Resonant Raman Study on Bulk and Isolated Graphitic Nanoribbons. Small, 2009, 5, 2698-2702.	10.0	14
512	Optoelectronic modulation by multi-wall carbon nanotubes. Nanotechnology, 2013, 24, 045201.	2.6	14
513	ROS evaluation for a series of CNTs and their derivatives using an ESR method with DMPO. Journal of Physics: Conference Series, 2013, 429, 012029.	0.4	14
514	Hydro-deoxygenation of CO on functionalized carbon nanotubes for liquid fuels production. Carbon, 2017, 121, 274-284.	10.3	14
515	Facile 1D graphene fiber synthesis from an agricultural by-product: A silicon-mediated graphenization route. Carbon, 2019, 142, 78-88.	10.3	14
516	Photodegradation Protection in 2D In-Plane Heterostructures Revealed by Hyperspectral Nanoimaging: The Role of Nanointerface 2D Alloys. ACS Nano, 2021, 15, 2447-2457.	14.6	14
517	Synthesis and electronic properties of coalesced graphitic nanocones. Chemical Physics Letters, 2005, 407, 327-332.	2.6	13
518	CdSe quantum dot-decorated double walled carbon nanotubes: The effect of chemical moieties. Applied Physics Letters, 2008, 93, 051901.	3.3	13
519	Raman spectroscopy study of heat-treated and boron-doped double wall carbon nanotubes. Physical Review B, 2009, 80, .	3.2	13
520	Visualizing fullerene chemistry. Nature Chemistry, 2010, 2, 82-83.	13.6	13
521	Graphene oxide nanoplatelets of different crystallinity synthesized from helical-ribbon carbon nanofibers and multiwall carbon nanotubes. Journal of Materials Research, 2011, 26, 2632-2641.	2.6	13
522	Controlled interlayer spacing of scrolled reduced graphene nanotubes by thermal annealing. RSC Advances, 2013, 3, 4161.	3.6	13

#	Article	IF	Citations
523	A Spray Pyrolysis Method to Grow Carbon Nanotubes on Carbon Fibres, Steel and Ceramic Bricks. Journal of Nanoscience and Nanotechnology, 2015, 15, 2858-2864.	0.9	13
524	Three dimensional porous monoliths from multi-walled carbon nanotubes and polyacrylonitrile. Carbon, 2016, 101, 377-381.	10.3	13
525	Lightâ€Emitting Transition Metal Dichalcogenide Monolayers under Cellular Digestion. Advanced Materials, 2018, 30, 1703321.	21.0	13
526	Experimental verification of the dominant influence of extended carbon networks on the structural, electrical and magnetic properties of a common soot. Journal of Physics Condensed Matter, 1997, 9, 10661-10673.	1.8	12
527	WxMoyCzS2 nanotubes. Carbon, 2001, 39, 1107-1111.	10.3	12
528	Oxidation and Thermal Stability of Linear Carbon Chains Contained in Thermally Treated Double-Walled Carbon Nanotubes. Small, 2007, 3, 788-792.	10.0	12
529	Architectures from Aligned Nanotubes Using Controlled Micropatterning of Silicon Substrates and Electrochemical Methods. Small, 2007, 3, 1157-1163.	10.0	12
530	A reversible strain-induced electrical conductivity in cup-stacked carbon nanotubes. Nanoscale, 2013, 5, 10212.	5.6	12
531	High Performance and Chlorine Resistant Carbon Nanotube/Aromatic Polyamide Reverse Osmosis Nanocomposite Membrane. MRS Advances, 2016, 1, 1469-1476.	0.9	12
532	A carbon nanotube integrated microfluidic device for blood plasma extraction. Scientific Reports, 2018, 8, 13623.	3.3	12
533	Excitonic processes in atomically-thin MoSe ₂ /MoS ₂ vertical heterostructures. 2D Materials, 2018, 5, 031016.	4.4	12
534	Incorporating Niobium in MoS₂ at BEOLâ€Compatible Temperatures and its Impact on Copper Diffusion Barrier Performance. Advanced Materials Interfaces, 2019, 6, 1901055.	3.7	12
535	Transition metal â€" Graphene oxide nanohybrid materials as counter electrodes for high efficiency quantum dot solar cells. Catalysis Today, 2020, 355, 860-869.	4.4	12
536	Graphene oxide membranes for lactose-free milk. Carbon, 2021, 181, 118-129.	10.3	12
537	Structure, Chirality, and Formation of Giant Icosahedral Fullerenes and Spherical Graphitic Onions. , 2015, , 101-112.		12
538	Origin of the complex Raman tensor elements in single-layer triclinic ReSe2. 2D Materials, 2021, 8, 025002.	4.4	12
539	Solid-phase production of carbon nanotubes. Applied Physics A: Materials Science and Processing, 1999, 68, 493-495.	2.3	11
540	Grafting of Polystyrene on Nitrogen-Doped Multi-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2007, 7, 3450-3457.	0.9	11

#	Article	IF	Citations
541	Composition and morphological characteristics of chemically sprayed fluorine-doped zinc oxide thin films deposited on Si(100). Physica B: Condensed Matter, 2007, 390, 10-16.	2.7	11
542	Ion irradiation of carbon nanotubes encapsulating cobalt crystals. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2618-2621.	2.7	11
543	Effects of novel and stable intermolecular connections in the mechanical and electronic properties of C60 polymerized structures. Chemical Physics Letters, 2008, 458, 128-133.	2.6	11
544	Magnetic properties of individual carbon clusters, clusters inside fullerenes and graphitic nanoribbons. Journal of Materials Chemistry, 2008, 18, 1535.	6.7	11
545	The importance of defects for carbon nanoribbon based electronics. Physica Status Solidi - Rapid Research Letters, 2009, 3, 181-183.	2.4	11
546	Controlling the shapes and assemblages of graphene. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7951-7952.	7.1	11
547	Hyperelasticity of three-dimensional carbon nanotube sponge controlled by the stiffness of covalent junctions. Carbon, 2015, 95, 640-645.	10.3	11
548	Effect of underlying boron nitride thickness on photocurrent response in molybdenum disulfide - boron nitride heterostructures. Journal of Materials Research, 2016, 31, 893-899.	2.6	11
549	Properties of Functionalized Carbon Nanotubes and Their Interaction with a Metallic Substrate Investigated by Scanning Tunneling Microscopy. Journal of Physical Chemistry C, 2017, 121, 24264-24271.	3.1	11
550	Anomalous Corrosion of Bulk Transition Metal Diselenides Leading to Stable Monolayers. ACS Applied Materials & Interfaces, 2017, 9, 39059-39068.	8.0	11
551	Homogeneously dispersed CeO2 nanoparticles on exfoliated hexaniobate nanosheets. Journal of Physics and Chemistry of Solids, 2017, 111, 335-342.	4.0	11
552	Atomistic-Scale Simulations on Graphene Bending Near a Copper Surface. Catalysts, 2021, 11, 208.	3.5	11
553	Single-Step Direct Laser Writing of Multimetal Oxygen Evolution Catalysts from Liquid Precursors. ACS Nano, 2021, 15, 9796-9807.	14.6	11
554	Roomâ€Temperature Observation of Nearâ€Intrinsic Exciton Linewidth in Monolayer WS₂. Advanced Materials, 2022, 34, e2108721.	21.0	11
555	Cathodoluminescence of fullerene C60. Journal of Physics Condensed Matter, 2000, 12, 7869-7878.	1.8	10
556	Directional Electrical Transport in Tough Multifunctional Layered Ceramic/Graphene Composites. Advanced Electronic Materials, 2015, 1, 1500132.	5.1	10
557	Biotin molecules on nitrogen-doped carbon nanotubes enhance the uniform anchoring and formation of Ag nanoparticles. Carbon, 2015, 88, 51-59.	10.3	10
558	Photoluminescence of monolayer transition metal dichalcogenides integrated with VO₂. Journal of Physics Condensed Matter, 2016, 28, 504001.	1.8	10

#	Article	IF	Citations
559	H2O2/UV layer-by-layer oxidation of multiwall carbon nanotubes: The â€œonion effectâ€•and the control of the degree of surface crystallinity and diameter. Carbon, 2018, 139, 1027-1034.	10.3	10
560	Temperature- and power-dependent phonon properties of suspended few layers of tungsten diselenide. Vibrational Spectroscopy, 2020, 111, 103169.	2.2	10
561	Second harmonic generation in two-dimensional transition metal dichalcogenides with growth and post-synthesis defects. 2D Materials, 2020, 7, 045020.	4.4	10
562	Interaction of gases with monolayer WS₂: an <i>in situ</i> spectroscopy study. Nanoscale, 2021, 13, 11470-11477.	5.6	10
563	Integration of Nitrogen-Doped Graphene Oxide Dots with Au Nanoparticles for Enhanced Electrocatalytic Hydrogen Evolution. ACS Applied Nano Materials, 2021, 4, 11513-11525.	5.0	10
564	Coaxial fabrication of Ni-Co layered double hydroxide into 3D carbon nanotube networks for high-performance flexible fiber supercapacitors. Journal of Alloys and Compounds, 2022, 909, 164664.	5.5	10
565	A perspective on two-dimensional van der Waals opto-spin-caloritronics. Applied Physics Letters, 2021, 119, .	3.3	10
566	Photoluminescence quenching of CVD grown WS2 monolayers treated with low-power Ar plasma. Surfaces and Interfaces, 2022, 33, 102220.	3.0	10
567	Raman study on electrochemical lithium insertion into multiwalled carbon nanotubes. Journal of Raman Spectroscopy, 2008, 39, 1183-1188.	2.5	9
568	Efficient Vapor Sensors Using Foils of Dispersed Nitrogen-Doped and Pure Carbon Multiwalled Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 3965-3972.	0.9	9
569	Enhanced Solubilization of Carbon Nanotubes in Aqueous Suspensions of Anionicâ€"Nonionic Surfactant Mixtures. Journal of Physical Chemistry C, 2013, 117, 25138-25145.	3.1	9
570	Iron Particle Nanodrilling of Few Layer Graphene at Low Electron Beam Accelerating Voltages. Particle and Particle Systems Characterization, 2013, 30, 76-82.	2.3	9
571	Carbon nanotube-Cu hybrids enhanced catalytic activity in aqueous media. Carbon, 2014, 78, 10-18.	10.3	9
572	Self-Assembly Synthesis of Decorated Nitrogen-Doped Carbon Nanotubes with ZnO Nanoparticles: Anchoring Mechanism and the Effects of Sulfur. Journal of Physical Chemistry C, 2015, 119, 741-747.	3.1	9
573	Temperature Dependence of Sensors Based on Silver-Decorated Nitrogen-Doped Multiwalled Carbon Nanotubes. Journal of Sensors, 2016, 2016, 1-10.	1.1	9
574	Electric-Field-Assisted Directed Assembly of Transition Metal Dichalcogenide Monolayer Sheets. ACS Nano, 2016, 10, 5006-5014.	14.6	9
575	The amorphization of metal nanoparticles in graphitic shells under laser pulses. Carbon, 2020, 161, 495-501.	10.3	9
576	Doping and connecting carbon nanotubes. Molecular Crystals and Liquid Crystals, 2002, 387, 51-62.	0.9	8

#	Article	IF	Citations
577	Growth of Double-Walled Carbon Nanotubes Using a Conditioning Catalyst. Journal of Nanoscience and Nanotechnology, 2005, 5, 404-408.	0.9	8
578	Sodium Chloride-Catalyzed Oxidation of Multiwalled Carbon Nanotubes for Environmental Benefit. Journal of Physical Chemistry B, 2006, 110, 12017-12021.	2.6	8
579	Vibration sample magnetometry, a good tool for the study of nanomagnetic inclusions. Superlattices and Microstructures, 2008, 43, 482-486.	3.1	8
580	Controlled growth of one-dimensional clusters of molybdenum atoms using double-walled carbon nanotube templating. Applied Physics Letters, 2009, 94, .	3.3	8
581	Unusually High Dispersion of Nitrogen-Doped Carbon Nanotubes in DNA Solution. Journal of Physical Chemistry B, 2011, 115, 14295-14300.	2.6	8
582	Preparation of novel tetrahedral Ag3PO4 crystals and the sunlight-responsive photocatalytic properties using graphene oxide as the template. Carbon, 2017, 119, 522-526.	10.3	8
583	The Improvement of the Bleaching of Peroxyformic Sugar Cane Bagasse Pulp by Photocatalysis and Photosensitization. Journal of the Brazilian Chemical Society, 1999, 10, 197-202.	0.6	7
584	Large-Scale Synthesis of Carbon Nanotubes by Pyrolysis. , 1999, , 143-152.		7
585	Sensors: Photosensor Device Based on Fewâ€Layered WS₂ Films (Adv. Funct. Mater. 44/2013). Advanced Functional Materials, 2013, 23, 5510-5510.	14.9	7
586	Magnetic and Electrical Properties of Nitrogen-Doped Multiwall Carbon Nanotubes Fabricated by a Modified Chemical Vapor Deposition Method. Journal of Nanomaterials, 2015, 2015, 1-14.	2.7	7
587	Transport properties through hexagonal boron nitride clusters embedded in graphene nanoribbons. Nanotechnology, 2016, 27, 185203.	2.6	7
588	Fullerene and nanotube growth: new insights using first principles and molecular dynamics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150327.	3.4	7
589	Probing the interaction of noble gases with pristine and nitrogen-doped graphene through Raman spectroscopy. Physical Review B, 2018, 97, .	3.2	7
590	Nanotechnology of nanotubes and nanowires: From aligned carbon nanotubes to silicon oxide nanowires. , 1998, , .		6
591	SiO2-coated carbon nanotubes: theory and experiment. International Journal of Materials Research, 2002, 93, 455-458.	0.8	6
592	Magnetic and transport properties of Fe nanowires encapsulated in carbon nanotubes. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1255-E1257.	2.3	6
593	Formation of off-centered double-walled carbon nanotubes exhibiting wide interlayer spacing from bi-cables. Chemical Physics Letters, 2006, 432, 240-244.	2.6	6
594	Determination of chiralities of single-walled carbon nanotubes by neutron powder diffraction technique. Diamond and Related Materials, 2007, 16, 473-476.	3.9	6

#	Article	IF	Citations
595	Soft purification of N-doped and undoped multi-wall carbon nanotubes. Nanotechnology, 2008, 19, 155701.	2.6	6
596	Magnetic Properties of Encapsulated Nanoparticles in Nitrogen-Doped Multiwalled Cabon Nanotubes Embedded in SiO_{<I>x</I>} Matrices. Journal of Nanoscience and Nanotechnology, 2010, 10, 5576-5582.	0.9	6
597	Sensitive G-Band Raman Features for the Electrical Conductivity of Multi-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 3940-3944.	0.9	6
598	Electrical transport through single-wall carbon nanotubeâ€“anodic aluminum oxideâ€“aluminum heterostructures. Nanotechnology, 2010, 21, 035707.	2.6	6
599	Metalâ€“semiconductor transition like behavior of naphthalene-doped single wall carbon nanotube bundles. Faraday Discussions, 2014, 173, 145-156.	3.2	6
600	Controllable and Predictable Viscoelastic Behavior of 3D Boronâ€Doped Multiwalled Carbon Nanotube Sponges. Particle and Particle Systems Characterization, 2016, 33, 21-26.	2.3	6
601	Probing the origin of lateral heterogeneities in synthetic monolayer molybdenum disulfide. 2D Materials, 2019, 6, 025008.	4.4	6
602	Thermal and Photo Sensing Capabilities of Mono- and Few-Layer Thick Transition Metal Dichalcogenides. Micromachines, 2020, 11, 693.	2.9	6
603	Superconductivity enhancement in phase-engineered molybdenum carbide/disulfide vertical heterostructures. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 19685-19693.	7.1	6
604	Enhanced desalination performance in compacted carbon-based reverse osmosis membranes. Nanoscale Advances, 2020, 2, 3444-3451.	4.6	6
605	Mouse pulmonary dose- and time course-responses induced by exposure to nitrogen-doped multi-walled carbon nanotubes. Inhalation Toxicology, 2020, 32, 24-38.	1.6	6
606	Multiple excitations and temperature study of the disorder-induced Raman bands in MoS₂. 2D Materials, 2021, 8, 035042.	4.4	6
607	Understanding the influence of nanocarbon conducting modes on the rate performance of LiFePO4 cathodes in lithium-ion batteries. Journal of Alloys and Compounds, 2022, 905, 164205.	5.5	6
608	Autonomous scanning probe microscopy investigations over WS2 and Au{111}. Npj Computational Materials, 2022, 8, .	8.7	6
609	Synthetic Routes to Novel Nanomaterials. Fullerenes, Nanotubes, and Carbon Nanostructures, 1997, 5, 813-827.	0.6	5
610	New advances in the creation of nanostructural materials. Pure and Applied Chemistry, 1999, 71, 2125-2130.	1.9	5
611	Metal and alloy nanowires: Iron and invar inside carbon nanotubes. AIP Conference Proceedings, 2001, , .	0.4	5
612	Determination of the stacking order of curved few-layered graphene systems. Nanoscale, 2012, 4, 6419.	5.6	5

#	Article	IF	Citations
613	Boron-assisted coalescence of parallel multi-walled carbon nanotubes. RSC Advances, 2013, 3, 26266.	3.6	5
614	Novel Carbon-Based Nanomaterials. , 2013, , 61-87.		5
615	(Ga,In)P nanowires grown without intentional catalyst. Journal of Crystal Growth, 2015, 431, 72-78.	1.5	5
616	Solvothermal synthesis of porous conjugated polymer with high surface area for efficient adsorption of organic and biomolecules. Journal of Porous Materials, 2018, 25, 1659-1668.	2.6	5
617	Probing exciton species in atomically thin WS₂â€"graphene heterostructures. JPhys Materials, 2019, 2, 025001.	4.2	5
618	Effects of dimensionality and excitation energy on the Raman tensors of triclinic ReSe₂. Journal of Raman Spectroscopy, 2021, 52, 2068-2080.	2.5	5
619	3d transition metal coordination on monolayer MoS₂: a facile doping method to functionalize surfaces. Nanoscale, 2022, 14, 10801-10815.	5.6	5
620	Fullerenes with Non-Positive Gaussian Curvature: Holey-Balls and Holey-Tubes. Fullerenes, Nanotubes, and Carbon Nanostructures, 1998, 6, 751-767.	0.6	4
621	Modified Carbon Nanotubes. , 2013, , 189-232.		4
622	Pine-tree-like morphologies of nitrogen-doped carbon nanotubes: Electron field emission enhancement. Journal of Materials Research, 2014, 29, 2441-2450.	2.6	4
623	Enhancing the superconducting temperature of MgB2 by SWCNT dilution. Physica C: Superconductivity and Its Applications, 2014, 497, 43-48.	1.2	4
624	Lithiumâ€Ion Batteries: Graphene Sandwiched Mesostructured Liâ€Ion Battery Electrodes (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10	21.0	4
625	Themed issue on 2D materials. Journal of Materials Chemistry C, 2017, 5, 11156-11157.	5.5	4
626	Pyrrolic nitrogen-doped multiwall carbon nanotubes using ball-milled slag-SiC mixtures as a catalyst by aerosol assisted chemical vapor deposition. Materials Research Express, 2020, , .	1.6	4
627	Review of optical properties of two-dimensional transition metal dichalcogenides. , 2018, , .		4
628	Advances on the growth and properties of N- and B-doped carbon nanotubes. AIP Conference Proceedings, 2001, , .	0.4	3
629	Pure and aligned carbon nanotubes produced by the pyrolysis of benzene-based aerosols. AIP Conference Proceedings, 2001, , .	0.4	3
630	Selective Fabrication of Carbon Nanotube and Their Applications. Journal of Biomedical Nanotechnology, 2006, 2, 106-108.	1.1	3

#	Article	IF	Citations
631	Magnetic properties of carbon nanostructures. International Journal of Nanotechnology, 2007, 4, 651.	0.2	3
632	Self-diffraction properties in nanotubes (CNTs). Proceedings of SPIE, 2009, , .	0.8	3
633	Synthesis and Characterization of Nitrogen Doped Carbon Nanotubes. Materials Science Forum, 0, 636-637, 714-721.	0.3	3
634	Resource Letter N-1: Nanotechnology. American Journal of Physics, 2014, 82, 8-22.	0.7	3
635	Atomic-scale Observation of Grains and Grain Boundaries in Monolayers of WS₂. Microscopy and Microanalysis, 2014, 20, 1084-1085.	0.4	3
636	Individual Mo Dopant Atoms in WS2 Monolayers: Atomic Structure and Induced Strain. Microscopy and Microanalysis, 2015, 21, 435-436.	0.4	3
637	Stable and solid pellets of functionalized multi-walled carbon nanotubes produced under high pressure and temperature. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	3
638	Polysulphone composite membranes modified with two types of carbon additives as a potential material for bone tissue regeneration. Bulletin of Materials Science, 2017, 40, 201-212.	1.7	3
639	BNC nanoshells: a novel structure for atomic storage. Nanotechnology, 2017, 28, 465201.	2.6	3
640	Phenomenological Modeling of Confined Phonon States in TMD Quantum Dots. MRS Advances, 2018, 3, 339-344.	0.9	3
641	Catalytic Nanocarbons: Defect Engineering and Surface Functionalization of Nanocarbons for Metalâ€Free Catalysis (Adv. Mater. 13/2019). Advanced Materials, 2019, 31, 1970096.	21.0	3
642	Hollow â€œgrapheneâ€•microtubes using polyacrylonitrile nanofiber template and potential applications of field emission. Carbon, 2020, 167, 439-445.	10.3	3
643	Multi-walled carbon nanotubes enhance the genetic transformation of Bifidobacterium longum. Carbon, 2021, 184, 902-909.	10.3	3
644	Properties and Applications of Doped Carbon Nanotubes. , 2009, , 223-269.		3
645	Data Science Applied to Carbon Materials: Synthesis, Characterization, and Applications. Advanced Theory and Simulations, 2022, 5, 2100205.	2.8	3
646	Spatially resolved EELS applied to the study of a one-dimensional solid solution of AgCl1â^'xIx formed within single wall carbon nanotubes. AIP Conference Proceedings, 2002, , .	0.4	2
647	Banhart, HernÃ¡ndez, and Terrones Reply:. Physical Review Letters, 2004, 92, .	7.8	2
648	Science and Technology of the Twenty-First Century: Synthesis, Properties, and Applications of Carbon Nanotubes. ChemInform, 2004, 35, no.	0.0	2

#	Article	IF	Citations
649	Microfluidic device with carbon nanotube channel walls for blood plasma extraction. , 2013, , .		2
650	Three-dimensional Nanotube Networks and a New Horizon of Applications. , 2014, , 457-493.		2
651	Synthesis, Characterization and Magnetic Properties of Defective Nitrogen-Doped Multiwall Carbon Nanotubes Encapsulating Ferromagnetic Nanoparticles. Journal of Nano Research, 2014, 28, 39-49.	0.8	2
652	Covalent Networks: 3D Nanocomposites of Covalently Interconnected Multiwalled Carbon Nanotubes with SiC with Enhanced Thermal and Electrical Properties (Adv. Funct. Mater. 31/2015). Advanced Functional Materials, 2015, 25, 4922-4922.	14.9	2
653	Random anion distribution in MSxSe2âˆ’x (M = Mo, W) crystals and nanosheets. RSC Advances, 2018, 8, 9871-9878.	3.6	2
654	Functional Pd/reduced graphene oxide nanocomposites: effect of reduction degree and doping in hydrodechlorination catalytic activity. Journal of Nanoparticle Research, 2019, 21, 1.	1.9	2
655	Spin dependent transport in hybrid one dimensional BNC systems. Semiconductor Science and Technology, 2019, 34, 015004.	2.0	2
656	Selective Synthesis of Bi₂Te₃/WS₂ Heterostructures with Strong Interlayer Coupling. ACS Applied Materials & Interfaces, 2020, , .	8.0	2
657	Carbon Nanotubes and Nanofibres: Exotic Materials of Carbon. Tanso, 2000, 2000, 424-433.	0.1	2
658	Roomâ€Temperature Observation of Nearâ€Intrinsic Exciton Linewidth in Monolayer WS₂ (Adv. Mater. 15/2022). Advanced Materials, 2022, 34, .	21.0	2
659	Fullerene Formation. , 2001, , 3372-3379.		1
660	Defects and coalescence in carbon nanotubes. AIP Conference Proceedings, 2001, , .	0.4	1
661	MÃ¶ssbauer Study of Iron-Containing Carbon Nanotubes. , 2002, , 535-542.		1
662	Novel Nanostructures: from Metal-Filled Carbon Nanotubes to MgO Nanoferns. , 2002, , 11-19.		1
663	Advances in Cnx Nanotube Growth. Materials Research Society Symposia Proceedings, 2003, 772, 251.	0.1	1
664	A big step for Ecuador. Nature Materials, 2010, 9, 704-705.	27.5	1
665	Magnetoresistance and Phase Breaking Behavior of a Nitrogen Doped Multi-Walled Carbon Nanotube. Japanese Journal of Applied Physics, 2010, 49, 02BD01.	1.5	1
666	Transparent Foamlike 2D Networks of Nitrogen-Doped Multiwalled Carbon Nanotubes Obtained by Self-Assembly. Journal of Physical Chemistry C, 2011, 115, 11447-11452.	3.1	1

#	Article	IF	Citations
667	Selective synthesis of double helices of carbon nanotube bundles grown on treated metallic substrates. Physica Status Solidi (B): Basic Research, 2012, 249, 2382-2385.	1.5	1
668	Carbon Nanotubes: Catalytic Twistâ€Spun Yarns of Nitrogenâ€Doped Carbon Nanotubes (Adv. Funct.) Tj ETQq0 0 0 rgBT /Overlock 10 T	14.9	1
669	Porous Materials: Controlling the Optical, Electrical and Chemical Properties of Carbon Inverse Opal by Nitrogen Doping (Adv. Funct. Mater. 18/2014). Advanced Functional Materials, 2014, 24, 2611-2611.	14.9	1
670	A VACNT integrated handheld device for label-free virus capture, detection and enrichment for genomic analysis. , 2015, , .		1
671	Observation of a Quasi-ordered Structure in Monolayer W x Mo (1-x) S 2 Alloys. Microscopy and Microanalysis, 2016, 22, 1548-1549.	0.4	1
672	Fano Resonances: Tunable Fano Resonance and Plasmon-Exciton Coupling in Single Au Nanotriangles on Monolayer WS2 at Room Temperature (Adv. Mater. 22/2018). Advanced Materials, 2018, 30, 1870155.	21.0	1
673	A Review of Defects in Metal Dichalcogenides: Doping, Alloys, Interfaces, Vacancies and Their Effects in Catalysis & Optical Emission. Microscopy and Microanalysis, 2018, 24, 1556-1557.	0.4	1
674	AgnÃ¨s Oberlin (1925â€“2019) â€“ A tribute from the Carbon Journal. Carbon, 2019, 147, 126-133.	10.3	1
675	Dielectric Nanospheres: Directional Modulation of Exciton Emission Using Single Dielectric Nanospheres (Adv. Mater. 20/2021). Advanced Materials, 2021, 33, 2170153.	21.0	1
676	A Simple Route to Silicon-Based Nanostructures. Advanced Materials, 1999, 11, 844-847.	21.0	1
677	Mildred S. Dresselhaus (1930 â€“ 2017) â€“ A Tribute from the Carbon Journal. Carbon, 2017, 119, 573-577.	10.3	1
678	Identification of individual and few layers of WS2 using Raman Spectroscopy. , 0, .		1
679	Carbon Nanotubes and Other Carbon Materials. , 2008, , 691-706.		1
680	MoS2 Monolayers on Nanocavities: Enhanced Light-Matter Interaction within Atomic Monolayers. , 2016, , .		1
681	Induced Ring Currents in Polymerized C₆₀ and C₇₀ Molecules. Journal of Computational and Theoretical Nanoscience, 2007, 4, 257-263.	0.4	1
682	Enhancement in Light-Matter Interaction within Atomic MoS2 Monolayers on Nanocavities. , 2016, , .		1
683	Electron Irradiation Effects in Carbon Nanostructures: Surface Reconstruction, Extreme Compression, Nanotube Growth and Morphology Manipulation. , 2008, , 155-156.		1
684	Evolution of spectroscopy features in layered MoS_xSe_(2-x) solid solutions. Materials Research Express, 2022, 9, 046301.	1.6	1

#	Article	IF	Citations
685	Formation of Twisted AB-Graphitic and Fullerene-Related Tubular Structures During Soot Deposition from the Flaming Combustion of Polymers. Combustion and Flame, 1998, 114, 591-593.	5.2	0
686	Pyrolysis of C[sub 60]-thin films yields Ni-filled sharp nanotubes. , 1998, , .		0
687	Experimental observation and quantum modeling of electron irradiation on single-wall carbon nanotubes. , 2003, , .		0
688	Exploring the carbon nanocosmos: doped nanotubes, networks, and other novel forms of carbon. , 2003, , .		0
689	Introduction. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 2035-2037.	3.4	0
690	Ring Currents in Carbon Nanostructures: Magnetic Field Effects. AIP Conference Proceedings, 2005, , .	0.4	0
691	Tetrahedral magnetic cluster embedded in metallic matrix: electron-correlation effects. IEEE Transactions on Magnetics, 2005, 41, 3428-3430.	2.1	0
692	Optical Spectroscopic Studies of Thermally Coalesced Single-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 3878-3883.	0.9	0
693	Structural changes to aid science in developing countries. Nature, 2010, 464, 486-486.	27.8	0
694	Nanoribbons: Nitrogenâ€Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport (Adv.) Tj ETQq0 0 0 rgBT /Overlock 1	14.9	0
695	Nanodrilling: Iron Particle Nanodrilling of Few Layer Graphene at Low Electron Beam Accelerating Voltages (Part. Part. Syst. Charact. 1/2013). Particle and Particle Systems Characterization, 2013, 30, 75-75.	2.3	0
696	Polarized Induced Magnetic Broadening of Photonic Activities in Fe3O4-Elastomer Composites. Materials Research Society Symposia Proceedings, 2013, 1509, 1.	0.1	0
697	Graphene: Large-Area Si-Doped Graphene: Controllable Synthesis and Enhanced Molecular Sensing (Adv. Mater. 45/2014). Advanced Materials, 2014, 26, 7676-7676.	21.0	0
698	Harmonic generation in 2D layered materials. , 2014, , .		0
699	4. The importance of defects and dopants within carbon nanomaterials during the fabrication of polymer composites. , 2014, , 71-122.		0
700	Harold Walter Kroto: A carbon scientist, humanist, spectroscopist, graphic designer, tennis player and friend (1939â€"2016). Carbon, 2016, 108, 103-105.	10.3	0
701	Anchorage of Î^3-Al2O3 nanoparticles on nitrogen-doped multiwalled carbon nanotubes. Scripta Materialia, 2016, 123, 17-20.	5.2	0
702	Magnetic quenching of photonic activity in Fe3O4-elastomer composite. Journal of Nanophotonics, 2016, 10, 016017.	1.0	0

#	Article	IF	Citations
703	Fullerene Formationâ˘†. , 2017, , .		0
704	Electrochemical Exfoliation: On the Role of Transition Metal Salts During Electrochemical Exfoliation of Graphite: Antioxidants or Metal Oxide Decorators for Energy Storage Applications (Adv. Funct. Mater. 48/2018). Advanced Functional Materials, 2018, 28, 1870345.	14.9	0
705	Dark Excitons: Darkâ€Excitonâ€Mediated Fano Resonance from a Single Gold Nanostructure on Monolayer WS₂ at Room Temperature (Small 31/2019). Small, 2019, 15, 1970164.	10.0	0
706	The application of low-dimensional materials in virology and in the study of living organisms. , 2020, , 403-441.		0
707	Temperature-Dependent RF Characteristics of Alâ‚‚Oâ‚ƒ-Passivated WSeâ‚‚ MOSFETs. IEEE Electron Device Letters, 2020, 41, 1134-1137.	3.9	0
708	Graphene Oxide Membranes for Water Filtration. Membrane, 2021, 46, 184-186.	0.0	0
709	Controlled Production of Tubular Carbon and BCN Architecture. , 2001, , 171-185.		0
710	Novel Nanostructures: from Metal-Filled Carbon Nanotubes to MgO Nanoferns. , 2002, , 11-19.		0
711	THE SHAPE OF CARBON: NOVEL MATERIALS FOR THE 21ST CENTURY. Series on Iraq War and Its Consequences, 2007, , 7-32.	0.1	0
712	Carbon Nanotubes and Other Carbon Materials. , 2014, , 628-642.		0
713	In-situ electron irradiation studies of metal-carbon nanostructures. , 2008, , 121-122.		0
714	Data Science Applied to Carbon Materials: Synthesis, Characterization, and Applications (Adv. Theory) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.8	0