Nicole Grobert

List of Publications by Year
in descending order

134 papers	8,721 citations	44042 48 h-index	42364 92 g-index
145 all docs	145 docs citations	145 times ranked	9626 citing authors

#	Article	IF	Citations
1	Controlled production of aligned-nanotube bundles. Nature, 1997, 388, 52-55.	13.7	763
2	Identification of Electron Donor States in N-Doped Carbon Nanotubes. Nano Letters, 2001, 1, 457-460.	4.5	727
3	Selective Attachment of Gold Nanoparticles to Nitrogen-Doped Carbon Nanotubes. Nano Letters, 2003, 3, 275-277.	4.5	518
4	N-doping and coalescence of carbon nanotubes: synthesis and electronic properties. Applied Physics A: Materials Science and Processing, 2002, 74, 355-361.	1.1	392
5	Carbon nanotubes â€" becoming clean. Materials Today, 2007, 10, 28-35.	8.3	294
6	Nanotubes in a Flash--Ignition and Reconstruction. Science, 2002, 296, 705-705.	6.0	256
7	Carbon Nitride Nanocomposites: Formation of Aligned CxNy Nanofibers. Advanced Materials, 1999, 11, 655-658.	11.1	252
8	Pyrolytic production of aligned carbon nanotubes from homogeneously dispersed benzene-based aerosols. Chemical Physics Letters, 2001, 338, 101-107.	1.2	205
9	Controlling the Orientation, Edge Geometry, and Thickness of Chemical Vapor Deposition Graphene. ACS Nano, 2013, 7, 1351-1359.	7.3	182
10	Synthetic routes to nanoscale BxCyNz architectures. Carbon, 2002, 40, 1665-1684.	5.4	164
11	Tungsten oxide tree-like structures. Chemical Physics Letters, 1999, 309, 327-334.	1.2	152
12	Graphitic cones in palladium catalysed carbon nanofibres. Chemical Physics Letters, 2001, 343, 241-250.	1.2	150
13	Boron- and nitrogen-doped multi-wall carbon nanotubes for gas detection. Carbon, 2014, 66, 662-673.	5.4	139
14	Enhanced Electron Field Emission in B-doped Carbon Nanotubes. Nano Letters, 2002, 2, 1191-1195.	4.5	136
15	Effect of the experimental parameters on the structure of nitrogen-doped carbon nanotubes produced by aerosol chemical vapour deposition. Carbon, 2009, 47, 30-37.	5.4	127
16	Hysteresis shift in Fe-filled carbon nanotubes due to Î³-Fe. Physical Review B, 2002, 65, .	1.1	114
17	Aligned CN[sub x] nanotubes by pyrolysis of ferrocene/C[sub 60] under NH[sub 3] atmosphere. Applied Physics Letters, 2000, 77, 1807.	1.5	112
18	Boron-doping effects in carbon nanotubes. Journal of Materials Chemistry, 2000, 10, 1425-1429.	6.7	112

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19	Microstructural investigations on zirconium oxideâ€“carbon nanotube composites synthesized by hydrothermal crystallization. Carbon, 2004, 42, 1995-1999.	5.4	111
20	Comparison of structural changes in nitrogen and boron-doped multi-walled carbon nanotubes. Carbon, 2010, 48, 3033-3041.	5.4	111
21	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.	3.3	110
22	Production of WS2Nanotubes. Chemistry of Materials, 2000, 12, 1190-1194.	3.2	108
23	3D Silicon oxide nanostructures: from nanoflowers to radiolaria. Journal of Materials Chemistry, 1998, 8, 1859-1864.	6.7	107
24	SiOx-coating of carbon nanotubes at room temperature. Chemical Physics Letters, 2001, 339, 41-46.	1.2	106
25	Understanding the conversion mechanism and performance of monodisperse FeF2 nanocrystal cathodes. Nature Materials, 2020, 19, 644-654.	13.3	97
26	Direct Measurement of the Surface Energy of Graphene. Nano Letters, 2017, 17, 3815-3821.	4.5	95
27	A Simple Route to Silicon-Based Nanostructures. Advanced Materials, 1999, 11, 844-847.	11.1	91
28	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.	1.1	89
29	Generation of hollow crystalline tungsten oxide fibres. Applied Physics A: Materials Science and Processing, 2000, 70, 231-233.	1.1	83
30	An Alternative Route to Molybdenum Disulfide Nanotubes. Journal of the American Chemical Society, 2000, 122, 10155-10158.	6.6	83
31	Zipper Mechanism of Nanotube Fusion: Theory and Experiment. Physical Review Letters, 2004, 92, 075504.	2.9	78
32	Nonlinear Behavior in the Thermopower of Doped Carbon Nanotubes Due to Strong, Localized States. Nano Letters, 2003, 3, 839-842.	4.5	77
33	SiCâ€“SiOx heterojunctions in nanowires. Journal of Materials Chemistry, 1999, 9, 3173-3178.	6.7	72
34	Efficient encapsulation of gaseous nitrogen inside carbon nanotubes with bamboo-like structure using aerosol thermolysis. Chemical Physics Letters, 2004, 396, 167-173.	1.2	72
35	METAL ATOMS IN CARBON NANOTUBES AND RELATED NANOPARTICLES. International Journal of Modern Physics B, 2001, 15, 4037-4069.	1.0	70
36	Probing the Bonding in Nitrogen-Doped Graphene Using Electron Energy Loss Spectroscopy. ACS Nano, 2013, 7, 7145-7150.	7.3	69

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37	Spray deposited fluoropolymer/multi-walled carbon nanotube composite films with high dielectric permittivity at low percolation threshold. Carbon, 2009, 47, 561-569.	5.4	68
38	Lowâ€Cost Chitosanâ€Derived Nâ€Doped Carbons Boost Electrocatalytic Activity of Multiwall Carbon Nanotubes. Advanced Functional Materials, 2018, 28, 1707284.	7.8	68
39	Morphology, structure and growth of WS2 nanotubes. Journal of Materials Chemistry, 2000, 10, 2570-2577.	6.7	67
40	High-frequency supercapacitors based on doped carbon nanostructures. Carbon, 2018, 126, 305-312.	5.4	65
41	A novel route to aligned nanotubes and nanofibres using laser-patterned catalytic substrates. Applied Physics A: Materials Science and Processing, 2000, 70, 175-183.	1.1	62
42	Controlling pyridinic, pyrrolic, graphitic, and molecular nitrogen in multi-wall carbon nanotubes using precursors with different N/C ratios in aerosol assisted chemical vapor deposition. Physical Chemistry Chemical Physics, 2015, 17, 23741-23747.	1.3	61
43	MÃ¶ssbauer Study of Iron-Containing Carbon Nanotubes. Hyperfine Interactions, 2002, 139/140, 535-542.	0.2	60
44	Fabrication of carbon-nanotube-reinforced glassâ€"ceramic nanocomposites by ultrasonic in situ solâ€"gel processing. Journal of Materials Chemistry, 2008, 18, 5344.	6.7	59
45	Tuning the magnetic properties of iron-filled carbon nanotubes. Carbon, 2012, 50, 3674-3681.	5.4	57
46	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.	11.1	56
47	Tumbling motion of magnetic particles on a magnetic substrate induced by a rotational magnetic field. Physical Review E, 2008, 78, 021403.	0.8	55
48	H₂-Driven biocatalytic hydrogenation in continuous flow using enzyme-modified carbon nanotube columns. Chemical Communications, 2017, 53, 9839-9841.	2.2	48
49	Rapid epitaxy-free graphene synthesis on silicidated polycrystalline platinum. Nature Communications, 2015, 6, 7536.	5.8	46
50	Mixed-Phase WxMoyCzS2Nanotubes. Chemistry of Materials, 2000, 12, 3541-3546.	3.2	44
51	Targeted removal of copper foil surface impurities for improved synthesis of CVD graphene. Carbon, 2017, 122, 207-216.	5.4	43
52	Tailoring gas sensing properties of multi-walled carbon nanotubes by in situ modification with Si, P, and N. Carbon, 2012, 50, 2816-2823.	5.4	39
53	Layer-by-layer spray deposition and unzipping of single-wall carbon nanotube-based thin film electrodes for electrochemical capacitors. Carbon, 2013, 61, 525-536.	5.4	38
54	Carbon Nanotubes as Nanoreactors for Boriding Iron Nanowires. Advanced Materials, 2000, 12, 1356-1359.	11.1	37

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55	In-situ formation of carbon nanotubes in an aluminaâ€“nanotube composite by spray pyrolysis. Carbon, 2003, 41, 2737-2741.	5.4	37
56	Microstructural characterization of Câ€“SiCâ€“carbon nanotube composite flakes. Carbon, 2004, 42, 1-4.	5.4	37
57	Aerosol-assisted chemical vapour deposition synthesis of multi-wall carbon nanotubes: II. An analytical study. Carbon, 2013, 58, 159-169.	5.4	37
58	Cables of BN-insulated Bâ€“Câ€“N nanotubes. Applied Physics Letters, 2003, 82, 1275-1277.	1.5	36
59	The structure of 1D CuI crystals inside SWNTs. Journal of Microscopy, 2008, 232, 335-342.	0.8	36
60	Processing and properties of aligned multi-walled carbon nanotube/aluminoborosilicate glass composites made by solâ€“gel processing. Carbon, 2010, 48, 2212-2217.	5.4	36
61	Aerosol-assisted chemical vapour deposition synthesis of multi-wall carbon nanotubes: I. Mapping the reactor. Carbon, 2013, 58, 151-158.	5.4	36
62	The effect of multi-wall carbon nanotube morphology on electrical and mechanical properties of polyurethane nanocomposites. Composites Part A: Applied Science and Manufacturing, 2017, 102, 305-313.	3.8	36
63	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.	1.3	34
64	Electrical conductance and breakdown in individual CNx multiwalled nanotubes. Applied Physics Letters, 2006, 89, 143110.	1.5	33
65	Aerosol-assisted chemical vapour deposition synthesis of multi-wall carbon nanotubes: III. Towards upscaling. Carbon, 2015, 88, 148-156.	5.4	33
66	Microscopy Study of the Growth Process and Structural Features of Silicon Oxide Nanoflowers. Chemistry of Materials, 1999, 11, 2709-2715.	3.2	31
67	STM investigation of carbon nanotubes connected by functional groups. Materials Science and Engineering C, 2003, 23, 1007-1011.	3.8	31
68	Facile, fast, and inexpensive synthesis of monodisperse amorphous Nickel-Phosphide nanoparticles of predefined size. Chemical Communications, 2011, 47, 4108.	2.2	31
69	Time dependent decomposition of ammonia borane for the controlled production of 2D hexagonal boron nitride. Scientific Reports, 2017, 7, 14297.	1.6	31
70	Nanocomposites: synthesis and elemental mapping of aligned Bâ€“Câ€“N nanotubes. Chemical Physics Letters, 2002, 360, 1-7.	1.2	28
71	Comparison of carbon materials as electrodes for enzyme electrocatalysis: hydrogenase as a case study. Faraday Discussions, 2014, 172, 473-496.	1.6	28
72	Nanotubes â€“ grow or go?. Materials Today, 2006, 9, 64.	8.3	26

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73	WS₂ 2D nanosheets in 3D nanoflowers. Chemical Communications, 2014, 50, 12360-12362.	2.2	26
74	Nacre-like alumina with unique high strain rate capabilities. Journal of the European Ceramic Society, 2020, 40, 417-426.	2.8	26
75	Vertically-aligned silicon carbide nanowires as visible-light-driven photocatalysts. Applied Catalysis B: Environmental, 2017, 218, 267-276.	10.8	25
76	Nanocages of layered BN: Super-high-pressure nanocells for formation of solid nitrogen. Journal of Chemical Physics, 2002, 116, 8523.	1.2	23
77	Singleâ€Step Spray Printing of Symmetric Allâ€Organic Solidâ€State Batteries Based on Porous Textile Dye Electrodes. Advanced Energy Materials, 2019, 9, 1901418.	10.2	23
78	Effects of temperature and ammonia flow rate on the chemical vapour deposition growth of nitrogen-doped graphene. Physical Chemistry Chemical Physics, 2014, 16, 19446.	1.3	21
79	A Graphene Surface Force Balance. Langmuir, 2014, 30, 11485-11492.	1.6	21
80	Magnetic and hysteretic properties of Fe-filled nanotubes. IEEE Transactions on Magnetics, 2001, 37, 2117-2119.	1.2	20
81	Boron-Mediated Nanotube Morphologies. ACS Nano, 2012, 6, 7800-7805.	7.3	20
82	Tungstenâ€"niobiumâ€"sulfur composite nanotubes. Chemical Communications, 2001, , 121-122.	2.2	19
83	Synthesis of SWCNT Rings Made by Two Y Junctions and Possible Applications in Electron Interferometry. Small, 2007, 3, 1900-1905.	5.2	19
84	Controlled growth of Ni nanocrystals on SrTiO3 and their application in the catalytic synthesis of carbon nanotubes. Chemical Communications, 2013, 49, 3748.	2.2	18
85	Ceramic composites from mesoporous silica coated multi-wall carbonÂnanotubes. Microporous and Mesoporous Materials, 2015, 217, 159-166.	2.2	18
86	Doping of carbon nanotubes with nitrogen improves protein coverage whilst retaining correct conformation. Nanotechnology, 2008, 19, 384001.	1.3	16
87	N-SWCNTs production by aerosol-assisted CVD method. Chemical Physics Letters, 2012, 538, 108-111.	1.2	16
88	Self-assembly of Si nanostructures. Chemical Physics Letters, 2000, 322, 312-320.	1.2	15
89	In situ engineering of NanoBud geometries. Chemical Communications, 2013, 49, 10956.	2.2	15
90	Rapid, Heterogeneous Biocatalytic Hydrogenation and Deuteration in a Continuous Flow Reactor. ChemCatChem, 2020, 12, 3913-3918.	1.8	15

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91	Experimental observation and quantum modeling of electron irradiation on single-wall carbon nanotubes. IEEE Nanotechnology Magazine, 2003, 2, 349-354.	1.1	14
92	Effect of Acid Treatment on the Structure and Electrical Properties of Nitrogen-Doped Multiwalled Carbon Nanotubes. Journal of Physical Chemistry C, 2008, 112, 1908-1912.	1.5	13
93	Synthesis of carbon nanocoil forests on BaSrTiO3 substrates with the aid of a Sn catalyst. Carbon, 2013, 60, 5-15.	5.4	12
94	Chemo-bio catalysis using carbon supports: application in H₂-driven cofactor recycling. Chemical Science, 2021, 12, 8105-8114.	3.7	12
95	Solid-phase production of carbon nanotubes. Applied Physics A: Materials Science and Processing, 1999, 68, 493-495.	1.1	11
96	Preparation and characterisation of novel â€œsea-cucumberâ€•like structures containing carbon and boron. Carbon, 2004, 42, 2223-2231.	5.4	11
97	Cathodoluminescence of fullerene C60. Journal of Physics Condensed Matter, 2000, 12, 7869-7878.	0.7	10
98	The Behaviour of 1D CuI Crystal@SWNT Nanocomposite under Electron Irradiation. AIP Conference Proceedings, 2008, , .	0.3	10
99	Investigating the Structural, Electronic, and Chemical Evolution of B-Doped Multi-walled Carbon Nanotubes as a Result of Joule Heating. Journal of Physical Chemistry C, 2011, 115, 25019-25022.	1.5	10
100	Currentâ€Induced Restructuring and Chemical Modification of Nâ€Doped Multiâ€walled Carbon Nanotubes. Advanced Functional Materials, 2011, 21, 3933-3937.	7.8	10
101	MWCNT-coated alumina micro-platelets for nacre-like biomimetic composites. Carbon, 2019, 145, 586-595.	5.4	10
102	Polarized light microscopy of chemical-vapor-deposition-grown graphene on copper. Applied Physics Letters, 2012, 100, 213103.	1.5	9
103	Stiffness, strength and interwall sliding in aligned and continuous multi-walled carbon nanotube/glass composite microcantilevers. Acta Materialia, 2015, 100, 118-125.	3.8	9
104	Doping and connecting carbon nanotubes. Molecular Crystals and Liquid Crystals, 2002, 387, 51-62.	0.4	8
105	Scanning Tunneling Microscopy and Spectroscopy of Nitrogen Doped Multi-Walled Carbon Nanotubes Produced by the Pyrolysis of Ferrocene and Benzylamine. Journal of Nanoscience and Nanotechnology, 2009, 9, 6139-6143.	0.9	7
106	Stable Dispersions of Nitrogen Containing Multi-Walled Carbon Nanotubes. Materials Express, 2011, 1, 201-209.	0.2	7
107	Customised transition metal oxide nanoparticles for the controlled production of carbon nanostructures. RSC Advances, 2012, 2, 3748.	1.7	7
108	Classification of carbon nanostructure families occurring in a chemically activated arc discharge reaction. RSC Advances, 2016, 6, 24912-24920.	1.7	7

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109	Synthesis, characterisation and applications of coreâ€“shell carbonâ€“hexagonal boron nitride nanotubes. Nanoscale Advances, 2020, 2, 4996-5014.	2.2	7
110	SiO2-coated carbon nanotubes: theory and experiment. International Journal of Materials Research, 2002, 93, 455-458.	0.8	6
111	Characterisation of conductive CVD carbonâ€“glass fibres. Carbon, 2004, 42, 2349-2351.	5.4	6
112	Flame spray pyrolysis generated transition metal oxide nanoparticles as catalysts for the growth of carbon nanotubes. RSC Advances, 2013, 3, 20040.	1.7	6
113	Morphology â€“ composition correlations in carbon nanotubes synthesised with nitrogen and phosphorus containing precursors. Physical Chemistry Chemical Physics, 2015, 17, 2137-2142.	1.3	6
114	Metal and alloy nanowires: Iron and invar inside carbon nanotubes. AIP Conference Proceedings, 2001, , .	0.3	5
115	A carbon-nanotube based nano-furnace for in-situ restructuring of a magnetoelectric oxide. Carbon, 2017, 114, 291-300.	5.4	5
116	Biocatalytic hydrogenations on carbon supports. Methods in Enzymology, 2020, 630, 303-325.	0.4	5
117	Single source precursor route to iron sulfide nanomaterials for energy storage. Chemical Physics Letters, 2020, 739, 136993.	1.2	5
118	Versatile in Situ Gas Analysis Apparatus for Nanomaterials Reactors. Analytical Chemistry, 2014, 86, 8850-8856.	3.2	4
119	Ultra-stiff large-area carpets of carbon nanotubes. Nanoscale, 2016, 8, 11993-12001.	2.8	4
120	Metal-free chemical vapor deposition growth of graphitic tubular structures on engineered perovskite oxide substrates. Carbon, 2016, 99, 591-598.	5.4	4
121	Pure and aligned carbon nanotubes produced by the pyrolysis of benzene-based aerosols. AIP Conference Proceedings, 2001, , .	0.3	3
122	Lipid-Modulated Assembly of Magnetized Iron-Filled Carbon Nanotubes in Millimeter-Scale Structures. Japanese Journal of Applied Physics, 2007, 46, 2799-2805.	0.8	3
123	Electrophoretic Fabrication of Robust Carbon Nanotube â€œBuckyfilmsâ€•for Flexible Electronics. ACS Applied Nano Materials, 2019, 2, 5190-5199.	2.4	3
124	The application of the surface energy based solubility parameter theory for the rational design of polymer-functionalized MWCNTs. Physical Chemistry Chemical Physics, 2019, 21, 5331-5334.	1.3	3
125	Encyclopedia of Carbon Nanoforms. , 2012, , 1-65.		2
126	Direct visualization of electrical transport-induced alloy formation and composition changes in filled multi-wall carbon nanotubes by in situ scanning transmission electron microscopy. Journal of Alloys and Compounds, 2017, 721, 501-505.	2.8	2

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127	Janus Structured Multiwalled Carbon Nanotube Forests for Simple Asymmetric Surface Functionalization and Patterning at the Nanoscale. ACS Applied Nano Materials, 2020, 3, 7554-7562.	2.4	2
128	Carbon nanotube columns for flow systems: influence of synthesis parameters. Nanoscale Advances, 2020, 2, 5874-5882.	2.2	2
129	A Simple Route to Silicon-Based Nanostructures. Advanced Materials, 1999, 11, 844-847.	11.1	1
130	Experimental observation and quantum modeling of electron irradiation on single-wall carbon nanotubes. , 2003, , .		0
131	STM investigation of carbon nanotubes completely covered with functional groups. , 2003, , .		0
132	Exploring the carbon nanocosmos: doped nanotubes, networks, and other novel forms of carbon. , 2003, , .		0
133	A facile route to self-assembled Hg//MoSI nanowire networks. New Journal of Chemistry, 2010, 34, 2241.	1.4	0
134	Rational synthesis of polymer coated inorganic nanoparticles-MWCNT hybrids via solvophobic effects. Carbon Trends, 2022, 6, 100141.	1.4	0