Marc Monthioux

List of Publications by Year in Descending Order

75 papers	5,850 citations	30 h-index	76 g-index
81 ext. papers	6,465 ext. citations	8.9 avg, IF	5.73 L-index

#	Paper	IF	Citations
75	Asymmetrical Cross-Sectional Buckling in Arc-Prepared Multiwall Carbon Nanotubes Revealed by Iodine Filling. *Journal of Carbon Research*, **2022**, 8, 10	3.3	
74	The X-ray, Raman and TEM Signatures of Cellulose-Derived Carbons Explained. *Journal of Carbon Research*, **2022**, 8, 4	3.3	0
73	Burn Them Right! Determining the Optimal Temperature for the Purification of Carbon Materials by Combustion. *Journal of Carbon Research*, **2022**, 8, 31	3.3	0
72	Unveiling the existence and role of a liquid phase in a high temperature (1400°C) pyrolytic carbon deposition process. *Carbon Trends*, **2021**, 5, 100117	0	1
71	Combining low and high electron energy diffractions as a powerful tool for studying 2D materials. *Applied Physics A: Materials Science and Processing*, **2021**, 127, 1	2.6	0
70	Intense Raman D Band without Disorder in Flattened Carbon Nanotubes. *ACS Nano*, **2021**, 15, 596-603	16.7	12
69	Progress on Diamane and Diamanoid Thin Film Pressureless Synthesis. *Journal of Carbon Research*, **2021**, 7, 9	3.3	5
68	Superior carbon nanotube stability by molecular filling:a single-chirality study at extreme pressures. *Carbon*, **2021**, 183, 884-892	10.4	2
67	Comments on: Structure evolution mechanism of highly ordered graphite during carbonization of cellulose nanocrystals by Eom et al. [Carbon 150 (2019) 142–152]. *Carbon*, **2020**, 160, 405-406	10.4	3
66	Raman evidence for the successful synthesis of diamane. *Carbon*, **2020**, 169, 129-133	10.4	25
65	Towards a better understanding of the structure of diamanoïds and diamanoïd/graphene hybrids. *Carbon*, **2020**, 156, 234-241	10.4	23
64	New insight on carbonisation and graphitisation mechanisms as obtained from a bottom-up analytical approach of X-ray diffraction patterns. *Carbon*, **2019**, 147, 602-611	10.4	13
63	Why some carbons may or may not graphitize? The point of view of thermodynamics. *Carbon*, **2019**, 149, 419-435	10.4	15
62	Analyzing the Raman Spectra of Graphenic Carbon Materials from Kerogens to Nanotubes: What Type of Information Can Be Extracted from Defect Bands?. *Journal of Carbon Research*, **2019**, 5, 69	3.3	39
61	Low temperature, pressureless sp2 to sp3 transformation of ultrathin, crystalline carbon films. *Carbon*, **2019**, 145, 10-22	10.4	36
60	Large-scale oxidation of multi-walled carbon nanotubes in fluidized bed from ozone-containing gas mixtures. *Canadian Journal of Chemical Engineering*, **2018**, 96, 688-695	2.3	1
59	Determining the structure of graphene-based flakes from their morphotype. *Carbon*, **2017**, 115, 128-133	10.4	5

58	The Unexpected Complexity of Filling Double-Wall Carbon Nanotubes With Nickel (and Iodine) 1-D Nanocrystals. *IEEE Nanotechnology Magazine*, **2017**, 16, 759-766	2.6	7
57	200 keV cold field emission source using carbon cone nanotip: Application to scanning transmission electron microscopy. *Ultramicroscopy*, **2017**, 182, 303-307	3.1	11
56	Charged iodide in chains behind the highly efficient iodine doping in carbon nanotubes. *Physical Review Materials*, **2017**, 1,	3.2	19
55	Spatial confinement model applied to phonons in disordered graphene-based carbons. *Carbon*, **2016**, 105, 275-281	10.4	16
54	Carbon science in 2016: Status, challenges and perspectives. *Carbon*, **2016**, 98, 708-732	10.4	200
53	A new insight on the mechanisms of filling closed carbon nanotubes with molten metal iodides. *Carbon*, **2016**, 110, 48-50	10.4	15
52	A Raman study to obtain crystallite size of carbon materials: A better alternative to the Tuinstra□Koenig law. *Carbon*, **2014**, 80, 629-639	10.4	119
51	Determining the work function of a carbon-cone cold-field emitter by in situ electron holography. *Micron*, **2014**, 63, 2-8	2.3	19
50	Behavior of Raman D band for pyrocarbons with crystallite size in the 2□ nm range. *Applied Physics A: Materials Science and Processing*, **2014**, 114, 759-763	2.6	29
49	Inhibition of microbial growth by carbon nanotube networks. *Nanoscale*, **2013**, 5, 9023-9	7.7	44
48	Electronic coupling in fullerene-doped semiconducting carbon nanotubes probed by Raman spectroscopy and electronic transport. *Carbon*, **2013**, 57, 498-506	10.4	6
47	Resonant laser-induced formation of double-walled carbon nanotubes from peapods under ambient conditions. *Small*, **2012**, 8, 2045-52	11	7
46	New carbon cone nanotip for use in a highly coherent cold field emission electron microscope. *Carbon*, **2012**, 50, 2037-2044	10.4	52
45	Introduction to the Meta-Nanotube Book **2011**, 1-5		1
44	Electrical detection of individual magnetic nanoparticles encapsulated in carbon nanotubes. *ACS Nano*, **2011**, 5, 2348-55	16.7	33
43	Filled Carbon Nanotubes: (X@CNTs) **2011**, 225-271		2
42	Contact angle hysteresis at the nanometer scale. *Physical Review Letters*, **2011**, 106, 136102	7.4	76
41	Fullerenes inside Carbon Nanotubes: The Peapods **2011**, 273-321		4

40	Formation mechanism of peapod-derived double-walled carbon nanotubes. *Physical Review B*, **2010**, 82,	3.3	28
39	Transport via coupled states in a C60 peapod quantum dot. *Physical Review B*, **2010**, 81,	3.3	22
38	Nanoelectromechanical coupling in fullerene peapods probed by resonant electrical transport experiments. *Nature Communications*, **2010**, 1, 37	17.4	27
37	Introduction to Carbon Nanotubes **2010**, 47-118		13
36	Response to Comment on the Effect of Stress Transfer Within Double-Walled Carbon Nanotubes upon Their Ability to Reinforce Composites *Advanced Materials*, **2010**, 22, 1180-1181	24	3
35	Chirality dependent surface adhesion of single-walled carbon nanotubes on graphene surfaces. *Carbon*, **2010**, 48, 3050-3056	10.4	16
34	The Effect of Stress Transfer Within Double-Walled Carbon Nanotubes Upon Their Ability to Reinforce Composites. *Advanced Materials*, **2009**, 21, 3591-3595	24	64
33	Evidence for electro-chemical interactions between multi-walled carbon nanotubes and human macrophages. *Carbon*, **2009**, 47, 2789-2804	10.4	21
32	Solutions of negatively charged graphene sheets and ribbons. *Journal of the American Chemical Society*, **2008**, 130, 15802-4	16.4	410
31	High performance supercapacitor from chromium oxide-nanotubes based electrodes. *Chemical Physics Letters*, **2007**, 434, 73-77	2.5	38
30	A significant improvement of both yield and purity during SWCNT synthesis via the electric arc process. *Carbon*, **2007**, 45, 1651-1661	10.4	26
29	Meta- and hybrid-CNTs: A clue for the future development of carbon nanotubes. *Materials Science and Engineering C*, **2007**, 27, 1096-1101	8.3	23
28	Ultraviolet photon absorption in single- and double-wall carbon nanotubes and peapods: Heating-induced phonon line broadening, wall coupling, and transformation. *Physical Review B*, **2007**, 76,	3.3	8
27	Orientation of C70 molecules in peapods as a function of the nanotube diameter. *Physical Review B*, **2007**, 75,	3.3	35
26	Introduction to Carbon Nanotubes **2007**, 43-112		22
25	Sub-Kelvin transport spectroscopy of fullerene peapod quantum dots. *Applied Physics Letters*, **2006**, 89, 233118	3.4	28
24	Evidence for the benefit of adding a carbon interphase in an all-carbon composite. *Carbon*, **2006**, 44, 699-709	10.4	18
23	Toxicology of carbon nanomaterials: Status, trends, and perspectives on the special issue. *Carbon*, **2006**, 44, 1028-1033	10.4	266

22	Chemical vapour deposition of pyrolytic carbon on carbon nanotubes. *Carbon*, **2006**, 44, 3183-3194	10.4	44
21	Chemical vapor deposition of pyrolytic carbon on carbon nanotubes. Part 2. Texture and structure. *Carbon*, **2005**, 43, 1265-1278	10.4	52
20	Introduction to Carbon Nanotubes **2004**, 39-98		6
19	Introduction to Carbon Nanotubes **2004**, 39-98		1
18	Chemical vapor deposition of pyrolytic carbon on carbon nanotubes: Part 1. Synthesis and morphology. *Carbon*, **2003**, 41, 2897-2912	10.4	38
17	Filling single-wall carbon nanotubes. *Carbon*, **2002**, 40, 1809-1823	10.4	402
16	Room temperature filling of single-wall carbon nanotubes with chromium oxide in open air. *Chemical Physics Letters*, **2001**, 339, 311-318	2.5	68
15	Abundance of encapsulated C60 in single-wall carbon nanotubes. *Chemical Physics Letters*, **1999**, 310, 21-24	2.5	147
14	Carbon nanotube encapsulated fullerenes: a unique class of hybrid materials. *Chemical Physics Letters*, **1999**, 315, 31-36	2.5	223
13	Encapsulated C60 in carbon nanotubes. *Nature*, **1998**, 396, 323-324	50.4	1269
12	Carbon beads with protruding cones. *Nature*, **1997**, 385, 211-212	50.4	34
11	Carbon-fibre-reinforced (YMAS) glass-ceramic matrix composites. I. Preparation, structure and fracture strength. *Journal of the European Ceramic Society*, **1997**, 17, 1485-1500	6	13
10	Mechanical properties of C/SiC composites as explained from their interfacial features. *Journal of the European Ceramic Society*, **1995**, 15, 209-224	6	35
9	The graphitizability of fullerenes and related textures. *Carbon*, **1994**, 32, 335-343	10.4	18
8	Spectroscopic analyses of aromatic hydrocarbons extracted from naturally and artificially matured coals. *Energy & Fuels*, **1992**, 6, 166-172	4.1	43
7	Pyrolysis of organic matter in cold-seal pressure autoclaves. Experimental approach and applications. *Journal of Analytical and Applied Pyrolysis*, **1989**, 16, 103-115	6	54
6	Natural and artificial maturations of a coal series: infrared spectrometry study. *Energy & Fuels*, **1988**, 2, 794-801	4.1	29
5	Oxidation-reduction processes in the genesis of the uranium-vanadium tabular deposits of the Cottonwood Wash mining area (Utah, U.S.A.) : evidence from petrological study and organic matter analysis. *Bulletin De Mineralogie*, **1987**, 110, 145-156		9

4	Comparison between extracts from natural and artificial maturation series of Mahakam delta coals. *Organic Geochemistry*, **1986**, 10, 299-311	3.1	80
3	Comparison between natural and artificial maturation series of humic coals from the Mahakam delta, Indonesia. *Organic Geochemistry*, **1985**, 8, 275-292	3.1	204
2	Importance of the oxidation/maturation pair in the evolution of humic coals. *Organic Geochemistry*, **1984**, 7, 249-260	3.1	43
1	Introduction to Carbon Nanotubes7-39		2