Alain Penicaud

List of Publications by Year
in descending order

88	4,950	172457 29	88630 70
papers	citations	h-index	g-index

92	92	92	6249
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Macroscopic Fibers and Ribbons of Oriented Carbon Nanotubes. Science, 2000, 290, 1331-1334.	12.6	1,703
2	Solutions of Negatively Charged Graphene Sheets and Ribbons. Journal of the American Chemical Society, 2008, 130, 15802-15804.	13.7	444
3	Spontaneous Dissolution of a Single-Wall Carbon Nanotube Salt. Journal of the American Chemical Society, 2005, 127, 8-9.	13.7	238
4	Buckminsterfulleride(1-) salts: synthesis, EPR, and the Jahn-Teller distortion of C60-. Journal of the American Chemical Society, 1993, 115, 5212-5217.	13.7	187
5	Surfactant-free single-layer graphene in water. Nature Chemistry, 2017, 9, 347-352.	13.6	175
6	Disentangling contributions of point and line defects in the Raman spectra of graphene-related materials. 2D Materials, 2017, 4, 025039.	4.4	146
7	Degradation of Singleâ€Layer and Fewâ€Layer Graphene by Neutrophil Myeloperoxidase. Angewandte Chemie - International Edition, 2018, 57, 11722-11727.	13.8	135
8	Hydrogen-bond tuning of macroscopic transport properties from the neutral molecular component site along the sries of metallic organic-inorganic solvates (BEDT-TTF)4Re6Se5Cl9.[guest], [guest = DMF, THF, dioxane]. Journal of the American Chemical Society, 1993, 115, 4101-4112.	13.7	119
9	C60.bul.- with coordination compounds. (Tetraphenylporphinato)chromium(III) fulleride. Journal of the American Chemical Society, 1991, 113, 6698-6700.	13.7	103
10	Singling out the Electrochemistry of Individual Single-Walled Carbon Nanotubes in Solution. Journal of the American Chemical Society, 2008, 130, 7393-7399.	13.7	99
11	Deconstructing Graphite: Graphenide Solutions. Accounts of Chemical Research, 2013, 46, 129-137.	15.6	99
12	Electrocrystallizing C60: synthesis, single crystal x-ray structure, and magnetic (ESR, SQUID) characterization of [(C6H5)4P]2[C60][I]x. Journal of the American Chemical Society, 1993, 115, 10392-10393.	13.7	82
13	Graphene solutions. Chemical Communications, 2011, 47, 5470-5472.	4.1	78
14	Local ferromagnetism in microporous carbon with the structural regularity of zeolite Y. Physical Review B, 2003, 68, .	3.2	73
15	The minor isomers and IR spectrum of [84]fullerene. Journal of the Chemical Society Perkin Transactions II, 1997, , 1907-1910.	0.9	64
16	High Yield Synthesis of Aspect Ratio Controlled Graphenic Materials from Anthracite Coal in Supercritical Fluids. ACS Nano, 2016, 10, 5293-5303.	14.6	64
17	Mixed-valence bis(ethylenedithio)tetrathiafulvalenium (BEDT-TTF) monolayers sandwiched between extended close-packed Keggin-type molecular metal oxide cluster arrays: synthesis, unprecedented acentric structure, and preliminary conducting and e.s.r. properties of (BEDT-TTF)8SiW12O40. Journal of the Chemical Society Chemical Communications, 1989, , 1373-1374.	2.0	53
18	Transparent Carbon Nanotube Network for Efficient Electrochemiluminescence Devices. Chemistry - A European Journal, 2015, 21, 12640-12645.	3.3	50

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19	Stoichiometric control of single walled carbon nanotubes functionalization. Journal of Materials Chemistry, 2010, 20, 4385.	6.7	49
20	Solutions of fully exfoliated individual graphene flakes in low boiling point solvents. Soft Matter, 2012, 8, 7882.	2.7	46
21	Intense Raman D Band without Disorder in Flattened Carbon Nanotubes. ACS Nano, 2021, 15, 596-603.	14.6	44
22	Simultaneous Graphite Exfoliation and N Doping in Supercritical Ammonia. ACS Applied Materials & Interfaces, 2016, 8, 30964-30971.	8.0	41
23	Characterization of Six Isomers of [84]Fullerene C84by Electrochemistry, Electron Spin Resonance Spectroscopy, and Molecular Energy Levels Calculations. Journal of Physical Chemistry A, 2001, 105, 4627-4632.	2.5	38
24	Portrait of carbon nanotube salts as soluble polyelectrolytes. Soft Matter, 2011, 7, 7998.	2.7	38
25	Novel formation of a linear trinuclear ferric complex containing a .mu.-oxo bis(.mu.-acetato) and a .mu.-hydroxo bis(.mu.-acetato) bridge. Inorganic Chemistry, 1993, 32, 3583-3584.	4.0	35
26	Carbon supported noble metal nanoparticles as efficient catalysts for electrochemical water splitting. Nanoscale, 2020, 12, 20165-20170.	5.6	34
27	Conductive inks of graphitic nanoparticles from a sustainable carbon feedstock. Carbon, 2017, 111, 142-149.	10.3	32
28	Single crystal synthesis of [(C6H5)4P]2[C70][I] by electrocrystallization and experimental determination of the g-value anisotropy of C70â€¢- and C60â€¢- at 4.2 K. Solid State Communications, 1995, 96, 147-150.	1.9	31
29	Novel redox properties of the paramagnetic hexanuclear niobium cluster halide Nb6Cl183- and the preparation, structures, and conducting and magnetic properties of its one-dimensional mixed-valence tetramethyltetra(selena and thia)fulvalenium salts: [TMTSF and TMTTF]5[Nb6Cl18].cntdot.(CH2Cl2)0.5. Chemistry of Materials, 1990, 2, 123-132.	6.7	30
30	Raman Studies of Solutions of Single-Wall Carbon Nanotube Salts. Journal of Physical Chemistry B, 2006, 110, 3949-3954.	2.6	28
31	Mild dissolution of carbon nanotubes: Composite carbon nanotube fibres from polyelectrolyte solutions. Composites Science and Technology, 2007, 67, 795-797.	7.8	27
32	Raman Signatures of Single Layer Graphene Dispersed in Degassed Water, â€œâ€˜Eau de Grapheneâ€â€™. Journal of Physical Chemistry C, 2016, 120, 28204-28214.	3.1	25
33	Improved chromatographic separation and purification of C60 and C70 fullerenes. Journal of the Chemical Society Chemical Communications, 1992, , 936.	2.0	24
34	Preparation, structure, and magnetic properties of a ternary tetrathiafulvalenium salt based on a paramagnetic hexanuclear niobium cluster halide: (TTF+)2[(Nb6Cl18)3-][(C2H5)4N+][CH3CN], a unique molecular rock salt with channels incorporating a neutral organic molecule. Chemistry of Materials, 1990, 2, 117-123.	6.7	23
35	Raman Doping Profiles of Polyelectrolyte SWNTs in Solution. ACS Nano, 2011, 5, 9892-9897.	14.6	20
36	Dissolution and alkylation of industrially produced multi-walled carbon nanotubes. Carbon, 2011, 49, 170-175.	10.3	20

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37	Concentrated solutions of individualized single walled carbon nanotubes. Carbon, 2014, 67, 360-367.	10.3	20
38	First cation radical mixed-valence hybrid salts of the paramagnetic octahedral cluster Nb6Cl183â€“. Preparation, crystal structures, and conducting and magnetic properties of pentakis(2,3,6,7-tetramethyl-1,4,5,8-tetra-selena- and -thia-fulvalenium) hexachloro(dodeca-Âµ2-chloro-octahedro-hexaniobate). Journal of the Chemical Society Chemical Communications, 1987, , 330-332.	2.0	19
39	Covalent Functionalization of Carbon Nanotubes Through Organometallic Reduction and Electrophilic Attack. Journal of Nanoscience and Nanotechnology, 2007, 7, 3509-3513.	0.9	19
40	Substantial Improvement of Nanotube Processability by Freeze-Drying. Journal of Nanoscience and Nanotechnology, 2007, 7, 2633-2639.	0.9	19
41	Single layer nano graphene platelets derived from graphite nanofibres. Nanoscale, 2016, 8, 8810-8818.	5.6	19
42	Reductive dismantling and functionalization of carbon nanohorns. Chemical Communications, 2015, 51, 5017-5019.	4.1	18
43	A conductive tetramethyltetraselenafulvalenium salt based on a divalent oxalato-bridged bis-(Tetrafluorometallate) complex: (TMTSF)3[Ti2F8(C2O4)]. Synthetic Metals, 1988, 22, 201-207.	3.9	17
44	â€Eau de grapheneâ€•from a KC₈ graphite intercalation compound prepared by a simple mixing of graphite and molten potassium. Physica Status Solidi - Rapid Research Letters, 2016, 10, 895-899.	2.4	17
45	Uniform, non-interacting antiferromagnetic chains of spins in the 1:1 bis-ethylenedithiotetrathiafulvalenium salt of a monovalent hexarhenium chalcohalide cluster anion: (BEDT-TTF)+Â·(Re6Se5Cl9)â^'Â·(C3H7ON)2. Synthetic Metals, 1989, 32, 25-32.	3.9	16
46	Matrix isolation of fullerene-derived CO2 at ambient temperature. Chemical Physics Letters, 1998, 295, 481-486.	2.6	16
47	Highly Conducting, Sustainable, Nanographitic Rubber Composites. ACS Omega, 2018, 3, 1367-1373.	3.5	16
48	Resonant Raman scattering of graphite intercalation compounds KC₈, KC₂₄, and KC₃₆. Journal of Raman Spectroscopy, 2014, 45, 219-223.	2.5	15
49	Graphene/nickel nanoparticles composites from graphenide solutions. Journal of Colloid and Interface Science, 2015, 453, 28-35.	9.4	15
50	Metal-Insulator and Structural Phase Transition Observed by ESR Spectroscopy and X-Ray Diffraction inKC60. Physical Review Letters, 2001, 86, 4346-4349.	7.8	13
51	Conductivity of transparent electrodes made from interacting nanotubes. Applied Physics Letters, 2013, 103, 263106.	3.3	13
52	Size Control of Nanographene Supported Iron Oxide Nanoparticles Enhances Their Electrocatalytic Performance for the Oxygen Reduction and Oxygen Evolution Reactions. Journal of Physical Chemistry C, 2019, 123, 20774-20780.	3.1	13
53	Conductive graphene coatings synthesized from graphenide solutions. Carbon, 2017, 121, 217-225.	10.3	11
54	Electrochemical generation of the higher fullerene radicals C76-, C78- and C84- under oxygen- and moisture-free conditions and their observation by EPR. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 3119-3123.	1.7	10

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55	Determining the structure of graphene-based flakes from their morphotype. Carbon, 2017, 115, 128-133.	10.3	10
56	The role of functionalization on the colloidal stability of aqueous fullerene C60 dispersions prepared with fullerides. Carbon, 2021, 173, 1041-1047.	10.3	10
57	Title is missing!. Journal of Chemical Crystallography, 1998, 28, 529-537.	1.1	9
58	Supramolecular fullerene chemistry: synthesis, crystal structure and potassium intercalation of [(C60)][(C6H5)2]. Journal of Materials Chemistry, 2002, 12, 913-918.	6.7	9
59	Transparent electrodes made from carbon nanotube polyelectrolytes and application to acidic environments. Journal of Materials Research, 2015, 30, 2009-2017.	2.6	9
60	Degradation of Singleâ€Layer and Fewâ€Layer Graphene by Neutrophil Myeloperoxidase. Angewandte Chemie, 2018, 130, 11896-11901.	2.0	9
61	Optical signatures of bulk and solutions of KC8 and KC24. Journal of Applied Physics, 2015, 118, 044304.	2.5	8
62	From Food Waste to Efficient Bifunctional Nonprecious Electrocatalyst. Chemistry - A European Journal, 2017, 23, 15283-15288.	3.3	8
63	Graphenide Solutions: A Chemical Platform for Nanoparticleâ€“Nanocarbon Composites. Chemistry - A European Journal, 2018, 24, 16246-16250.	3.3	8
64	Hydroxide Ions Stabilize Open Carbon Nanotubes in Degassed Water. ACS Nano, 2018, 12, 8606-8615.	14.6	7
65	Thermal Oxidation of Carbonaceous Nanomaterials Revisited: Evidence of Mechanism Changes. Angewandte Chemie - International Edition, 2019, 58, 16013-16017.	13.8	7
66	Observation of large third-order optical susceptibility in (BEDT-TTF)4Re6Se5Cl9. Chemical Physics, 1990, 144, 299-303.	1.9	6
67	Buckminsterfulleride(1-) salts: synthesis, EPR, and the Jahn-Teller distortion of C60-. [Erratum to document cited in CA119:116920]. Journal of the American Chemical Society, 1994, 116, 6484-6484.	13.7	6
68	(Acetonitrile-N)(Î·5-cyclopentadienyl)bis(triphenylphosphine-P)ruthenium(II) Tetrafluoroborate. Acta Crystallographica Section C: Crystal Structure Communications, 1997, 53, 301-302.	0.4	6
69	Building Solids with Buckminsterfullerene (C60). Fullerenes, Nanotubes, and Carbon Nanostructures, 1998, 6, 731-741.	0.6	6
70	Thermal Oxidation of Carbonaceous Nanomaterials Revisited: Evidence of Mechanism Changes. Angewandte Chemie, 2019, 131, 16159-16163.	2.0	6
71	Anchoring conductive polymeric monomers on single-walled carbon nanotubes: towards covalently linked nanocomposites. New Journal of Chemistry, 2019, 43, 10482-10490.	2.8	6
72	Low-Temperature Phase Transitions in a Biphenylâ^'Fullerene Single Crystal: A Raman Study. Journal of Physical Chemistry B, 2003, 107, 4904-4911.	2.6	4

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73	Dissolution Douce of Single Walled Carbon Nanotubes. AIP Conference Proceedings, 2005, , .	0.4	4
74	Magnetic Ordering in Ultrasmall Potassium Ferrite Nanoparticles Grown on Graphene Nanoflakes. ACS Applied Materials & Interfaces, 2022, 14, 3130-3142.	8.0	4
75	Cation-radical salts of the paramagnetic hexanuclear octahedral halide cluster Nb6Cl183â˜; preparation, crystal structure, transport and magnetic properties of D5(Nb6Cl18)(CH2Cl2)0.5		