Christophe Laurent

List of Publications by Year
in descending order

103 papers	8,594 citations	87888 38 h-index	42399 92 g-index
104 all docs	104 docs citations	104 times ranked	9046 citing authors

#	Article	IF	Citations
1	Specific surface area of carbon nanotubes and bundles of carbon nanotubes. Carbon, 2001, 39, 507-514.	10.3	1,782
2	DC and AC Conductivity of Carbon Nanotubesâˆ’Polyepoxy Composites. Macromolecules, 2003, 36, 5187-5194.	4.8	557
3	Carbon nanotubeâ€“metalâ€“oxide nanocomposites: microstructure, electrical conductivity and mechanical properties. Acta Materialia, 2000, 48, 3803-3812.	7.9	438
4	Large-scale synthesis of single-wall carbon nanotubes by catalytic chemical vapor deposition (CCVD) method. Chemical Physics Letters, 2000, 317, 83-89.	2.6	427
5	Carbon nanotubes in novel ceramic matrix nanocomposites. Ceramics International, 2000, 26, 677-683.	4.8	370
6	Gram-scale CCVD synthesis of double-walled carbon nanotubes. Chemical Communications, 2003, , 1442.	4.1	350
7	The weight and density of carbon nanotubes versus the number of walls and diameter. Carbon, 2010, 48, 2994-2996.	10.3	242
8	Synthesis of single-walled carbon nanotubeâ€“Coâ€“MgO composite powders and extraction of the nanotubes. Journal of Materials Chemistry, 2000, 10, 249-252.	6.7	237
9	Synthesis of single-walled carbon nanotubes using binary (Fe, Co, Ni) alloy nanoparticles prepared in situ by the reduction of oxide solid solutions. Chemical Physics Letters, 1999, 300, 236-242.	2.6	236
10	Percolation of single-walled carbon nanotubes in ceramic matrix nanocomposites. Acta Materialia, 2004, 52, 1061-1067.	7.9	198
11	High specific surface area carbon nanotubes from catalytic chemical vapor deposition process. Chemical Physics Letters, 2000, 323, 566-571.	2.6	186
12	Carbon nanotubesâ€“Feâ€“Alumina nanocomposites. Part II: microstructure and mechanical properties of the hot-Pressed composites. Journal of the European Ceramic Society, 1998, 18, 2005-2013.	5.7	184
13	Effect of Palmitic Acid on the Electrical Conductivity of Carbon Nanotubesâˆ’Epoxy Resin Composites. Macromolecules, 2003, 36, 9678-9680.	4.8	176
14	Spark plasma sintering of alumina: Study of parameters, formal sintering analysis and hypotheses on the mechanism(s) involved in densification and grain growth. Acta Materialia, 2011, 59, 1400-1408.	7.9	171
15	Carbon nanotubes grown <i>in situ</i> by a novel catalytic method. Journal of Materials Research, 1997, 12, 613-615.	2.6	168
16	Aligned carbon nanotubes in ceramic-matrix nanocomposites prepared by high-temperature extrusion. Chemical Physics Letters, 2002, 352, 20-25.	2.6	159
17	Catalytic CVD synthesis of double and triple-walled carbon nanotubes by the control of the catalyst preparation. Carbon, 2005, 43, 375-383.	10.3	134
18	A Study of the Formation of Single- and Double-Walled Carbon Nanotubes by a CVD Method. Journal of Physical Chemistry B, 2001, 105, 9699-9710.	2.6	117

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19	Metal nanoparticles for the catalytic synthesis of carbon nanotubes. New Journal of Chemistry, 1998, 22, 1229-1237.	2.8	107
20	The preparation of carbon nanotube (CNT)/copper composites and the effect of the number of CNT walls on their hardness, friction and wear properties. Carbon, 2013, 58, 185-197.	10.3	105
21	Carbon nanotubesâ€"Feâ€"alumina nanocomposites. Part I: influence of the Fe content on the synthesis of powders. Journal of the European Ceramic Society, 1998, 18, 1995-2004.	5.7	102
22	Double walled carbon nanotube/polymer composites via in-situ nitroxide mediated polymerisation of amphiphilic block copolymers. Carbon, 2005, 43, 873-876.	10.3	100
23	The preparation of double-walled carbon nanotube/Cu composites by spark plasma sintering, and their hardness and friction properties. Carbon, 2011, 49, 4535-4543.	10.3	99
24	Crystal and magnetic structure of piezoelectric, ferrimagnetic and magnetoelectric aluminium iron oxide FeAlO3 from neutron powder diffraction. Acta Crystallographica Section B: Structural Science, 1996, 52, 217-222.	1.8	75
25	CCVD synthesis of carbon nanotubes from (Mg,Co,Mo)O catalysts: influence of the proportions of cobalt and molybdenum. Journal of Materials Chemistry, 2004, 14, 646.	6.7	75
26	An investigation of carbon nanotubes obtained from the decomposition of methane over reduced Mg_{1â^'<i>x</i>}M_{<i>x</i>}Al₂O₄ spinel catalysts. Journal of Materials Research, 1999, 14, 2567-2576.	2.6	72
27	Toughening and hardening in double-walled carbon nanotube/nanostructured magnesia composites. Carbon, 2010, 48, 1952-1960.	10.3	70
28	Hydrogen Storage in High Surface Area Carbon Nanotubes Produced by Catalytic Chemical Vapor Deposition. Journal of Physical Chemistry B, 2004, 108, 12718-12723.	2.6	69
29	High strength â€" High conductivity double-walled carbon nanotube â€" Copper composite wires. Carbon, 2016, 96, 212-215.	10.3	65
30	Exchange bias effects in Fe nanoparticles embedded in an antiferromagnetic Cr2O3matrix. Nanotechnology, 2004, 15, S211-S214.	2.6	62
31	Carbon nanotubes and silver flakes filled epoxy resin for new hybrid conductive adhesives. Microelectronics Reliability, 2011, 51, 1230-1234.	1.7	60
32	Synthesis of carbon nanotubeâ€"Fe-Al2O3 nanocomposite powders by selective reduction of different Al1.8Fe0.2O3 solid solutions. Journal of Materials Chemistry, 1998, 8, 1263-1272.	6.7	58
33	Microstructure, microhardness and thermal expansion of CNT/Al composites prepared by flake powder metallurgy. Composites Part A: Applied Science and Manufacturing, 2018, 105, 126-137.	7.6	56
34	Preparation-microstructure-property relationships in double-walled carbon nanotubes/alumina composites. Carbon, 2013, 53, 62-72.	10.3	45
35	Carbon Nanotubes by a CVD Method. Part II: Formation of Nanotubes from (Mg, Fe)O Catalysts. Journal of Physical Chemistry B, 2002, 106, 13199-13210.	2.6	42
36	Chemical synthesis of metal nanoparticles dispersed in alumina. Scripta Materialia, 1993, 2, 339-346.	0.5	40

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37	Fast and easy preparation of few-layered-graphene/magnesia powders for strong, hard and electrically conducting composites. Carbon, 2018, 136, 270-279.	10.3	39
38	Elaboration, microstructure and reactivity of Cr3C2 powders of different morphology. Materials Research Bulletin, 1995, 30, 1535-1546.	5.2	38
39	Influence of the composition of a H2-CH4 gas mixture on the catalytic synthesis of carbon nanotubes-Fe/Fe3C-Al2O3 nanocomposite powders. Journal of Materials Chemistry, 1999, 9, 1167-1177.	6.7	36
40	MÃ¶ssbauer spectroscopy study of MgAl2O4-matrix nanocomposite powders containing carbon nanotubes and iron-based nanoparticles. Acta Materialia, 2000, 48, 3015-3023.	7.9	36
41	Carbon nanotubes prepared in situ in a cellular ceramic by the gelcasting-foam method. Journal of the European Ceramic Society, 2003, 23, 1233-1241.	5.7	36
42	Densification during hot-pressing of carbon nanotubeâ€“metalâ€“magnesium aluminate spinel nanocomposites. Journal of the European Ceramic Society, 2007, 27, 2183-2193.	5.7	34
43	Carbon Nanotubes by a CVD Method. Part I:â€‰ Synthesis and Characterization of the (Mg, Fe)O Catalysts. Journal of Physical Chemistry B, 2002, 106, 13186-13198.	2.6	32
44	Feâ€“Cr/Al2O3 metal-ceramic composites: Nature and size of the metal particles formed during hydrogen reduction. Journal of Materials Research, 1994, 9, 229-235.	2.6	31
45	Double-walled carbon nanotube/zirconia composites: Preparation by spark plasma sintering, electrical conductivity and mechanical properties. Ceramics International, 2015, 41, 13731-13738.	4.8	30
46	Fe/Co Alloys for the Catalytic Chemical Vapor Deposition Synthesis of Single- and Double-Walled Carbon Nanotubes (CNTs). 1. The CNTâˆ'Fe/Coâˆ'MgO System. Journal of Physical Chemistry B, 2005, 109, 17813-17824.	2.6	29
47	Synthesis of the metastable Î±-Al1.8Fe0.2O3 solid solution from precursors prepared by combustion. Journal of the European Ceramic Society, 2006, 26, 3099-3111.	5.7	27
48	Dog-bone copper specimens prepared by one-step spark plasma sintering. Journal of Materials Science, 2015, 50, 7364-7373.	3.7	27
49	Pressure-induced radial collapse in few-wall carbon nanotubes: A combined theoretical and experimental study. Carbon, 2017, 125, 429-436.	10.3	27
50	Spectroscopic detection of carbon nanotube interaction with amphiphilic molecules in epoxy resin composites. Journal of Applied Physics, 2005, 97, 034303.	2.5	26
51	Introduction to Carbon Nanotubes. , 2010, , 47-118.		26
52	A metastable chromium carbide powder obtained by carburization of a metastable chromium oxide. Journal of Alloys and Compounds, 1996, 243, 59-66.	5.5	25
53	Synthesis of carbon nanotubesâ€“Feâ€“Al2O3 powders.. Materials Research Bulletin, 2000, 35, 661-673.	5.2	25
54	Introduction to Carbon Nanotubes. , 2007, , 43-112.		25

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55	Fe/Co Alloys for the Catalytic Chemical Vapor Deposition Synthesis of Single- and Double-Walled Carbon Nanotubes (CNTs). 2. The CNTâˆ'Fe/Coâˆ'MgAl2O4 System. Journal of Physical Chemistry B, 2005, 109, 17825-17830.	2.6	24
56	Synthesis and characterization of Fe/Co/Ni alloys-MgO nanocomposite powders. Journal of Materials Chemistry, 1999, 9, 1003-1009.	6.7	23
57	In situ CCVD synthesis of carbon nanotubes within a commercial ceramic foam. Journal of Materials Chemistry, 2005, 15, 4041.	6.7	23
58	Catalytic chemical vapor deposition synthesis of single- and double-walled carbon nanotubes from Î±-(Al1âˆ'Fe)2O3 powders and self-supported foams. Carbon, 2009, 47, 482-492.	10.3	23
59	Synthesis, microstructure and oxidation of Co-MgAl2O4 and Ni-MgAl2O4 nanocomposite powders. Scripta Materialia, 1996, 7, 497-507.	0.5	22
60	Iron-alumina interface in ceramic matrix nanocomposites. Journal of Alloys and Compounds, 1992, 188, 179-181.	5.5	21
61	Elaboration, microstructure and oxidation behavior of metal-alumina and metal-chromia nanocomposite powders. Scripta Materialia, 1995, 6, 317-320.	0.5	20
62	Synthesis, characterization and thermal behaviour of Fe0.65Co0.35-MgAl2O4 and Fe0.65Ni0.35-MgAl2O4 nanocomposite powders. Journal of Materials Chemistry, 1997, 7, 2457-2467.	6.7	20
63	Carbon nanotube/alumina and graphite/alumina composite coatings on stainless steel for tribological applications. Materials Today Communications, 2016, 8, 118-126.	1.9	20
64	Reduction behaviour of Fe3+/Al2O3obtained from the mixed oxalate precursor and the formation of the Fe0â€"Al2O3metalâ€"ceramic composite. Journal of Materials Chemistry, 1993, 3, 513-518.	6.7	19
65	Influence of pulse current during Spark Plasma Sintering evidenced on reactive aluminaâ€"hematite powders. Journal of the European Ceramic Society, 2011, 31, 2247-2254.	5.7	19
66	High strengthâ€"high conductivity nanostructured copper wires prepared by spark plasma sintering and room-temperature severe plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 649, 209-213.	5.6	19
67	Zirconiaâ€"spinel composites. Part II: mechanical properties. Materials Research Bulletin, 2000, 35, 1979-1987.	5.2	18
68	Spark plasma sintering of double-walled carbon nanotubes. Carbon, 2008, 46, 1812-1816.	10.3	18
69	High strength-high conductivity carbon nanotube-copper wires with bimodal grain size distribution by spark plasma sintering and wire-drawing. Scripta Materialia, 2017, 137, 78-82.	5.2	18
70	Probing the electronic properties of individual carbon nanotube in 35 T pulsed magnetic field. Chemical Physics Letters, 2003, 372, 733-738.	2.6	17
71	Surface Composition of Carbon Nanotubes-Fe-Alumina Nanocomposite Powders:â€‰ An Integral Low-Energy Electron MÃ¶ssbauer Spectroscopic Study. Journal of Physical Chemistry C, 2008, 112, 5756-5761.	3.1	17
72	Microstructure and Mechanical Properties of AA7075 Aluminum Alloy Fabricated by Spark Plasma Sintering (SPS). Materials, 2021, 14, 430.	2.9	17

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73	Synthesis of Fe-ZrO2 nanocomposite powders by reduction in H2 of a nanocrystalline (Zr, Fe)O2 solid solution. Journal of Alloys and Compounds, 2009, 471, 204-210.	5.5	15
74	Nanostructured 1% silver-copper composite wires with a high tensile strength and a high electrical conductivity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138048.	5.6	15
75	Light scattering of double wall carbon nanotubes under hydrostatic pressure: pressure effects on the internal and external tubes. Physica Status Solidi (B): Basic Research, 2004, 241, 3360-3366.	1.5	14
76	One-step synthesis of few-layered-graphene/alumina powders for strong and tough composites with high electrical conductivity. Journal of the European Ceramic Society, 2020, 40, 5779-5789.	5.7	14
77	(Mg,Co)O Solidâ€Solution Precursors for the Largeâ€Scale Synthesis of Carbon Nanotubes by Catalytic Chemical Vapor Deposition. Journal of the American Ceramic Society, 2002, 85, 2666-2669.	3.8	13
78	Electrical conductive double-walled carbon nanotubes â€“ Silica glass nanocomposites prepared by the solâ€“gel process and spark plasma sintering. Scripta Materialia, 2009, 61, 988-991.	5.2	13
79	Iron-stabilized nanocrystalline ZrO2 solid solutions: Synthesis by combustion and thermal stability. Materials Research Bulletin, 2009, 44, 1301-1311.	5.2	13
80	In situ high-temperature MÃ¶ssbauer spectroscopic study of carbon nanotubeâ€“Feâ€“Al2O3 nanocomposite powder. Thermochimica Acta, 2009, 494, 86-93.	2.7	13
81	Microcontact printing process for the patterned growth of individual CNTs. Microelectronic Engineering, 2004, 73-74, 564-569.	2.4	12
82	Large-Diameter Single-Wall Carbon Nanotubes Formed Alongside Small-Diameter Double-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2015, 119, 1524-1535.	3.1	11
83	Dispersion of graphite flakes into boehmite sols for the preparation of bi-layer-graphene / alumina coatings on stainless steel for tribological applications. Journal of the European Ceramic Society, 2019, 39, 1304-1315.	5.7	11
84	Toughened carbon nanotubeâ€“ironâ€“mullite composites prepared by spark plasma sintering. Ceramics International, 2013, 39, 5513-5519.	4.8	10
85	A new fast method for ceramic foam impregnation: Application to the CCVD synthesis of carbon nanotubes. Applied Catalysis A: General, 2007, 319, 7-13.	4.3	9
86	Tetragonal-(Zr,Co)O2 solid solution: Combustion synthesis, thermal stability in air and reduction in H2, H2â€“CH4 and H2â€“C2H4 atmospheres. Materials Research Bulletin, 2008, 43, 3088-3099.	5.2	9
87	Two new metalâ€“organic framework structures derived from terephthalate and linear trimetallic zinc building units. Inorganica Chimica Acta, 2015, 426, 15-19.	2.4	9
88	CCVD Synthesis of Single- And Double-Walled Carbon Nanotubes: Influence of the Addition of Molybdenum to Feâˆ’Al₂O₃ Self-Supported Foams. Journal of Physical Chemistry C, 2008, 112, 18825-18831.	3.1	8
89	Presence of Metallic Fe Nanoclusters in Î±-(Al,Fe)2O3 Solid Solutions. Journal of Physical Chemistry C, 2008, 112, 16256-16263.	3.1	8
90	Hardness and friction behavior of bulk CoAl2O4 and Coâ€“Al2O3 composite layers formed during Spark Plasma Sintering of CoAl2O4 powders. Ceramics International, 2012, 38, 5209-5217.	4.8	7

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91	Introduction to Carbon Nanotubes. , 2004, , 39-98.		6
92	Synthesis of Î³-(Al1-xFex)2O3 solid solutions from oxinate precursors and formation of carbon nanotubes from the solid solutions using methane or ethylene as carbon source. Journal of Materials Research, 2008, 23, 3096-3111.	2.6	6
93	Catalytic Chemical Vapor Deposition Synthesis of Double-Walled and Few-Walled Carbon Nanotubes by Using a MoO3-Supported Conditioning Catalyst to Control the Formation of Iron Catalytic Particles within an Î±-Al1.8Fe0.2O3 Self-Supported Foam. Journal of Physical Chemistry C, 2010, 114, 19188-19193.	3.1	5
94	Influence of alloying on the tensile strength and electrical resistivity of silver nanowire: copper composites macroscopic wires. Journal of Materials Science, 2021, 56, 4884-4895.	3.7	5
95	Fe-Substituted Mullite Powders for the In Situ Synthesis of Carbon Nanotubes by Catalytic Chemical Vapor Deposition. Journal of Physical Chemistry C, 2009, 113, 11239-11245.	3.1	4
96	Few-layered-graphene/zirconia composites: Single-step powder synthesis, spark plasma sintering, microstructure and properties. Journal of the European Ceramic Society, 2022, 42, 2349-2361.	5.7	4
97	An Unusual 3D Zincâ€Organic Framework Constructed from Paddleâ€Wheelâ€Based Carboxylate Sheets Bridged by Acetate Ions. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2016, 642, 709-713.	1.2	3
98	High Strength-High Conductivity Silver Nanowire-Copper Composite Wires by Spark Plasma Sintering and Wire-Drawing for Non-Destructive Pulsed Fields. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-4.	1.7	1
99	Introduction to Carbon Nanotubes. , 2004, , 39-98.		1
100	Carbon Nanotubes from Oxide Solid Solution: A Way to Composite Powders, Composite Materials and Isolated Nanotubes. , 2002, , 151-168.		0
101	Integral low-energy electron MÃ¶ssbauer spectroscopic studies of the surfaces of carbon nanotube-nanocomposite powders. Hyperfine Interactions, 2009, 189, 125-130.	0.5	0
102	Integral low-energy electron MÃ¶ssbauer spectroscopic studies of the surfaces of carbon nanotube-nanocomposite powders. , 2009, , 125-130.		0
103	Al matrix composites reinforced by in situ synthesized grapheneâ€“Cu hybrid layers: interface control by spark plasma sintering conditions. Journal of Materials Science, 2022, 57, 6266-6281.	3.7	0