Catherine Journet

List of Publications by Year
in descending order

96 papers	9,451 citations	101384 36 h-index	51492 86 g-index
99 all docs	99 docs citations	99 times ranked	8545 citing authors

#	Article	IF	Citations
1	Large-scale production of single-walled carbon nanotubes by the electric-arc technique. Nature, 1997, 388, 756-758.	13.7	2,556
2	Macroscopic Fibers and Ribbons of Oriented Carbon Nanotubes. Science, 2000, 290, 1331-1334.	6.0	1,703
3	Supercurrents Through Single-Walled Carbon Nanotubes. Science, 1999, 284, 1508-1511.	6.0	407
4	Slippage of Water Past Superhydrophobic Carbon Nanotube Forests in Microchannels. Physical Review Letters, 2006, 97, 156104.	2.9	396
5	Hot Nanotubes: Stable Heating of Individual Multiwall Carbon Nanotubes to 2000 K Induced by the Field-Emission Current. Physical Review Letters, 2002, 88, 105502.	2.9	351
6	Root-Growth Mechanism for Single-Wall Carbon Nanotubes. Physical Review Letters, 2001, 87, 275504.	2.9	350
7	Production of carbon nanotubes. Applied Physics A: Materials Science and Processing, 1998, 67, 1-9.	1.1	307
8	Characterization of singlewalled carbon nanotubes-PMMA composites. Synthetic Metals, 2000, 108, 139-149.	2.1	184
9	Tuning and monitoring the electronic structure of carbon nanotubes. Chemical Physics Letters, 1999, 305, 370-374.	1.2	159
10	Contact angle measurements on superhydrophobic carbon nanotube forests: Effect of fluid pressure. Europhysics Letters, 2005, 71, 104-109.	0.7	156
11	Tuning of Nanotube Mechanical Resonances by Electric Field Pulling. Physical Review Letters, 2002, 89, 276103.	2.9	140
12	Fabrication of highly sensitive gas sensor based on Au functionalized WO3 composite nanofibers by electrospinning. Sensors and Actuators B: Chemical, 2015, 220, 1112-1119.	4.0	138
13	Acoustoelectric Effects in Carbon Nanotubes. Physical Review Letters, 2000, 85, 2829-2832.	2.9	128
14	Modelization of resistive heating of carbon nanotubes during field emission. Physical Review B, 2002, 66, .	1.1	127
15	Single-wall carbon nanotubes for optical limiting. Chemical Physics Letters, 1999, 307, 317-319.	1.2	118
16	Diameter distribution of single wall carbon nanotubes in nanobundles. European Physical Journal B, 2000, 18, 201-205.	0.6	109
17	Coalescence of single-walled carbon nanotubes and formation of multi-walled carbon nanotubes under high-temperature treatments. Carbon, 2002, 40, 1765-1773.	5.4	102
18	Determination of the binding energy of methane on single-walled carbon nanotube bundles. Physical Review B, 2000, 61, 13150-13154.	1.1	98

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19	Infrared active phonons in single-walled carbon nanotubes. Chemical Physics Letters, 1998, 294, 237-240.	1.2	97
20	Purification of catalytically produced multi-wall nanotubes. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 3753-3758.	1.7	96
21	Purification procedure of carbon nanotubes. Synthetic Metals, 1999, 103, 2492-2493.	2.1	94
22	Single-electron transistor made of multiwalled carbon nanotube using scanning probe manipulation. Applied Physics Letters, 1999, 75, 728-730.	1.5	92
23	Evolution and evaluation of the polymer/nanotube composite. Synthetic Metals, 1999, 103, 2559-2562.	2.1	92
24	Optical limiting properties of singlewall carbon nanotubes. Optics Communications, 2000, 174, 271-275.	1.0	92
25	Raman studies on single walled carbon nanotubes produced by the electric arc technique. Carbon, 1998, 36, 705-708.	5.4	83
26	Diameter control of single-walled carbon nanotubes using argonâ€“helium mixture gases. Journal of Chemical Physics, 2001, 115, 6752-6759.	1.2	83
27	Inclusion of carbon nanotubes in a TiO2 solâ€“gel matrix. Journal of Non-Crystalline Solids, 2002, 311, 130-137.	1.5	78
28	Study of the symmetry of single-wall nanotubes by electron diffraction. European Physical Journal B, 2000, 13, 661-669.	0.6	73
29	Carbon nanotube synthesis: from large-scale production to atom-by-atom growth. Nanotechnology, 2012, 23, 142001.	1.3	73
30	Raman characterization of singlewalled carbon nanotubes and PMMA-nanotubes composites. Synthetic Metals, 1999, 103, 2510-2512.	2.1	71
31	Structural properties of some conducting polymers and carbon nanotubes investigated by SERS spectroscopy. Synthetic Metals, 1999, 100, 13-27.	2.1	70
32	Atomic layer deposition of stable 2D materials. 2D Materials, 2019, 6, 012001.	2.0	65
33	Growing a Carbon Nanotube Atom by Atom: â€œAnd Yet It Does Turnâ€• Nano Letters, 2009, 9, 2961-2966.	4.5	59
34	Intermolecular Interaction in Carbon Nanotube Ropes. Physica Status Solidi (B): Basic Research, 1999, 215, 435-441.	0.7	54
35	Synthesis of hexagonal boron nitride graphene-like few layers. Nanoscale, 2014, 6, 7838-7841.	2.8	38
36	Carbon single wall nanotubes elaboration and properties. Carbon, 1998, 36, 675-680.	5.4	37

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37	Synthesis Methods and Growth Mechanisms. Lecture Notes in Physics, 2006, , 49-130.	0.3	34
38	Raman characterization of single wall carbon nanotubes prepared by the solar energy route. Carbon, 1998, 36, 1815-1820.	5.4	32
39	Ultrashort Single-Wall Carbon Nanotubes Reveal Field-Emission Coulomb Blockade and Highest Electron-Source Brightness. Physical Review Letters, 2014, 112, 126805.	2.9	31
40	What is the chirality of singlewall nanotubes produced by arcdischarge? An electron diffraction study. Synthetic Metals, 1999, 103, 2533-2536.	2.1	29
41	Carbon SWNTs as wires and structural templates between nanoelectrodes. Synthetic Metals, 1999, 103, 2540-2542.	2.1	26
42	Studies by sers spectroscopy of the structural properties of conducting polymers and carbon nanotubes. Synthetic Metals, 1999, 101, 184-187.	2.1	21
43	Dielectric permittivity, conductivity and breakdown field of hexagonal boron nitride. Materials Research Express, 2022, 9, 065901.	0.8	21
44	Evolution of the Field-Emission Properties of Individual Multiwalled Carbon Nanotubes Submitted to Temperature and Field Treatments. Chemical Vapor Deposition, 2006, 12, 331-344.	1.4	20
45	How to Increase the h-BN Crystallinity of Microfilms and Self-Standing Nanosheets: A Review of the Different Strategies Using the PDCs Route. Crystals, 2016, 6, 55.	1.0	20
46	Pure & crystallized 2D Boron Nitride sheets synthesized via a novel process coupling both PDCs and SPS methods. Scientific Reports, 2016, 6, 20388.	1.6	20
47	Hexagonal boron nitride: a review on selfstanding crystals synthesis towards 2D nanosheets. JPhys Materials, 2021, 4, 044018.	1.8	20
48	Synthesis of sheathed carbon nanotube tips by the solâ€“gel technique. Applied Surface Science, 2004, 221, 4-9.	3.1	19
49	A Novel Twoâ€Step Ammoniaâ€Free Atomic Layer Deposition Approach for Boron Nitride. ChemNanoMat, 2017, 3, 656-663.	1.5	19
50	Low-Temperature Synthesis of Highly Crystallized Hexagonal Boron Nitride Sheets with Li3N as Additive Agent. European Journal of Inorganic Chemistry, 2014, 2014, 5507-5513.	1.0	18
51	Millimeter-Scale Hexagonal Boron Nitride Single Crystals for Nanosheet Generation. ACS Applied Nano Materials, 2020, 3, 1508-1515.	2.4	17
52	Influence of tunneling voltage on the imaging of carbon nanotube rafts by scanning tunneling microscopy. Applied Physics Letters, 1998, 73, 3680-3682.	1.5	15
53	Single wall carbon nanotubes: Two ways of production. Synthetic Metals, 1999, 103, 2488-2489.	2.1	14
54	Infrared reflectance of single-walled carbon nanotubes. Synthetic Metals, 1999, 103, 2506-2507.	2.1	12

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55	Ring patterns in high-current field emission from carbon nanotubes. Physical Review B, 2009, 80, .	1.1	12
56	Synthesis of hexagonal boron nitride 2D layers using polymer derived ceramics route and derivatives. JPhys Materials, 2020, 3, 034002.	1.8	12
57	Fabrication of Au functionalized TiO2 nanofibers for photocatalytic application. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	11
58	Transport properties of single-walled carbon nanotubes. Synthetic Metals, 1999, 103, 2513-2514.	2.1	10
59	AlN hollow-nanofilaments by electrospinning. Nanotechnology, 2015, 26, 085603.	1.3	10
60	The influence of precursor addition order on the porosity of solâ€“gel bioactive glasses. Dental Materials, 2018, 34, 1323-1330.	1.6	10
61	Advanced synthesis of highly crystallized hexagonal boron nitride by coupling polymer-derived ceramics and spark plasma sintering processesâ€”influence of the crystallization promoter and sintering temperature. Nanotechnology, 2019, 30, 035604.	1.3	10
62	Carbon sublimation using a solar furnace. Synthetic Metals, 1997, 86, 2295-2296.	2.1	9
63	Improving Formation Conditions and Properties of hBN Nanosheets Through BaF2-assisted Polymer Derived Ceramics (PDCs) Technique. Nanomaterials, 2020, 10, 443.	1.9	9
64	Dispersions and fibers of carbon nanotubes. Materials Research Society Symposia Proceedings, 2000, 633, 1211.	0.1	8
65	Enhanced water repellency of surfaces coated with multiscale carbon structures. Applied Surface Science, 2018, 428, 364-369.	3.1	8
66	Coâ€doping Graphene with B and N Heteroatoms for Application in Energy Conversion and Storage Devices. ChemNanoMat, 2022, 8, .	1.5	8
67	Radiative lifetime of free excitons in hexagonal boron nitride. Physical Review B, 2021, 104, .	1.1	7
68	From the synthesis of hBN crystals to their use as nanosheets in van der Waals heterostructures. 2D Materials, 2022, 9, 035008.	2.0	7
69	Rotational excitations of methane molecules in carbon nanotubes. Physica B: Condensed Matter, 2001, 301, 292-294.	1.3	6
70	Room temperature ammonia vapour detection on hBN flakes. JPhys Materials, 2021, 4, 044007.	1.8	6
71	The Use of Solar Energy for the Production of Fullerenes and Porous Silicon. Journal De Physique III, 1997, 7, 463-472.	0.3	5
72	Simultaneous microwave-assisted reduction and B/N co-doping of graphene oxide for selective recognition of VOCs. Journal of Materials Chemistry C, 2022, 10, 3307-3317.	2.7	5

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73	Supramolecular assemblies of phenolic metalloporphyrins: Structures and electrochemical studies. Journal of Porphyrins and Phthalocyanines, 2019, 23, 103-116.	0.4	4
74	Measuring the physical properties of nanostructures and nanowires by field emission. Europhysics News, 2006, 37, 26-28.	0.1	3
75	Field emission measure of the time response of individual semiconducting nanowires to laser excitation. Applied Physics Letters, 2011, 99, .	1.5	3
76	High Pressure in Boron Nitride Nanotubes for Kirigami Nanoribbon Elaboration. Journal of Physical Chemistry C, 2021, 125, 11440-11453.	1.5	3
77	Hydrogen Storage in Pure and Boron-Substituted Nanoporous Carbonsâ€"Numerical and Experimental Perspective. Nanomaterials, 2021, 11, 2173.	1.9	3
78	Raman Investigation of Singlewalled Carbon Nanotubes. Molecular Crystals and Liquid Crystals, 1998, 322, 71-78.	0.3	2
79	Proximity-induced superconductivity in carbon nanotubes. Comptes Rendus De L'Academie De Sciences - Serie IIb: Mecanique, Physique, Chimie, Astronomie, 1999, 327, 933-943.	0.1	2
80	Direct growth of carbon nanotubes atom by atom during field emission. Materials Research Society Symposia Proceedings, 2009, 1204, 1.	0.1	2
81	Synthesis of Carbon Nanotubes Using Field Emission. Nanoscience and Nanotechnology Letters, 2011, 3, 11-17.	0.4	2
82	Production of carbon single wall nanotubes versus experimental parameters. , 1998, , .		1
83	Mid-infrared investigations and spatially resolved Raman spectra of singlewalled carbon nanotubes. , 1998, , .		1
84	Purification des nanotubes de carbone monofeuillets. Comptes Rendus De L'Academie De Sciences - Serie IIb: Mecanique, Physique, Chimie, Astronomie, 1999, 327, 925-931.	0.1	1
85	Structure and vibrational properties of single wall carbon nanotubes. Synthetic Metals, 1999, 103, 2537-2539.	2.1	1
86	A simple method to make carbon nanotubes fibers. AIP Conference Proceedings, 2001, , .	0.3	1
87	Raman studies on single-walled carbon nanotubes. , 1997, 3142, 18.		0
88	Raman studies of singlewalled nanotubes. , 1998, , .		0
89	Electrical resistivity of single-wall carbon nanotubes obtained by the arc-discharge technique. , 1998, , .		0
90	Molecular dynamics of single wall nanotubes. , 1998, , .		0

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91	Superconductivity and normal state resistance of carbon nanotubes. AIP Conference Proceedings, 2000, , .	0.3	0
92	Superconductivity in molecular wires. Physics-Uspekhi, 2001, 44, 69-71.	0.8	0
93	Direct Measurement of Binding Energy Via Adsorption of Methane on SWNT. , 2002, , 215-221.		0
94	Carbon nanotubes grown in a field emission electron microscope. , 2012, , .		0
95	Chemical Sensing Properties of BaF2-Modified hBN Flakes towards Detection of Volatile Organic Compounds. Chemosensors, 2021, 9, 263.	1.8	0
96	Hydrogen Storage in Pure and Boron-Substituted Nanoporous Carbons-Numerical and Experimental Perspective. Nanomaterials, 2021, 11, .	1.9	0