Arnaud Magrez

List of Publications by Citations

122 papers	4,683 citations	36 h-index	65 g-index
133 ext. papers	5,172 ext. citations	5.9 avg, IF	5.15 L-index

#	Paper	IF	Citations
122	Cellular toxicity of carbon-based nanomaterials. *Nano Letters*, **2006**, 6, 1121-5	11.5	905
121	Are carbon nanotube effects on green algae caused by shading and agglomeration?. *Environmental Science & Technology*, **2011**, 45, 6136-44	10.3	222
120	Tunable polaronic conduction in anatase TiO2. *Physical Review Letters*, **2013**, 110, 196403	7.4	185
119	In vitro investigation of the cellular toxicity of boron nitride nanotubes. *ACS Nano*, **2011**, 5, 3800-10	16.7	151
118	Growth of single-crystalline KNbO3 nanostructures. *Journal of Physical Chemistry B*, **2006**, 110, 58-61	3.4	140
117	Microengineered CH3NH3PbI3 Nanowire/Graphene Phototransistor for Low-Intensity Light Detection at Room Temperature. *Small*, **2015**, 11, 4824-8	11	135
116	Direct growth of carbon nanotubes on carbon fibers: Effect of the CVD parameters on the degradation of mechanical properties of carbon fibers. *Diamond and Related Materials*, **2015**, 51, 39-48	3.5	114
115	Catalytic CVD Synthesis of Carbon Nanotubes: Towards High Yield and Low Temperature Growth. *Materials*, **2010**, 3, 4871-4891	3.5	104
114	High-efficiency solid-state dye-sensitized solar cells: fast charge extraction through self-assembled 3D fibrous network of crystalline TiO2 nanowires. *ACS Nano*, **2010**, 4, 7644-50	16.7	99
113	Polymorphism in micro-, submicro-, and nanocrystalline NaNbO3. *Journal of Physical Chemistry B*, **2005**, 109, 20122-30	3.4	98
112	Diuron sorbed to carbon nanotubes exhibits enhanced toxicity to Chlorella vulgaris. *Environmental Science & Technology*, **2013**, 47, 7012-9	10.3	90
111	Evaluation of the toxicity of graphene derivatives on cells of the lung luminal surface. *Carbon*, **2013**, 64, 45-60	10.4	81
110	Cellular toxicity of TiO2-based nanofilaments. *ACS Nano*, **2009**, 3, 2274-80	16.7	81
109	Controlled positioning of carbon nanotubes by dielectrophoresis: insights into the solvent and substrate role. *ACS Nano*, **2010**, 4, 279-84	16.7	72
108	Growth of carbon nanotubes with alkaline earth carbonate as support. *Journal of Physical Chemistry B*, **2005**, 109, 10087-91	3.4	69
107	Lithium niobate nanowires synthesis, optical properties, and manipulation. *Applied Physics Letters*, **2009**, 95, 143105	3.4	67
106	Temperature-induced Phase Transitions in Micro-, Submicro-, and Nanocrystalline NaNbO3. *Journal of Physical Chemistry C*, **2007**, 111, 18493-18502	3.8	66

105	Filming the formation and fluctuation of skyrmion domains by cryo-Lorentz transmission electron microscopy. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 14212-7	11.5	58
104	Management of nanomaterials safety in research environment. *Particle and Fibre Toxicology*, **2010**, 7, 40	8.4	57
103	Evidence of an equimolar C2H2-CO2 reaction in the synthesis of carbon nanotubes. *Angewandte Chemie - International Edition*, **2007**, 46, 441-4	16.4	56
102	Nanopore integrated nanogaps for DNA detection. *Nano Letters*, **2014**, 14, 244-9	11.5	53
101	Low-temperature, highly efficient growth of carbon nanotubes on functional materials by an oxidative dehydrogenation reaction. *ACS Nano*, **2010**, 4, 3702-8	16.7	52
100	Towards electron spin resonance of mechanically exfoliated graphene. *Physica Status Solidi (B): Basic Research*, **2009**, 246, 2558-2561	1.3	50
99	FeOx magnetization enhancing E. coli inactivation by orders of magnitude on Ag-TiO2 nanotubes under sunlight. *Applied Catalysis B: Environmental*, **2017**, 202, 438-445	21.8	49
98	Particle size effect on the crystal structure symmetry of K0.5Na0.5NbO3. *Journal of the European Ceramic Society*, **2005**, 25, 2075-2079	6	49
97	Striking influence of the catalyst support and its acid-base properties: new insight into the growth mechanism of carbon nanotubes. *ACS Nano*, **2011**, 5, 3428-37	16.7	48
96	Growth kinetics of one-dimensional KNbO3 nanostructures by hydrothermal processing routes. *Journal of Physical Chemistry B*, **2005**, 109, 14331-4	3.4	48
95	Influence of the initial state of carbon nanotubes on their colloidal stability under natural conditions. *Environmental Pollution*, **2011**, 159, 1641-8	9.3	47
94	Phase transformation of KNaNb2O6 induced by size effect. *Chemical Physics Letters*, **2004**, 391, 288-292	2.5	47
93	Long-term colloidal stability of 10 carbon nanotube types in the absence/presence of humic acid and calcium. *Environmental Pollution*, **2012**, 169, 64-73	9.3	42
92	Room-temperature negative differential resistance in graphene field effect transistors: experiments and theory. *ACS Nano*, **2015**, 9, 620-5	16.7	41
91	Morphology Engineering: A Route to Highly Reproducible and High Efficiency Perovskite Solar Cells. *ChemSusChem*, **2017**, 10, 1624-1630	8.3	40
90	The Role of Transport Agents in MoS2 Single Crystals. *Journal of Physical Chemistry C*, **2015**, 119, 3918-3922	4.8	40
89	Diameter-dependent elastic modulus supports the metastable-catalyst growth of carbon nanotubes. *Nano Letters*, **2007**, 7, 1598-602	11.5	40
88	Microemulsion mediated synthesis of nanocrystalline (Kx,Na1−x)NbO3 powders. *Journal of Crystal Growth*, **2005**, 280, 191-200	1.6	40

87	Elevated transition temperature in Ge doped VO2 thin films. *Journal of Applied Physics*, **2017**, 122, 045302	2.5	36
86	Synthesis of Homogeneous Manganese-Doped Titanium Oxide Nanotubes from Titanate Precursors. *Journal of Physical Chemistry C*, **2013**, 117, 697-702	3.8	34
85	Electrical conductivity of multi-walled carbon nanotubes-SU8 epoxy composites. *Applied Physics Letters*, **2013**, 102, 223114	3.4	32
84	Capacitive nanoelectromechanical switch based on suspended carbon nanotube array. *Applied Physics Letters*, **2010**, 97, 233508	3.4	30
83	Size dependence of the magnetic response of graphite oxide and graphene flakes an electron spin resonance study. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 2958-2961	1.3	30
82	Van der Waals MoS/VO heterostructure junction with tunable rectifier behavior and efficient photoresponse. *Scientific Reports*, **2017**, 7, 14250	4.9	29
81	Influence of TiO2 phase composition on the photocatalytic activity of TiO2/MWCNT composites prepared by combined sol gel/hydrothermal method. *Journal of Molecular Catalysis A*, **2016**, 414, 140-147		29
80	Dye metachromasy on titanate nanowires: sensing humidity with reversible molecular dimerization. *Journal of Materials Chemistry*, **2012**, 22, 8778		29
79	Enhanced low-temperature thermoelectrical properties of BiTeCl grown by topotactic method. *Scripta Materialia*, **2014**, 76, 69-72	5.6	27
78	Probing titanate nanowire surface acidity through methylene blue adsorption in colloidal suspension and on thin films. *Journal of Colloid and Interface Science*, **2014**, 416, 190-7	9.3	27
77	Carbon nanotubes SU8 composite for flexible conductive inkjet printable applications. *Journal of Materials Chemistry*, **2012**, 22, 14030		27
76	Uniformly dispersed deposition of colloidal nanoparticles and nanowires by boiling. *Applied Physics Letters*, **2007**, 91, 173112	3.4	27
75	A Gibeon meteorite yields a high-performance water oxidation electrocatalyst. *Energy and Environmental Science*, **2016**, 9, 3448-3455	35.4	26
74	In Situ Electric Field Skyrmion Creation in Magnetoelectric CuOSeO. *Nano Letters*, **2018**, 18, 5167-5171	11.5	26
73	Optical properties of BiTeBr and BiTeCl. *Physical Review B*, **2014**, 90,	3.3	26
72	Pressure-Induced Phase Transitions in Micro-, Submicro-, and Nanocrystalline NaNbO3. *Journal of Physical Chemistry C*, **2008**, 112, 9610-9616	3.8	26
71	Photocatalytic activity of TiO2/SWCNT and TiO2/MWCNT nanocomposites with different carbon nanotube content. *Physica Status Solidi (B): Basic Research*, **2011**, 248, 2496-2499	1.3	23
70	Growth of carbon nanotubes on carbon fibers without strength degradation. *Physica Status Solidi (B): Basic Research*, **2012**, 249, 2420-2423	1.3	22

69	Preparation and characterization of multiwalled carbon nanotube/In2O3 composites. *Carbon*, **2013**, 60, 266-272	10.4	22
68	Influence of the catalyst drying process and catalyst support particle size on the carbon nanotubes produced by CCVD. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 1915-1918	1.3	19
67	Efficient voltammetric discrimination of free bilirubin from uric acid and ascorbic acid by a CVD nanographite-based microelectrode. *Talanta*, **2014**, 130, 423-6	6.2	18
66	Synthesis, electrical resistivity, thermo-electric power and magnetization of cubic ZnMnO3. *Solid State Communications*, **2011**, 151, 487-490	1.6	18
65	Role of the particle size polydispersity in the electrical conductivity of carbon nanotube-epoxy composites. *Scientific Reports*, **2017**, 7, 12553	4.9	17
64	Photosynthetic reaction center protein in nanostructures. *Physica Status Solidi (B): Basic Research*, **2011**, 248, 2700-2703	1.3	17
63	Melting of a skyrmion lattice to a skyrmion liquid via a hexatic phase. *Nature Nanotechnology*, **2020**, 15, 761-767	28.7	16
62	High-performance multipanel biosensors based on a selective integration of nanographite petals. *Nano Letters*, **2014**, 14, 3180-4	11.5	16
61	Manufacturing and investigations of i-butane sensor made of SnO2/multiwall-carbon-nanotube nanocomposite. *Sensors and Actuators B: Chemical*, **2012**, 173, 890-896	8.5	16
60	Study of the mechanical response of carbon nanotubes-SU8 composites by nanoindentation. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 3072-3075	1.3	16
59	Structural and transport properties of a new class of oxide ion conductors: Nd4[Ga2(1⊠)M2xO7+x?1⊠]O2 (M=Ti, Ge). *Solid State Sciences*, **2002**, 4, 1413-1418	3.4	16
58	Sub-terahertz spectroscopy of magnetic resonance in BiFeO3 using a vector network analyzer. *Applied Physics Letters*, **2016**, 108, 241109	3.4	15
57	Sorption kinetics and equilibrium of the herbicide diuron to carbon nanotubes or soot in absence and presence of algae. *Environmental Pollution*, **2014**, 192, 147-53	9.3	15
56	Dispersion Characteristics and Aggregation in Titanate Nanowire Colloids. *ChemPlusChem*, **2014**, 79, 592-600	2.8	15
55	Synthesis of Nanosized Mn-Doped ZnO by Low Temperature Decomposition of Hydrozincite Precursors. *Crystal Growth and Design*, **2010**, 10, 4437-4441	3.5	15
54	Consolidation, Microstructure and Crystallography of Dense NaNbO3 Ceramics with Ultra-Fine Grain Size. *Journal of the Ceramic Society of Japan*, **2006**, 114, 995-1000		15
53	Electrical conduction of photo-patternable SU8⊡graphene composites. *Carbon*, **2014**, 80, 364-372	10.4	14
52	Reinforcement of CVD grown multi-walled carbon nanotubes by high temperature annealing. *AIP Advances*, **2013**, 3, 112101	1.5	14

51	High-Pressure Study of Anatase TiO2. *Materials*, **2010**, 3, 1509-1514	3.5	14
50	Spin-Resolved Electronic Response to the Phase Transition in MoTe_{2}. *Physical Review Letters*, **2018**, 121, 156401	7.4	14
49	Probing the coupling between a doublon excitation and the charge-density wave in TaS2 by ultrafast optical spectroscopy. *Physical Review B*, **2016**, 94,	3.3	13
48	Reinforcing multiwall carbon nanotubes by electron beam irradiation. *Journal of Applied Physics*, **2010**, 108, 084314	2.5	13
47	Dirac nodal lines and flat-band surface state in the functional oxide RuO2. *Physical Review B*, **2018**, 98,	3.3	13
46	Sensing hydrogen peroxide by carbon nanotube/horseradish peroxidase bio-nanocomposite. *Physica Status Solidi (B): Basic Research*, **2013**, 250, 2559-2563	1.3	12
45	Photocatalytic and phototoxic properties of TiO2-based nanofilaments: ESR and AFM assays. *Nanotoxicology*, **2012**, 6, 813-24	5.3	12
44	Large magnetothermopower and anomalous Nernst effect in HfTe5. *Physical Review B*, **2019**, 100,	3.3	11
43	Graphene Negative Differential Resistance Circuit With Voltage-Tunable High Performance at Room Temperature. *IEEE Electron Device Letters*, **2015**, 36, 865-867	4.4	11
42	Thermal diffusivity measurements of templated nanocomposite using infrared thermography. *Materials Letters*, **2014**, 115, 106-108	3.3	11
41	Electrical property measurements of Cr-N codoped TiO2 epitaxial thin films grown by pulsed laser deposition. *Applied Physics Letters*, **2013**, 102, 172108	3.4	11
40	Tuning the length dispersion of multi-walled carbon nanotubes by ball milling. *AIP Advances*, **2013**, 3, 092117	1.5	11
39	Iron-Rich Natural Mineral Gibeon Meteorite Catalyzed N-formylation of Amines using CO2 as the C1 Source. *ChemistrySelect*, **2018**, 3, 10271-10276	1.8	11
38	Chemical exchange at the ferroelectric phase transition of lead germanate revealed by solid state Pb nuclear magnetic resonance. *Physical Chemistry Chemical Physics*, **2019**, 21, 1100-1109	3.6	10
37	Carbon nanotubes quench singlet oxygen generated by photosynthetic reaction centers. *Physica Status Solidi (B): Basic Research*, **2013**, 250, 2539-2543	1.3	10
36	Cyan titania nanowires: Spectroscopic study of the origin of the self-doping enhanced photocatalytic activity. *Catalysis Today*, **2017**, 284, 52-58	5.3	10
35	Doping dependence of the G-band Raman spectra of an individual multiwall carbon nanotube. *Physica E: Low-Dimensional Systems and Nanostructures*, **2010**, 42, 2466-2470	3	10
34	Magnetism in nanoscale graphite flakes as seen via electron spin resonance. *Physical Review B*, **2012**, 85,	3.3	9

33	Preparation and characterization of SU8□arbon nanotube composites. *Physica Status Solidi (B): Basic Research*, **2009**, 246, 2461-2464	1.3	9
32	Multiwalled Carbon Nanotubes Produced by a Continuous CVD Method and Their Use in Melt Mixed Composites with Polycarbonate. *Macromolecular Symposia*, **2007**, 254, 392-399	0.8	9
31	Preparation of titania covered multi-walled carbon nanotube thin films. *Materials and Design*, **2015**, 86, 198-203	8.1	8
30	Direct growth of nanotubes and graphene nanoflowers on electrochemical platinum electrodes. *Nanoscale*, **2013**, 5, 12448-55	7.7	8
29	La@C82 as a spin-active filling of SWCNTs: ESR study of magnetic and photophysical properties. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 2042-2046	1.3	8
28	Photochemical processes developed in composite based on highly separated metallic and semiconducting SWCNTs functionalized with polydiphenylamine. *Carbon*, **2015**, 81, 426-438	10.4	7
27	Functionalized graphene grown by oxidative dehydrogenation chemistry. *Carbon*, **2014**, 71, 11-19	10.4	7
26	Long term stabilization of reaction center protein photochemistry by carbon nanotubes. *Physica Status Solidi (B): Basic Research*, **2011**, 248, 2454-2457	1.3	7
25	Single potassium niobate nano/microsized particles as local mechano-optical Brownian probes. *Nanoscale*, **2016**, 8, 6810-9	7.7	6
24	Chemical challenges during the synthesis of MWCNT-based inorganic nanocomposite materials. *Physica Status Solidi (B): Basic Research*, **2014**, 251, 2360-2365	1.3	6
23	Cell type dependence of carbon based nanomaterial toxicity. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 3059-3062	1.3	6
22	Evidence of an Equimolar C2H2□O2 Reaction in the Synthesis of Carbon Nanotubes. *Angewandte Chemie*, **2007**, 119, 445-448	3.6	6
21	Time-resolved ARPES at LACUS: Band Structure and Ultrafast Electron Dynamics of Solids. *Chimia*, **2017**, 71, 273-277	1.3	5
20	Effects of composition and pressure on electronic states of iron in bridgmanite. *American Mineralogist*, **2020**, 105, 1030-1039	2.9	5
19	Fabrication of homogeneous titania/MWNT composite materials. *Materials Research Bulletin*, **2011**, 46, 1991-1996	5.1	5
18	Crystal Structure, Transport, and Magnetic Properties of an Ir(6+) Compound Ba8Al2IrO14. *Inorganic Chemistry*, **2015**, 54, 4371-6	5.1	4
17	Anti-Stokes Raman spectroscopy as a method to identify metallic and mixed metallic/semiconducting configurations of multi-walled carbon nanotubes. *Analytical Methods*, **2015**, 7, 6225-6230	3.2	4
16	The effect of titania precursor on the morphology of prepared TiO2/MWCNT nanocomposite materials. *Physica Status Solidi (B): Basic Research*, **2014**, 251, 2384-2388	1.3	4

15	Charge stabilization by reaction center protein immobilized to carbon nanotubes functionalized by amine groups and poly(3-thiophene acetic acid) conducting polymer. *Physica Status Solidi (B): Basic Research*, **2012**, 249, 2386-2389	1.3	4
14	Singlet state formation and its impact on the magnetic structure in the tetramer system SeCuO3. *Physical Review B*, **2018**, 98,	3.3	3
13	Photosynthetic reaction centre/carbon nanotube bundle composites. *Physica Status Solidi (B): Basic Research*, **2014**, 251, 2366-2371	1.3	3
12	Equilibrium concentration of singlet oxygen in photoreaction of reaction center/carbon nanotube bionanocomposites. *Physica Status Solidi (B): Basic Research*, **2015**, 252, 2479-2484	1.3	3
11	Materials and Devices for Nanoelectronic Systems Beyond Ultimately Scaled CMOS **2009**, 23-44		3
10	Electrical transport in onion-like carbon PMMA nanocomposites. *Applied Physics Letters*, **2019**, 114, 103102	3.4	2
9	Polymorphism in Micro-, Submicro-, and Nanocrystalline NaNbO3. *Journal of Physical Chemistry B*, **2006**, 110, 16801-16801	3.4	2
8	Diameter Dependence of the Elastic Modulus of CVD-Grown Carbon Nanotubes. *AIP Conference Proceedings*, **2005**,	0	2
7	Toxicity Study of Nanofibers **2011**, 133-149		2
6	MnO nanoparticles as the cause of ferromagnetism in bulk dilute Mn-doped ZnO. *Applied Physics Letters*, **2016**, 109, 252405	3.4	2
5	**2016**,		1
4	Investigating Skyrmions Using Lorentz Transmission Electron Microscopy. *Microscopy and Microanalysis*, **2018**, 24, 932-933	0.5	0
3	New refinement of the crystal structure of Zn(NH)Cl at 100 K. *Acta Crystallographica Section E: Crystallographic Communications*, **2019**, 75, 1386-1388	0.7	0
2	Direct Visualisation of Skyrmion Lattice Defect Alignment at Grain Boundaries.. *Nanoscale Research Letters*, **2022**, 17, 20	5	
1	Ba(IO): crystal structure evolution from room temperature to 80 K. *Acta Crystallographica Section E: Crystallographic Communications*, **2021**, 77, 634-637	0.7	