## Jean-Noël Rouzaud

List of Publications by Year in descending order

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105 papers 9,926 citations

52 h-index 98 g-index

105 all docs

105 docs citations

105 times ranked 10075 citing authors

| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Traces of fire in a 560,000-year-old occupation soil at Caune de l'Arago: response to the article by Professor Henry de Lumley. Comptes Rendus - Geoscience, 2022, 354, 47-50.  | 1.2  | O         |
| 2  | Search for early traces of fire in the Caune de l'Arago at Tautavel (Eastern Pyrenees, France), combining magnetic susceptibility measurements, microscopic observations, and Raman analysis. Comptes Rendus - Geoscience, 2021, 353, 247-264.                        | 1.2  | 8         |
| 3  | Temperatures reached by the roof structure of Notre-Dame de Paris in the fire of April 15th 2019 determined by Raman paleothermometry. , 2020, 352, 7-18.   |      | 16        |
| 4  | The color of refractory organic carbon. Bulletin - Societie Geologique De France, 2018, 189, 9.   | 2.2  | 1         |
| 5  | Ultrasonic treatment of glassy carbon for nanoparticle preparation. Ultrasonics Sonochemistry, 2017, 35, 615-622.   | 8.2  | 9         |
| 6  | A Raman $\hat{a}\in$ HRTEM study of the carbonization of wood: A new Raman-based paleothermometer dedicated to archaeometry. Carbon, 2016, 102, 319-329.  | 10.3 | 74        |
| 7  | Early Neanderthal constructions deep in Bruniquel Cave in southwestern France. Nature, 2016, 534, 111-114.  | 27.8 | 210       |
| 8  | Nanostructure characterization of carbide-derived carbons by morphological analysis of transmission electron microscopy images combined with physisorption and Raman spectroscopy. Carbon, 2016, 105, 314-322.  | 10.3 | 53        |
| 9  | Dynamic weakening and amorphization in serpentinite during laboratory earthquakes. Geology, 2016, 44, 607-610.  | 4.4  | 45        |
| 10 | The Raman-Derived Carbonization Continuum: A Tool to Select the Best Preserved Molecular Structures in Archean Kerogens. Astrobiology, 2016, 16, 407-417.   | 3.0  | 46        |
| 11 | Toward an experimental synthesis of the chondritic insoluble organic matter. Meteoritics and Planetary Science, 2015, 50, 1408-1422.  | 1.6  | 10        |
| 12 | Carbons at the heart of questions on energy and environment: A nanostructural approach. Comptes Rendus - Geoscience, 2015, 347, 124-133.  | 1.2  | 54        |
| 13 | Characterizing various types of defects in nuclear graphite using Raman scattering: Heat treatment, ion irradiation and polishing. Carbon, 2015, 95, 364-373.   | 10.3 | 167       |
| 14 | Raman microspectroscopy characterization of carbon blacks: Spectral analysis and structural information. Carbon, 2015, 84, 479-490.   | 10.3 | 386       |
| 15 | Origin of insoluble organic matter in type $1$ and $2$ chondrites: New clues, new questions. Geochimica Et Cosmochimica Acta, 2014, 136, 80-99.   | 3.9  | 68        |
| 16 | Influence of surface fibre properties and textural organization of a pyrocarbon interphase on the interfacial shear stress of SiC/SiC minicomposites reinforced with Hi-Nicalon S and Tyranno SA3 fibres. Journal of the European Ceramic Society, 2014, 34, 179-188. | 5.7  | 63        |
| 17 | Graphitization at low temperatures (600–1200°C) in the presence of iron implications in planetology.<br>Carbon, 2014, 66, 178-190.  | 10.3 | 57        |
| 18 | Evolution of Barnett Shale organic carbon structure and nanostructure with increasing maturation. Organic Geochemistry, 2014, 71, 7-16.   | 1.8  | 170       |

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|----|---|------|-----------|
| 19 | Multiple generations of carbonaceous material deposited in Apex chert by basin-scale pervasive hydrothermal fluid flow. Gondwana Research, 2014, 25, 284-289.   | 6.0  | 27        |
| 20 | Probing structures of soot formed in premixed flames of methane, ethylene and benzene. Proceedings of the Combustion Institute, 2013, 34, 1885-1892.  | 3.9  | 80        |
| 21 | A new approach to characterize the nanostructure of activated carbons from mathematical morphology applied to high resolution transmission electron microscopy images. Carbon, 2013, 52, 239-258.     | 10.3 | 65        |
| 22 | Wet Chemical Method for Making Graphene-like Films from Carbon Black. ACS Applied Materials & Interfaces, 2012, 4, 4491-4498.   | 8.0  | 44        |
| 23 | Transmission Electron Microscopy of CONCORDIA UltraCarbonaceous Antarctic MicroMeteorites (UCAMMs): Mineralogical properties. Geochimica Et Cosmochimica Acta, 2012, 76, 68-82.                       | 3.9  | 78        |
| 24 | Comparative XRD, Raman, and TEM Study on Graphitization of PBO-Derived Carbon Fibers. Journal of Physical Chemistry C, 2012, 116, 257-268.  | 3.1  | 183       |
| 25 | Influence of the inherent metal species on the graphitization of methane-based carbon nanofibers. Carbon, 2012, 50, 5387-5394.  | 10.3 | 19        |
| 26 | Nanostructure evolution in heat-treated porous carbons derived from PBO polymer. Journal of Alloys and Compounds, 2012, 536, S464-S468.   | 5.5  | 7         |
| 27 | Structure, composition, and location of organic matter in the enstatite chondrite Sahara 97096 (EH3). Meteoritics and Planetary Science, 2012, 47, 8-29.  | 1.6  | 33        |
| 28 | Graphitization of highly porous carbons derived from poly(p-phenylene benzobisoxazole). Carbon, 2012, 50, 2929-2940.  | 10.3 | 33        |
| 29 | High resolution TEM of chondritic carbonaceous matter: Metamorphic evolution and heterogeneity. Meteoritics and Planetary Science, 2012, 47, 345-362.   | 1.6  | 42        |
| 30 | How to obtain a reliable structural characterization of polished graphitized carbons by Raman microspectroscopy. Journal of Raman Spectroscopy, 2012, 43, 207-211.                                    | 2.5  | 83        |
| 31 | Silica encapsulation of luminescent silicon nanoparticles: stable and biocompatible nanohybrids.<br>Journal of Nanoparticle Research, 2012, 14, 1.  | 1.9  | 5         |
| 32 | Implications of in situ calcification for photosynthesis in a ~3.3Ga-old microbial biofilm from the Barberton greenstone belt, South Africa. Earth and Planetary Science Letters, 2011, 310, 468-479. | 4.4  | 75        |
| 33 | Volcaniclastic habitats for early life on Earth and Mars: A case study from $\hat{a}^{1/4}3.5$ Ga-old rocks from the Pilbara, Australia. Planetary and Space Science, 2011, 59, 1093-1106.            | 1.7  | 63        |
| 34 | Complementary X-ray scattering and high resolution imaging of nanostructure development in thermally treated PBO fibers. Carbon, 2011, 49, 2960-2970.   | 10.3 | 20        |
| 35 | High temperature iron-based catalysts for hydrogen and nanostructured carbon production by methane decomposition. International Journal of Hydrogen Energy, 2011, 36, 7832-7843.                      | 7.1  | 111       |
| 36 | The effect of temperature on soot properties in premixed methane flames. Combustion and Flame, 2010, 157, 1959-1965.  | 5.2  | 93        |

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|----|---|------|-----------|
| 37 | Characterization of graphite implanted with chlorine ions using combined Raman microspectrometry and transmission electron microscopy on thin sections prepared by focused ion beam. Carbon, 2010, 48, 1244-1251.   | 10.3 | 35        |
| 38 | Structures, origin and evolution of various carbon phases in the ureilite Northwest Africa 4742 compared with laboratory-shocked graphite. Geochimica Et Cosmochimica Acta, 2010, 74, 4167-4185.  | 3.9  | 43        |
| 39 | Extreme Deuterium Excesses in Ultracarbonaceous Micrometeorites from Central Antarctic Snow. Science, 2010, 328, 742-745.   | 12.6 | 160       |
| 40 | Effect of boron incorporation on the structure and electrical properties of diamond-like carbon films deposited by femtosecond and nanosecond pulsed laser ablation. Thin Solid Films, 2009, 518, 1470-1474.  | 1,8  | 18        |
| 41 | Multiscale organisation of organic matter associated with gold and uranium minerals in the Witwatersrand basin, South Africa. International Journal of Coal Geology, 2009, 78, 77-88.   | 5.0  | 23        |
| 42 | Precursor and metamorphic condition effects on Raman spectra of poorly ordered carbonaceous matter in chondrites and coals. Earth and Planetary Science Letters, 2009, 287, 185-193.  | 4.4  | 113       |
| 43 | High-Resolution Transmission Electron Microscopy Studies of Graphite Materials Prepared by High-Temperature Treatment of Unburned Carbon Concentrates from Combustion Fly Ashes. Energy & Energy & Fuels, 2009, 23, 942-950.  | 5.1  | 23        |
| 44 | New experimental constraints on the composition and structure of tholins. Icarus, 2008, 198, 218-231.   | 2.5  | 144       |
| 45 | Molecular evidence for life in the 3.5Âbillion year old Warrawoona chert. Earth and Planetary Science<br>Letters, 2008, 272, 476-480.   | 4.4  | 86        |
| 46 | Molecular study of insoluble organic matter in Kainsaz CO3 carbonaceous chondrite: Comparison with CI and CM IOM. Meteoritics and Planetary Science, 2008, 43, 1099-1111.   | 1.6  | 22        |
| 47 | Comparison of quantification methods to measure fireâ€derived (black/elemental) carbon in soils and sediments using reference materials from soil, water, sediment and the atmosphere. Global Biogeochemical Cycles, 2007, 21, .                                      | 4.9  | 483       |
| 48 | Nanodiamond nucleation below 2273K at 15GPa from carbons with different structural organizations. Carbon, 2007, 45, 636-648.  | 10.3 | 83        |
| 49 | Black carbon yields and types in forest and cultivated sandy soils (Landes de Gascogne, France) as determined with different methods: Influence of change in land use. Organic Geochemistry, 2006, 37, 1185-1189.   | 1.8  | 23        |
| 50 | Graphitization of carbons synthesized in a confined geometry. Carbon, 2006, 44, 3348-3352.  | 10.3 | 63        |
| 51 | Atom transfer radical polymerization (ATRP) initiated by aryl diazonium salts: a new route for surface modification of multiwalled carbon nanotubes by tethered polymer chains. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 287, 217-221. | 4.7  | 78        |
| 52 | Nanostructured coatings of metal containing diamond-like carbon films deposited by femtosecond pulsed laser ablation. Surface and Coatings Technology, 2006, 200, 6272-6278.  | 4.8  | 23        |
| 53 | HIGH RESOLUTION TRANSMISSION ELECTRON MICROSCOPY IMAGE ANALYSIS OF DISORDERED CARBONS USED FOR ELECTROCHEMICAL STORAGE OF ENERGY. , 2006, , 411-424.  |      | 1         |
| 54 | Evaluation of Raman spectroscopy to detect fullerenes in geological materials. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2005, 61, 2364-2367.  | 3.9  | 10        |

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|----|---|-------------|--------------|
| 55 | Maturation grade of coals as revealed by Raman spectroscopy: Progress and problems. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2005, 61, 2368-2377.                   | 3.9         | 176          |
| 56 | Correlation of the irreversible lithium capacity with the active surface area of modified carbons. Carbon, 2005, 43, 2160-2167.   | 10.3        | 112          |
| 57 | Carbon aerogels, cryogels and xerogels: Influence of the drying method on the textural properties of porous carbon materials. Carbon, 2005, 43, 2481-2494.  | 10.3        | 396          |
| 58 | Size discontinuity between interstellar and chondritic aromatic structures: A high-resolution transmission electron microscopy study. Geochimica Et Cosmochimica Acta, 2005, 69, 3911-3917.       | 3.9         | 36           |
| 59 | Experimental study of the microtextural and structural transformations of carbonaceous materials under pressure and temperature. European Journal of Mineralogy, 2004, 15, 937-951.               | 1.3         | 112          |
| 60 | The first in situ 7Li NMR study of the reversible lithium insertion mechanism in disorganised carbons. Journal of Physics and Chemistry of Solids, 2004, 65, 245-251.                             | 4.0         | 64           |
| 61 | A better understanding of the irreversible lithium insertion mechanisms in disordered carbons. Journal of Physics and Chemistry of Solids, 2004, 65, 211-217.                                     | 4.0         | 47           |
| 62 | Structural and electrochemical characterisation of nitrogen enriched carbons produced by the co-pyrolysis of coal-tar pitch with polyacrylonitrile. Electrochimica Acta, 2004, 49, 423-432.       | 5.2         | 64           |
| 63 | HRTEM study of activated carbons prepared by alkali hydroxide activation of anthracite. Carbon, 2004, 42, 1305-1310.  | 10.3        | 36           |
| 64 | Carbon nanotubes produced by aerosol pyrolysis: growth mechanisms and post-annealing effects. Diamond and Related Materials, 2004, 13, 1266-1269.   | 3.9         | 68           |
| 65 | Coking properties of perhydrous low-rank vitrains. Influence of pyrolysis conditions. Journal of Analytical and Applied Pyrolysis, 2003, 67, 263-276.   | 5.5         | 15           |
| 66 | On the characterization of disordered and heterogeneous carbonaceous materials by Raman spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2003, 59, 2267-2276. | 3.9         | 724          |
| 67 | Structural Modeling of Porous Carbons:Â Constrained Reverse Monte Carlo Method. Langmuir, 2003, 19, 8565-8582.  | 3.5         | 208          |
| 68 | In Situ 7Li-Nuclear Magnetic Resonance Observation of Reversible Lithium Insertion into Disordered Carbons. Electrochemical and Solid-State Letters, 2003, 6, A225.                               | 2.2         | 88           |
| 69 | The first in situ 7Li nuclear magnetic resonance study of lithium insertion in hard-carbon anode materials for Li-ion batteries. Journal of Chemical Physics, 2003, 118, 6038-6045.               | 3.0         | 111          |
| 70 | Abundance and composition of the refractory organic fraction of an ancient, tropical soil (Pointe) Tj ETQq0 0 0 r   | gBT_{8}Over | ock 10 Tf 50 |
| 71 | Graphitization in a high-pressure, low-temperature metamorphic gradient: a Raman microspectroscopy and HRTEM study. Contributions To Mineralogy and Petrology, 2002, 143, 19-31.                  | 3.1         | 287          |
| 72 | Raman spectra of carbonaceous material in metasediments: a new geothermometer. Journal of Metamorphic Geology, 2002, 20, 859-871.   | 3.4         | 934          |

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| 73 | Quantitative high-resolution transmission electron microscopy: a promising tool for carbon materials characterization. Fuel Processing Technology, 2002, 77-78, 229-235.             | 7.2  | 103       |
| 74 | Carbon nanoparticles from laser pyrolysis. Carbon, 2002, 40, 2775-2789.  | 10.3 | 133       |
| 75 | Evaluation of a protocol for the quantification of black carbon in sediments. Global Biogeochemical Cycles, 2001, 15, 881-890.   | 4.9  | 341       |
| 76 | Improved Molecular Models for Porous Carbons. Studies in Surface Science and Catalysis, 2001, 132, 647-652.  | 1.5  | 30        |
| 77 | Influence of the Pyrolysis Conditions on the Nature of Lithium Inserted in Hard Carbons. Journal of Physical Chemistry A, 2001, 105, 5794-5800.                                      | 2.5  | 30        |
| 78 | Optical properties of synthetic carbon nanoparticles as model of cosmic dust. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2001, 57, 797-814.              | 3.9  | 25        |
| 79 | Surface functionality and porosity of activated carbons obtained from chemical activation of wood. Carbon, 2000, 38, 669-674.  | 10.3 | 193       |
| 80 | A small angle X-ray scattering study on the porosity of anthracites. Carbon, 2000, 38, 1391-1400.  | 10.3 | 31        |
| 81 | On the optically biaxial character and heterogeneity of anthracites. International Journal of Coal<br>Geology, 2000, 44, 227-250.  | 5.0  | 65        |
| 82 | Influence of Pyrolysis Conditions on the Performance of Hard Carbons as Anodes for Lithium Batteries. Molecular Crystals and Liquid Crystals, 2000, 340, 431-436.                    | 0.3  | 4         |
| 83 | Chemical structure and sources of the macromolecular, resistant, organic fraction isolated from a forest soil (Lacadée, south-west France). Organic Geochemistry, 2000, 31, 813-827. | 1.8  | 122       |
| 84 | Calculation of reflectance values for two models of texture of carbon materials. International Journal of Coal Geology, 1999, 38, 333-348.   | 5.0  | 33        |
| 85 | Transmission electron microscopy studies on carbon materials prepared by mechanical milling.<br>Carbon, 1999, 37, 1941-1959.   | 10.3 | 113       |
| 86 | Influence of the atmosphere in the chemical activation of wood by phosphoric acid. Carbon, 1998, 36, 306-309.  | 10.3 | 125       |
| 87 | Influence of anthracite pretreatment in the preparation of activated carbons. Fuel, 1998, 77, 495-502.   | 6.4  | 25        |
| 88 | Mechanism of Lithium Insertion in Different Kinds of Carbons. Molecular Crystals and Liquid Crystals, 1998, 310, 359-364.  | 0.3  | 5         |
| 89 | A Comparative Study of Silicate-Oxide Nanocomposites. Molecular Crystals and Liquid Crystals, 1998, 311, 295-301.  | 0.3  | 0         |
| 90 | Raman microspectrometry of accumulated non-graphitized solid bitumens. Journal of Raman Spectroscopy, 1997, 28, 717-724.   | 2.5  | 35        |

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|-----|--|------|-----------|
| 91  | Microtextural study of cokes from hydropyrolysis of coals. Fuel, 1995, 74, 201-207.  | 6.4  | 6         |
| 92  | Application of Fourier self-deconvolution to the FT-i.r. characterization of coals and their N-methyl 2-pyrrolidinone extraction products. Fuel, 1995, 74, 217-225.                  | 6.4  | 35        |
| 93  | Natural graphitization of anthracite: Experimental considerations. Carbon, 1995, 33, 679-691.  | 10.3 | 127       |
| 94  | Mechanisms of graphite formation from kerogen: experimental evidence. International Journal of Coal Geology, 1995, 28, 1-36.   | 5.0  | 175       |
| 95  | Structural and adsorption properties of carbons synthesized within taeniolite matrices. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 493-497.                    | 1.7  | 10        |
| 96  | Different mechanisms of coke microtexture formation during coking coal carbonization. Fuel, 1994, 73, 795-809.   | 6.4  | 39        |
| 97  | Influence of the oxidation of coals of different rank on coke microtexture and other relevant properties. Fuel, 1994, 73, 810-815.   | 6.4  | 7         |
| 98  | Graphitization of high rank coalsâ€"the role of shear strain: experimental considerations. Organic Geochemistry, 1991, 17, 585-596.  | 1.8  | 32        |
| 99  | Contribution of transmission electron microscopy to the study of the coal carbonization processes. Fuel Processing Technology, 1990, 24, 55-69.                                      | 7.2  | 42        |
| 100 | Organic geochemistry of precambrian shales and schists (Bohemian massif, Central Europe). Organic Geochemistry, 1990, 16, 865-872.   | 1.8  | 26        |
| 101 | Structure, microtexture, and optical properties of anthracene and saccharose-based carbons. Carbon, 1989, 27, 517-529.   | 10.3 | 228       |
| 102 | Coke properties and their microtexture Part I: Microtextural analysis: A guide for cokemaking. Fuel Processing Technology, 1988, 20, 143-154.  | 7.2  | 33        |
| 103 | Coke properties and their microtexture. Part III: First results about relationship between microtexture and reactivity of some cokes. Fuel Processing Technology, 1988, 20, 163-175. | 7.2  | 22        |
| 104 | Graphitization of Korean anthracites as studied by transmission electron microscopy and X-ray diffraction. International Journal of Coal Geology, 1987, 8, 375-393.                  | 5.0  | 59        |
| 105 | Carbon films: Structure and microtexture (optical and electron microscopy, Raman spectroscopy).<br>Thin Solid Films, 1983, 105, 75-96.   | 1.8  | 213       |