

Jean-Christophe P Gabriel

List of Publications by Year in descending order

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126708

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75
all docs

75
docs citations

75
times ranked

5953
citing authors

#	ARTICLE	IF	CITATIONS
1	Electronic Detection of Specific Protein Binding Using Nanotube FET Devices. Nano Letters, 2003, 3, 459-463.	4.5	759
2	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
3	Gas Sensor Array Based on Metal-Decorated Carbon Nanotubes. Journal of Physical Chemistry B, 2006, 110, 21014-21020.	1.2	542
4	Flexible Nanotube Electronics. Nano Letters, 2003, 3, 1353-1355.	4.5	319
5	Nanoelectronic Carbon Dioxide Sensors. Advanced Materials, 2004, 16, 2049-2052.	11.1	294
6	Chemistry of Hexanuclear Rhenium Chalcohalide Clusters. Chemical Reviews, 2001, 101, 2037-2066.	23.0	276
7	Swollen liquid-crystalline lamellar phase based on extended solid-like sheets. Nature, 2001, 413, 504-508.	13.7	256
8	Observation of Nematic Liquid-Crystal Textures in Aqueous Gels of Smectite Clays. The Journal of Physical Chemistry, 1996, 100, 11139-11143.	2.9	252
9	New Trends in Colloidal Liquid Crystals Based on Mineral Moieties. Advanced Materials, 2000, 12, 9-20.	11.1	204
10	Interaction of Aromatic Compounds with Carbon Nanotubes: Correlation to the Hammett Parameter of the Substituent and Measured Carbon Nanotube FET Response. Nano Letters, 2003, 3, 1421-1423.	4.5	204
11	Charge Transfer from Ammonia Physisorbed on Nanotubes. Physical Review Letters, 2003, 91, 218301.	2.9	178
12	Mineral liquid crystals. Current Opinion in Colloid and Interface Science, 2005, 9, 377-383.	3.4	170
13	Electrocrystallization, an Invaluable Tool for the Construction of Ordered, Electroactive Molecular Solids. Chemistry of Materials, 1998, 10, 3005-3015.	3.2	154
14	Short-channel effects in contact-passivated nanotube chemical sensors. Applied Physics Letters, 2003, 83, 3821-3823.	1.5	130
15	Influence of Mobile Ions on Nanotube Based FET Devices. Nano Letters, 2003, 3, 639-641.	4.5	113
16	The measurement by SAXS of the nematic order parameter of laponite gels. Europhysics Letters, 2002, 59, 55-61.	0.7	98
17	Quasi-Langmuir Blodgett thin film deposition of carbon nanotubes. Journal of Applied Physics, 2004, 95, 3228-3230.	1.1	87
18	Hydrogen storage by physisorption: beyond carbon. Solid State Communications, 2004, 129, 769-773.	0.9	86

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19	Mineral Liquid Crystals from Self-Assembly of Anisotropic Nanosystems. Topics in Current Chemistry, 2003, , 119-172.	4.0	85
20	Structure-Directing Effects in Zeolite Synthesis: A Single-Crystal X-ray Diffraction, ²⁹ Si 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
21	Mineral liquid crystalline polymers. Progress in Polymer Science, 1997, 22, 913-936.	11.8	67
22	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
23	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
24	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
25	Value-added products from thermochemical treatments of contaminated e-waste plastics. Chemosphere, 2021, 269, 129409.	4.2	54
26	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
27	Integration of Cell Membranes and Nanotube Transistors. Nano Letters, 2005, 5, 841-845.	4.5	49
28	Réseaux 2d atomiques à nanotubes de carbone. Comptes Rendus Physique, 2010, 11, 362-374.	0.3	49
29	Liquid-crystalline properties of aqueous suspensions of natural clay nanosheets. Liquid Crystals Reviews, 2013, 1, 110-126.	1.1	49
30	A New Nematic Suspension Based on All-Inorganic Polymer Rods. Europhysics Letters, 1993, 21, 317-322.	0.7	47
31	Electrochemical Approaches for the Recovery of Metals from Electronic Waste: A Critical Review. Recycling, 2021, 6, 53.	2.3	43
32	Complex Fluids Based on the Flexible One-Dimensional Mineral Polymers [K(MPS ₄)] _n (M=Ni, Pd): Autofragmentation to Concave, Cyclic (PPh ₄) ₃ [(NiPS ₄) ₃]. Angewandte Chemie - International Edition, 1998, 37, 1711-1714.	7.2	40
33	Laser induced breakdown spectroscopy for plastic analysis. TrAC - Trends in Analytical Chemistry, 2021, 140, 116280.	5.8	36
34	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
35	Combined SAXS-Rheological Studies of Liquid-Crystalline Colloidal Dispersions of Mineral Particles. Langmuir, 2003, 19, 10028-10035.	1.6	29
36	Microfluidic lab-on-chip advances for liquid-liquid extraction process studies. Current Opinion in Colloid and Interface Science, 2020, 46, 20-35.	3.4	29

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37	Synthesis and structure of a three-dimensional open-framework aluminophosphate $[\text{NH}_2(\text{CH}_2)_3\text{NH}_3]^+[\text{HAl}_3\text{P}_3\text{O}_{14}]^{\ominus} \cdot \text{H}_2\text{O}$, containing AlO_5 and AlO_6 polyhedra. <i>Chemical Communications</i> , 1996, , 1415-1416.	2.2	28
38	Nematic liquid crystalline mineral polymers. <i>Advanced Materials</i> , 1993, 5, 665-668.	11.1	25
39	Nanococoon seeds for BN nanotube growth. <i>Journal of Materials Science</i> , 2003, 38, 4805-4810.	1.7	25
40	Dismantling of Printed Circuit Boards Enabling Electronic Components Sorting and Their Subsequent Treatment Open Improved Elemental Sustainability Opportunities. <i>Sustainability</i> , 2021, 13, 10357.	1.6	25
41	Hydrothermal Synthesis and Structure of a Mixed Valent Heteropoly-oxometallate Keggin Salt: $[\text{PMo}_4.27\text{W}_7.73\text{O}_6]^{40-}$ $[\text{H}_3\text{N}(\text{CH}_2)_6\text{NH}_2+3]^3$. <i>Journal of Solid State Chemistry</i> , 1997, 129, 257-262.	1.4	22
42	Dilute liquid crystals used to enhance residual dipolar couplings may alter conformational equilibrium in oligosaccharides. <i>Carbohydrate Research</i> , 2003, 338, 1771-1785.	1.1	19
43	A microfluidic study of synergic liquid-liquid extraction of rare earth elements. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 5449-5462.	1.3	19
44	Determining the Partial Pressure of Volatile Components via Substrate-Integrated Hollow Waveguide Infrared Spectroscopy with Integrated Microfluidics. <i>Analytical Chemistry</i> , 2018, 90, 4445-4451.	3.2	18
45	Ordering of the Disk-like 2,3,6,7,10,11-Hexakis(hexylthio)triphenylene in Solution and at a Liquid-Solid Interface. <i>Langmuir</i> , 1996, 12, 1690-1692.	1.6	17
46	VLSI silicon multi-gas analyzer coupling gas chromatography and NEMS detectors. , 2011, , .		17
47	Behaviour of the one-dimensional, inorganic polymer $[\text{MPS}_4]^-$ anions (M=Ni, Pd) in organic solutions. <i>Journal of Materials Chemistry</i> , 1999, 9, 143-153.	6.7	16
48	Original Single Walled Nanotubules Based on Weakly Interacting Covalent Mineral Polymers, $[\text{Nb}_2\text{PS}_{10}]^-$ in N-Methylformamide. <i>Nano Letters</i> , 2002, 2, 403-407.	4.5	16
49	Magnetically Induced Large Mesoporous Single-Domain Monoliths Using a Mineral Liquid Crystal as a Template. <i>Advanced Functional Materials</i> , 2003, 13, 377-381.	7.8	16
50	Sustainable route for Nd recycling from waste electronic components featured with unique element-specific sorting enabling simplified hydrometallurgy. <i>Chemical Engineering Journal</i> , 2022, 441, 135886.	6.6	15
51	Synthesis of a mesoporous composite material prepared by the self-assembly of mineral liquid crystals. <i>Chemical Communications</i> , 2002, , 1926-1927.	2.2	12
52	$[\text{NBun}_4]_4[(\text{Re}_6\text{S}_5\text{OCl}_7)_2\text{O}]$, an oxo-bridged siamese twin cluster of two hexanuclear oxochalcohalide rhenium clusters. <i>Chemical Communications</i> , 1998, , 845-846.	2.2	11
53	Effects of porous media on extraction kinetics: Is the membrane really a limiting factor?. <i>Journal of Membrane Science</i> , 2019, 586, 318-325.	4.1	10
54	On-line spectroscopic study of brominated flame retardant extraction in supercritical CO_2 . <i>Chemosphere</i> , 2021, 263, 128282.	4.2	10

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55	Large Scale Production of Carbon Nanotube Transistors: A Generic Platform for Chemical Sensors. Materials Research Society Symposia Proceedings, 2003, 776, 1271.	0.1	9
56	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
57	Molecular simulation of binary phase diagrams from the osmotic equilibrium method: vapour pressure and activity in water-ethanol mixtures. Molecular Physics, 2018, 116, 2009-2021.	0.8	9
58	A stable free radical as donor: A layer-structure organic pressure sensor. Synthetic Metals, 1997, 86, 2147-2148.	2.1	7
59	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
60	Activated recovery of PVC from contaminated waste extension cord-cable using a weak acid. Chemosphere, 2022, 303, 134878.	4.2	7
61	Fine tuning the structural colours of photonic nanosheet suspensions by polymer doping. Soft Matter, 2021, 17, 9280-9292.	1.2	6
62	First online X-ray fluorescence characterization of liquid-liquid extraction in microfluidics. Nano Select, 2022, 3, 425-436.	1.9	5
63	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 chalcogenide rhenium cluster anion. Acta Crystallographica Section C: Crystal Structure Communications. 1993. 49. 1052-1056.	0.4	4
64	Implementation and mechanical characterization of 2 nm thin diamond like carbon suspended membranes. Diamond and Related Materials, 2015, 57, 53-57.	1.8	3
65	Destabilization of the Nematic Phase of Clay Nanosheet Suspensions by Polymer Adsorption. Langmuir, 2020, 36, 12563-12571.	1.6	3
66	Self-Assemblies of Anisotropic Nanoparticles: Mineral Liquid Crystals. , 2006, , 173-212.		2
67	A Promising Portable Tool for the Continuous, Online, and Field Monitoring of Pressured Processes. ACS Central Science, 2016, 2, 188-189.	5.3	2
68	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, Stéphane Grolleau for TGA (thermogravimetric analysis) measurements, and Prof. Pierre Sinaÿ and Dr. Yongmin Zhang for the gift of the pentasaccharide. Financial support from the CNRS, the Ministry of Education (PhD) Tj ETQq0 0 0 rgBT7Overlock 10 Tf 50	7.2	2
69	acknowledged.. Angewandte Chemie - International Edition, 2001, 40, 373-376. Characterization of Integrated Nano Materials. , 2009, , .		1
70	Liquid-liquid extraction: thermodynamics-kinetics driven processes explored by microfluidics. Comptes Rendus Chimie, 2022, 25, 137-148.	0.2	1
71	Synthesis and solubility in water of Cs ₃ Re ₆ S ₇ Cl ₇ , 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