Jean-Christophe P Gabriel

List of Publications by Year
in descending order

71 papers	6,097 citations	126708 33 h-index	91712 69 g-index
75 all docs	75 docs citations	75 times ranked	5953 citing authors

#	Article	IF	Citations
1	First online Xâ€ray fluorescence characterization of liquidâ€liquid extraction in microfluidics. Nano Select, 2022, 3, 425-436.	1.9	5
2	Direct reuse of electronic plastic scraps from computer monitor and keyboard to direct stem cell growth and differentiation. Science of the Total Environment, 2022, 807, 151085.	3.9	7
3	Sustainable route for Nd recycling from waste electronic components featured with unique element-specific sorting enabling simplified hydrometallurgy. Chemical Engineering Journal, 2022, 441, 135886.	6.6	15
4	Activated recovery of PVC from contaminated waste extension cord-cable using a weak acid. Chemosphere, 2022, 303, 134878.	4.2	7
5	Liquidâ€“liquid extraction: thermodynamicsâ€“kinetics driven processes explored by microfluidics. Comptes Rendus Chimie, 2022, 25, 137-148.	0.2	1
6	Fine tuning the structural colours of photonic nanosheet suspensions by polymer doping. Soft Matter, 2021, 17, 9280-9292.	1.2	6
7	On-line spectroscopic study of brominated flame retardant extraction in supercritical CO2. Chemosphere, 2021, 263, 128282.	4.2	10
8	Value-added products from thermochemical treatments of contaminated e-waste plastics. Chemosphere, 2021, 269, 129409.	4.2	54
9	Laser induced breakdown spectroscopy for plastic analysis. TrAC - Trends in Analytical Chemistry, 2021, 140, 116280.	5.8	36
10	Electrochemical Approaches for the Recovery of Metals from Electronic Waste: A Critical Review. Recycling, 2021, 6, 53.	2.3	43
11	Dismantling of Printed Circuit Boards Enabling Electronic Components Sorting and Their Subsequent Treatment Open Improved Elemental Sustainability Opportunities. Sustainability, 2021, 13, 10357.	1.6	25
12	Destabilization of the Nematic Phase of Clay Nanosheet Suspensions by Polymer Adsorption. Langmuir, 2020, 36, 12563-12571.	1.6	3
13	Microfluidic lab-on-chip advances for liquidâ€“liquid extraction process studies. Current Opinion in Colloid and Interface Science, 2020, 46, 20-35.	3.4	29
14	A microfluidic study of synergic liquidâ€“liquid extraction of rare earth elements. Physical Chemistry Chemical Physics, 2020, 22, 5449-5462.	1.3	19
15	Effects of porous media on extraction kinetics: Is the membrane really a limiting factor?. Journal of Membrane Science, 2019, 586, 318-325.	4.1	10
16	Methods for dispersing carbon nanotubes for nanotechnology applications: liquid nanocrystals, suspensions, polyelectrolytes, colloids and organization control. International Nano Letters, 2019, 9, 31-49.	2.3	56
17	Determining the Partial Pressure of Volatile Components via Substrate-Integrated Hollow Waveguide Infrared Spectroscopy with Integrated Microfluidics. Analytical Chemistry, 2018, 90, 4445-4451.	3.2	18
18	Molecular simulation of binary phase diagrams from the osmotic equilibrium method: vapour pressure and activity in waterâ€“ethanol mixtures. Molecular Physics, 2018, 116, 2009-2021.	0.8	9

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19	Isotropic, nematic, and lamellar phases in colloidal suspensions of nanosheets. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6662-6667.	3.3	67
20	A Promising Portable Tool for the Continuous, Online, and Field Monitoring of Pressured Processes. ACS Central Science, 2016, 2, 188-189.	5.3	2
21	Implementation and mechanical characterization of 2 nm thin diamond like carbon suspended membranes. Diamond and Related Materials, 2015, 57, 53-57.	1.8	3
22	Electrostatic method to estimate the mechanical properties of suspended membranes applied to nickel-coated graphene oxide. Applied Physics Letters, 2013, 103, 051907.	1.5	9
23	Liquidâ€“crystalline properties of aqueous suspensions of natural clay nanosheets. Liquid Crystals Reviews, 2013, 1, 110-126.	1.1	49
24	VLSI silicon multi-gas analyzer coupling gas chromatography and NEMS detectors. , 2011, , .		17
25	RÃ©seaux 2d alÃ©atoires Ã nanotubes de carbone. Comptes Rendus Physique, 2010, 11, 362-374.	0.3	49
26	Characterization of Integrated Nano Materials. , 2009, , .		1
27	Gas Sensor Array Based on Metal-Decorated Carbon Nanotubes. Journal of Physical Chemistry B, 2006, 110, 21014-21020.	1.2	542
28	Label-free detection of DNA hybridization using carbon nanotube network field-effect transistors. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 921-926.	3.3	646
29	Self-Assemblies of Anisotropic Nanoparticles: Mineral Liquid Crystals. , 2006, , 173-212.		2
30	Mineral liquid crystals. Current Opinion in Colloid and Interface Science, 2005, 9, 377-383.	3.4	170
31	Integration of Cell Membranes and Nanotube Transistors. Nano Letters, 2005, 5, 841-845.	4.5	49
32	Quasi-Langmuirâ€“Blodgett thin film deposition of carbon nanotubes. Journal of Applied Physics, 2004, 95, 3228-3230.	1.1	87
33	Nanoelectronic Carbon Dioxide Sensors. Advanced Materials, 2004, 16, 2049-2052.	11.1	294
34	Hydrogen storage by physisorption: beyond carbon. Solid State Communications, 2004, 129, 769-773.	0.9	86
35	Nanococoon seeds for BN nanotube growth. Journal of Materials Science, 2003, 38, 4805-4810.	1.7	25
36	Flexible Nanotube Electronics. Nano Letters, 2003, 3, 1353-1355.	4.5	319

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37	Magnetically Induced Large Mesoporous Single-Domain Monoliths Using a Mineral Liquid Crystal as a Template. Advanced Functional Materials, 2003, 13, 377-381.	7.8	16
38	Dilute liquid crystals used to enhance residual dipolar couplings may alter conformational equilibrium in oligosaccharides. Carbohydrate Research, 2003, 338, 1771-1785.	1.1	19
39	Combined SAXSâˆ'Rheological Studies of Liquid-Crystalline Colloidal Dispersions of Mineral Particles. Langmuir, 2003, 19, 10028-10035.	1.6	29
40	Interaction of Aromatic Compounds with Carbon Nanotubes:Â Correlation to the Hammett Parameter of the Substituent and Measured Carbon Nanotube FET Response. Nano Letters, 2003, 3, 1421-1423.	4.5	204
41	Electronic Detection of Specific Protein Binding Using Nanotube FET Devices. Nano Letters, 2003, 3, 459-463.	4.5	759
42	Influence of Mobile Ions on Nanotube Based FET Devices. Nano Letters, 2003, 3, 639-641.	4.5	113
43	Short-channel effects in contact-passivated nanotube chemical sensors. Applied Physics Letters, 2003, 83, 3821-3823.	1.5	130
44	Charge Transfer from Ammonia Physisorbed on Nanotubes. Physical Review Letters, 2003, 91, 218301.	2.9	178
45	Mineral Liquid Crystals from Self-Assembly of Anisotropic Nanosystems. Topics in Current Chemistry, 2003, , 119-172.	4.0	85
46	Large Scale Production of Carbon Nanotube Transistors: A Generic Platform for Chemical Sensors. Materials Research Society Symposia Proceedings, 2003, 776, 1271.	0.1	9
47	The measurement by SAXS of the nematic order parameter of laponite gels. Europhysics Letters, 2002, 59, 55-61.	0.7	98
48	Original Single Walled Nanotubules Based on Weakly Interacting Covalent Mineral Polymers,1âˆž[Nb2PS10-] inN-Methylformamide. Nano Letters, 2002, 2, 403-407.	4.5	16
49	Synthesis of a mesoporous composite material prepared by the self-assembly of mineral liquid crystals. Chemical Communications, 2002, , 1926-1927.	2.2	12
50	Chemistry of Hexanuclear Rhenium Chalcohalide Clusters. Chemical Reviews, 2001, 101, 2037-2066.	23.0	276
51	First Use of a Mineral Liquid Crystal for Measurement of Residual Dipolar Couplings of a Nonlabeled Biomolecule. Angewandte Chemie - International Edition, 2001, 40, 373-376.	7.2	30
52	Swollen liquid-crystalline lamellar phase based on extended solid-like sheets. Nature, 2001, 413, 504-508.	13.7	256
53	First Use of a Mineral Liquid Crystal for Measurement of Residual Dipolar Couplings of a Nonlabeled Biomolecule We would like to thank Dr. Patrick Davidson for helpful discussions, StÃ©phane Grolleau for TGA (thermogravimetric analysis) measurements, and Prof. Pierre SinaÃ¿ and Dr. Yongmin Zhang for the gift of the pentasaccharide. Financial support from the CNRS, the Ministry of Education (PhD) Tj ETQq1 1 0.784314 rgBT /Overlock acknowledged.. Angewandte Chemie - International Edition, 2001, 40, 373-376.	7.2	2
54	New Trends in Colloidal Liquid Crystals Based on Mineral Moieties. Advanced Materials, 2000, 12, 9-20.	11.1	204

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55	Behaviour of the one-dimensional, inorganic polymer 1âˆž[MPS4]âˆ’ anions (M=Ni, Pd) in organic solutions. Journal of Materials Chemistry, 1999, 9, 143-153.	6.7	16
56	Complex Fluids Based on the Flexible One-Dimensional Mineral Polymers [K(MPS4)]âˆž (M=Ni, Pd): Autofragmentation to Concave, Cyclic (PPh4)3[(NiPS4)3]. Angewandte Chemie - International Edition, 1998, 37, 1711-1714.	7.2	40
57	Synthesis and solubility in water of Cs3Re6S7Cl7, the missing octahedral thiochloride rhenium(III) cluster salt. Comptes Rendus De L'Academie Des Sciences - Series IIc: Chemistry, 1998, 1, 765-770.	0.1	0
58	Electrocrystallization, an Invaluable Tool for the Construction of Ordered, Electroactive Molecular Solidsâ€. Chemistry of Materials, 1998, 10, 3005-3015.	3.2	154
59	[NBun4]4[(Re6S5OCl7)2O], an oxo-bridged siamese twin cluster of two hexanuclear oxochalcohalide rhenium clusters. Chemical Communications, 1998, , 845-846.	2.2	11
60	A stable free radical as donor: A layer-structure organic pressure sensor. Synthetic Metals, 1997, 86, 2147-2148.	2.1	7
61	Mineral liquid crystalline polymers. Progress in Polymer Science, 1997, 22, 913-936.	11.8	67
62	Hydrothermal Synthesis and Structure of a Mixed Valent Heteropoly-oxometallate Keggin Salt: [PMo4.27W7.73O6âˆ’40] [H3N(CH2)6NH2+3]3. Journal of Solid State Chemistry, 1997, 129, 257-262.	1.4	22
63	Ordering of the Disk-like 2,3,6,7,10,11-Hexakis(hexylthio)triphenylene in Solution and at a Liquidâˆ’Solid Interface. Langmuir, 1996, 12, 1690-1692.	1.6	17
64	A Pressure Sensitive Two-Dimensional Tetracyanoquinodimethane (TCNQ) Salt of a Stable Free Radical. Journal of the American Chemical Society, 1996, 118, 13081-13082.	6.6	52
65	Observation of Nematic Liquid-Crystal Textures in Aqueous Gels of Smectite Clays. The Journal of Physical Chemistry, 1996, 100, 11139-11143.	2.9	252
66	Structure-Directing Effects in Zeolite Synthesis:â€‰ A Single-Crystal X-ray Diffraction, 29Si MAS NMR, and Computational Study of the Competitive Formation of Siliceous Ferrierite and Dodecasil-3C (ZSM-39). Journal of the American Chemical Society, 1996, 118, 2427-2435.	6.6	79
67	Synthesis and structure of a three-dimensional open-framework aluminophosphate [NH2(CH2)3NH3]+[HAl3P3O14]â€“Â·H2O, containing AlO5and AlO6polyhedra. Chemical Communications, 1996, , 1415-1416.	2.2	28
68	Nematic liquid crystalline mineral polymers. Advanced Materials, 1993, 5, 665-668.	11.1	25
69	A novel type of two-dimensional pattern of association of mixed-valence dimers in the structures of two cation radical salts of thieno- and selenolo[3,4-d]-1,3-dithiol-2-ylidene and a monovalent hexanuclear chalcohalide rhenium cluster anion. Acta Crystallographica Section C: Crystal Structure Communications, 1993, 49, 1052-1056.	0.4	4
70	Molecular hexanuclear clusters in the system rhenium-sulfur-chlorine: solid state synthesis, solution chemistry, and redox properties. Inorganic Chemistry, 1993, 32, 2894-2900.	1.9	63
71	A New Nematic Suspension Based on All-Inorganic Polymer Rods. Europhysics Letters, 1993, 21, 317-322.	0.7	47