Mark A Sephton

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Mass Spectrometric Fingerprints of Bacteria and Archaea for Life Detection on Icy Moons. Astrobiology, 2022, 22, 143-157. | 3.0 | 11 |
| 2 | Mineral Matrix Effects on Pyrolysis Products of Kerogens Infer Difficulties in Determining Biological Provenance of Macromolecular Organic Matter at Mars. Astrobiology, 2022, 22, 520-540. | 3.0 | 6 |
| 3 | COSPAR Sample Safety Assessment Framework (SSAF). Astrobiology, 2022, 22, S-186-S-216. | 3.0 | 7 |
| 4 | Environmental screening of water associated with shale gas extraction by fluorescence excitation emission matrix. Environmental Science: Water Research and Technology, 2022, 8, 2196-2206. | 2.4 | 1 |
| 5 | Artificial Maturation of Iron- and Sulfur-Rich Mars Analogues: Implications for the Diagenetic Stability of Biopolymers and Their Detection with Pyrolysis–Gas Chromatography–Mass Spectrometry. Astrobiology, 2021, 21, 199-218. | 3.0 | 5 |
| 6 | Quantifying Preservation Potential: Lipid Degradation in a Mars-Analog Circumneutral Iron Deposit. Astrobiology, 2021, 21, 638-654. | 3.0 | 4 |
| 7 | Pyrolysis of Carboxylic Acids in the Presence of Iron Oxides: Implications for Life Detection on Missions to Mars. Astrobiology, 2021, 21, 673-691. | 3.0 | 5 |
| 8 | Transformation of Cyanobacterial Biomolecules by Iron Oxides During Flash Pyrolysis: Implications for Mars Life-Detection Missions. Astrobiology, 2021, 21, 1363-1386. | 3.0 | 2 |
| 9 | Heterogeneity within refractory organic matter from CM2 Carbonaceous Chondrites: Evidence from Raman spectroscopy. Earth and Planetary Science Letters, 2021, 574, 117149. | 4.4 | 5 |
| 10 | Mapping hydrocarbon charge-points in the Wessex Basin using seismic, geochemistry and mineral magnetics. Marine and Petroleum Geology, 2020, 111, 510-528. | 3.3 | 12 |
| 11 | Organic Records of Early Life on Mars: The Role of Iron, Burial, and Kinetics on Preservation. Astrobiology, 2020, 20, 53-72. | 3.0 | 16 |
| 12 | Solid Phase Micro Extraction: Potential for Organic Contamination Control for Planetary Protection of Life-Detection Missions to the Icy Moons of the Outer Solar System. Astrobiology, 2019, 19, 1153-1166. | 3.0 | 1 |
| 13 | Effects of Oxygen-Containing Salts on the Detection of Organic Biomarkers on Mars and in Terrestrial Analog Soils. Astrobiology, 2019, 19, 711-721. | 3.0 | 24 |
| 14 | Indigenous Organicâ€Oxidized Fluid Interactions in the Tissint Mars Meteorite. Geophysical Research Letters, 2019, 46, 3090-3098. | 4.0 | 25 |
| 15 | Biological Contamination Prevention for Outer Solar System Moons of Astrobiological Interest: What Do We Need to Know?. Astrobiology, 2019, 19, 951-974. | 3.0 | 24 |
| 16 | Identification of fossil worm tubes from Phanerozoic hydrothermal vents and cold seeps. Journal of Systematic Palaeontology, 2019, 17, 287-329. | 1.5 | 30 |
| 17 | Using geophysics and geochemistry to find life in the solar system. First Break, 2019, 37, 79-80. | 0.4 | 0 |
| 18 | Transitory microbial habitat in the hyperarid Atacama Desert. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2670-2675. | 7.1 | 172 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Detecting Nonvolatile Life- and Nonlife-Derived Organics in a Carbonaceous Chondrite Analogue with a New Multiplex Immunoassay and Its Relevance for Planetary Exploration. Astrobiology, 2018, 18, 1041-1056. | 3.0 | 20 |
| 20 | A Method for Choosing the Best Samples for Mars Sample Return. Astrobiology, 2018, 18, 556-570. | 3.0 | 3 |
| 21 | The Search for Hesperian Organic Matter on Mars: Pyrolysis Studies of Sediments Rich in Sulfur and Iron. Astrobiology, 2018, 18, 454-464. | 3.0 | 16 |
| 22 | Role of Minerals in Hydrogen Sulfide Generation during Steam-Assisted Recovery of Heavy Oil. Energy & Fuels, 2018, 32, 4651-4654. | 5.1 | 8 |
| 23 | How to Detect Life on Icy Moons. Astrobiology, 2018, 18, 843-855. | 3.0 | 30 |
| 24 | Survivability of 1 hloronapthalene During Simulated Early Diagenesis: Implications for Chlorinated Hydrocarbon Detection on Mars. Journal of Geophysical Research E: Planets, 2018, 123, 2790-2802. | 3.6 | 6 |
| 25 | Selecting Mars samples to return to Earth. Astronomy and Geophysics, 2018, 59, 1.36-1.38. | 0.2 | 1 |
| 26 | Biomarker analysis of the upper Jurassic Naokelekan and Barsarin formations in the Miran Well-2, Miran oil field, Kurdistan region, Iraq. Arabian Journal of Geosciences, 2018, 11, 1. | 1.3 | 8 |
| 27 | The Fate of Lipid Biosignatures in a Mars-Analogue Sulfur Stream. Scientific Reports, 2018, 8, 7586. | 3.3 | 24 |
| 28 | Perchlorateâ€Driven Combustion of Organic Matter During Pyrolysisâ€Gas Chromatographyâ€Mass Spectrometry: Implications for Organic Matter Detection on Earth and Mars. Journal of Geophysical Research E: Planets, 2018, 123, 1901-1909. | 3.6 | 12 |
| 29 | Organic compound-mineral interactions: Using flash pyrolysis to monitor the adsorption of fatty acids on calcite. Journal of Analytical and Applied Pyrolysis, 2017, 123, 184-193. | 5.5 | 5 |
| 30 | Effects of Pressure on Model Compounds of Meteorite Organic Matter. ACS Earth and Space Chemistry, 2017, 1, 475-482. | 2.7 | 2 |
| 31 | Effect of Hydration State of Martian Perchlorate Salts on Their Decomposition Temperatures During Thermal Extraction. Journal of Geophysical Research E: Planets, 2017, 122, 2793-2802. | 3.6 | 5 |
| 32 | Organic Matter Detection on Mars by Pyrolysis-FTIR: An Analysis of Sensitivity and Mineral Matrix Effects. Astrobiology, 2016, 16, 831-845. | 3.0 | 14 |
| 33 | Sporopollenin, a Natural Copolymer, is Robust under High Hydrostatic Pressure. Macromolecular Chemistry and Physics, 2016, 217, 2494-2500. | 2.2 | 19 |
| 34 | Pollen and spores as biological recorders of past ultraviolet irradiance. Scientific Reports, 2016, 6, 39269. | 3.3 | 27 |
| 35 | Organic Matter Responses to Radiation under Lunar Conditions. Astrobiology, 2016, 16, 900-912. | 3.0 | 5 |
| 36 | PRESSURE EFFECTS IN POLYCYCLIC AROMATIC NITROGENATED HETEROCYCLES (PANHs): DIAGNOSTIC QUALITIES AND COSMOBAROMETRY POTENTIAL. Astrophysical Journal, 2016, 819, 64. | 4.5 | 1 |

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| 37 | Rapid habitability assessment of Mars samples by pyrolysis-FTIR. Planetary and Space Science, 2016, 121, 60-75. | 1.7 | 6 |
| 38 | Single-crystal X-ray diffraction study of synthetic sodium–hydronium jarosite. Physics and Chemistry of Minerals, 2016, 43, 377-386. | 0.8 | 7 |
| 39 | Minimising hydrogen sulphide generation during steam assisted production of heavy oil. Scientific Reports, 2015, 5, 8159. | 3.3 | 13 |
| 40 | Formation of magnetic minerals at hydrocarbon-generation conditions. Marine and Petroleum Geology, 2015, 68, 509-519. | 3.3 | 25 |
| 41 | Sulfate Minerals: A Problem for the Detection of Organic Compounds on Mars?. Astrobiology, 2015, 15, 247-258. | 3.0 | 31 |
| 42 | The Moon as a Recorder of Organic Evolution in the Early Solar System: A Lunar Regolith Analog Study. Astrobiology, 2015, 15, 154-168. | 3.0 | 18 |
| 43 | Multiple Cosmic Sources for Meteorite Macromolecules?. Astrobiology, 2015, 15, 779-786. | 3.0 | 5 |
| 44 | Terrestrial acidification during the end-Permian biosphere crisis?. Geology, 2015, 43, 159-162. | 4.4 | 35 |
| 45 | The chances of detecting life on Mars. Planetary and Space Science, 2015, 112, 15-22. | 1.7 | 11 |
| 46 | A new rapid method for shale oil and shale gas assessment. Fuel, 2015, 153, 231-239. | 6.4 | 54 |
| 47 | Subcritical water extraction of organic matter from sedimentary rocks. Analytica Chimica Acta, 2015, 879, 48-57. | 5.4 | 38 |
| 48 | Organic geochemical characteristics of black shales across the Ordovician–Silurian boundary in the Holy Cross Mountains, central Poland. Marine and Petroleum Geology, 2015, 66, 1042-1055. | 3.3 | 28 |
| 49 | Heat, Aromatic Units, and Iron-Rich Phyllosilicates: A Mechanism for Making Macromolecules in the Early Solar System. Astrobiology, 2015, 15, 787-792. | 3.0 | 12 |
| 50 | Pollen and spores as a passive monitor of ultraviolet radiation. Frontiers in Ecology and Evolution, 2014, 2, . | 2.2 | 35 |
| 51 | Statistics Provide Guidance for Indigenous Organic Carbon Detection on Mars Missions. Astrobiology, 2014, 14, 706-713. | 3.0 | 6 |
| 52 | The Effects of Minerals on Heavy Oil and Bitumen Chemistry When Recovered Using Steam-Assisted Methods. , 2014, , . | | 6 |
| 53 | AN ORGANIC COSMO-BAROMETER: DISTINCT PRESSURE AND TEMPERATURE EFFECTS FOR METHYL SUBSTITUTED POLYCYCLIC AROMATIC HYDROCARBONS. Astrophysical Journal, 2014, 784, 98. | 4.5 | 5 |
| 54 | Changes in spore chemistry and appearance with increasing maturity. Review of Palaeobotany and Palynology, 2014, 201, 41-46. | 1.5 | 46 |

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| 55 | Astrobiology can help space science, education and the economy. Space Policy, 2014, 30, 146-148. | 1.5 | 3 |
| 56 | New estimates of the production of volatile gases from ablating carbonaceous micrometeoroids at Earth and Mars during an E-belt-type Late Heavy Bombardment. Geochimica Et Cosmochimica Acta, 2014, 145, 175-205. | 3.9 | 11 |
| 57 | In-situ vibrational optical rotatory dispersion of molecular organic crystals at high pressures. Analytica Chimica Acta, 2014, 842, 51-56. | 5.4 | 3 |
| 58 | Searching for Life on Mars: Degradation of Surfactant Solutions Used in Organic Extraction Experiments. Astrobiology, 2014, 14, 733-752. | 3.0 | 7 |
| 59 | Extracting organic matter on Mars: A comparison of methods involving subcritical water, surfactant solutions and organic solvents. Planetary and Space Science, 2014, 99, 19-27. | 1.7 | 12 |
| 60 | Perchlorateâ€induced combustion of organic matter with variable molecular weights: Implications for Mars missions. Geophysical Research Letters, 2014, 41, 7453-7460. | 4.0 | 17 |
| 61 | A magnetic solution to the Mupe Bay mystery. Marine and Petroleum Geology, 2013, 46, 165-172. | 3.3 | 4 |
| 62 | Correlating biodegradation to magnetization in oil bearing sedimentary rocks. Geochimica Et Cosmochimica Acta, 2013, 112, 146-165. | 3.9 | 25 |
| 63 | The effects of oil on As(V) adsorption on illite, kaolinite, montmorillonite and chlorite. Geochimica Et Cosmochimica Acta, 2013, 121, 487-502. | 3.9 | 44 |
| 64 | Biomass preservation in impact melt ejecta. Nature Geoscience, 2013, 6, 1018-1022. | 12.9 | 28 |
| 65 | High temperature reactions of water with heavy oil and bitumen: Insights into aquathermolysis chemistry during steam-assisted recovery. Fuel, 2013, 113, 426-434. | 6.4 | 39 |
| 66 | Searching for biomolecules on Mars: Considerations for operation of a life marker chip instrument. Planetary and Space Science, 2013, 86, 66-74. | 1.7 | 17 |
| 67 | Shock synthesis of amino acids from impacting cometary and icy planet surface analogues. Nature Geoscience, 2013, 6, 1045-1049. | 12.9 | 129 |
| 68 | Selecting samples for Mars sample return: Triage by pyrolysis–FTIR. Planetary and Space Science, 2013, 78, 45-51. | 1.7 | 10 |
| 69 | On the Origins of Deep Hydrocarbons. Reviews in Mineralogy and Geochemistry, 2013, 75, 449-465. | 4.8 | 76 |
| 70 | Aromatic units from the macromolecular material in meteorites: Molecular probes of cosmic environments. Geochimica Et Cosmochimica Acta, 2013, 107, 231-241. | 3.9 | 9 |
| 71 | Lithium isotopes as indicators of meteorite parent body alteration. Meteoritics and Planetary Science, 2013, 48, 872-878. | 1.6 | 9 |
| 72 | A Bayesian statistical assessment of representative samples for asteroidal or meteoritical material. Meteoritics and Planetary Science, 2013, 48, 976-996. | 1.6 | 6 |

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| 73 | Type IV Kerogens as Analogues for Organic Macromolecular Materials in Aqueously Altered Carbonaceous Chondrites. Astrobiology, 2013, 13, 324-333. | 3.0 | 22 |
| 74 | Quantitative Laboratory Assessment Of Aquathermolysis Chemistry During Steam-assisted Recovery Of Heavy Oils And Bitumen, With A Focus On Sulfur. , 2013, , . | | 4 |
| 75 | Insights into the nature of cometary organic matter from terrestrial analogues. International Journal of Astrobiology, 2012, 11, 83-92. | 1.6 | 4 |
| 76 | Amino acid analyses of type 3 chondrites Colony, Ornans, Chainpur, and Bishunpur. Meteoritics and Planetary Science, 2012, 47, 1502-1516. | 1.6 | 25 |
| 77 | Magnetic characterization of oil sands at Osmington Mills and Mupe Bay, Wessex Basin, UK. Geological Society Special Publication, 2012, 371, 189-198. | 1.3 | 14 |
| 78 | Development status of the life marker chip instrument for ExoMars. Planetary and Space Science, 2012, 72, 129-137. | 1.7 | 35 |
| 79 | Potential failure of life detection experiments on Mars resulting from adsorption of organic compounds on to common instrument materials. Planetary and Space Science, 2012, 73, 262-270. | 1.7 | 5 |
| 80 | Extrasolar planets and false atmospheric biosignatures: The role of micrometeoroids. Planetary and Space Science, 2012, 73, 233-242. | 1.7 | 29 |
| 81 | Organic geochemistry of late Jurassic paleosols (Dirt Beds) of Dorset, UK. Marine and Petroleum Geology, 2012, 37, 41-52. | 3.3 | 17 |
| 82 | A novel palaeoaltimetry proxy based on spore and pollen wall chemistry. Earth and Planetary Science Letters, 2012, 353-354, 22-28. | 4.4 | 35 |
| 83 | Pyrolysis and mass spectrometry studies of meteoritic organic matter. Mass Spectrometry Reviews, 2012, 31, 560-569. | 5.4 | 30 |
| 84 | Formation of a polyalkyl macromolecule from the hydrolysable component within sporopollenin during heating/pyrolysis experiments with Lycopodium spores. Journal of Analytical and Applied Pyrolysis, 2012, 95, 138-144. | 5.5 | 44 |
| 85 | Fluorescence spectroscopy for the detection of life in the Salten Skov Mars regolith analogue. Planetary and Space Science, 2012, 68, 42-47. | 1.7 | 2 |
| 86 | Spectrofluorometric analysis of amino acid mixtures: Implications for future space missions. Planetary and Space Science, 2012, 60, 336-341. | 1.7 | 2 |
| 87 | Extraction of polar and nonpolar biomarkers from the martian soil using aqueous surfactant solutions. Planetary and Space Science, 2012, 67, 109-118. | 1.7 | 9 |
| 88 | The contribution of sulphur dioxide from ablating micrometeorites to the atmospheres of Earth and Mars. Geochimica Et Cosmochimica Acta, 2011, 75, 1704-1717. | 3.9 | 20 |
| 89 | Fungal virulence at the time of the end-Permian biosphere crisis?. Geology, 2011, 39, 883-886. | 4.4 | 59 |
| 90 | Extraction of amino acids from soils close to the Mars Desert Research Station (MDRS), Utah. International Journal of Astrobiology, 2011, 10, 231-238. | 1.6 | 24 |

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| 91 | UV-B absorbing pigments in spores: biochemical responses to shade in a high-latitude birch forest and implications for sporopollenin-based proxies of past environmental change. Polar Research, 2011, 30, 8312. | 1.6 | 38 |
| 92 | Penetrators for in situ subsurface investigations of Europa. Advances in Space Research, 2011, 48, 725-742. | 2.6 | 51 |
| 93 | Organic host analogues and the search for life on Mars. International Journal of Astrobiology, 2011, 10, 31-44. | 1.6 | 26 |
| 94 | Astrobiology and habitability studies in preparation for future Mars missions: trends from investigating minerals, organics and biota. International Journal of Astrobiology, 2011, 10, 239-253. | 1.6 | 41 |
| 95 | Meteoritics. Encyclopedia of Earth Sciences Series, 2011, , 568-574. | 0.1 | 0 |
| 96 | New Solvents for Space Missions: Utility for Life Detection Instruments and Notable Terrestrial Applications. Recent Patents on Space Technology, 2011, 1, 7-11. | 0.1 | 0 |
| 97 | New Solvents for Space Missions: Utility for Life Detection Instruments and Notable Terrestrial Applications. Recent Patents on Space Technology, 2011, 1, 7-11. | 0.1 | 2 |
| 98 | Novel solvent systems for in situ extraterrestrial sample analysis. Planetary and Space Science, 2010, 58, 1470-1474. | 1.7 | 19 |
| 99 | Hydropyrolysis over a platinum catalyst as a preparative technique for the compoundâ€specific carbon isotope ratio measurement of C ₂₇ steroids. Rapid Communications in Mass Spectrometry, 2010, 24, 501-505. | 1.5 | 7 |
| 100 | Meteorite gases and planetary atmospheres. Astronomy and Geophysics, 2010, 51, 5.21-5.22. | 0.2 | 24 |
| 101 | Two Rovers to the Same Site on Mars, 2018: Possibilities for Cooperative Science. Astrobiology, 2010, 10, 663-685. | 3.0 | 5 |
| 102 | Thermochemolysis of the Murchison meteorite: identification of oxygen bound and occluded units in the organic macromolecule. International Journal of Astrobiology, 2010, 9, 201-208. | 1.6 | 9 |
| 103 | The effect of crude oil on arsenate adsorption on goethite. Water Research, 2010, 44, 5673-5683. | 11.3 | 41 |
| 104 | Habitability on planetary surfaces: interdisciplinary preparation phase for future Mars missions. International Journal of Astrobiology, 2009, 8, 301-315. | 1.6 | 20 |
| 105 | Chemical constitution of a Permian-Triassic disaster species. Geology, 2009, 37, 875-878. | 4.4 | 25 |
| 106 | Quantitative flash pyrolysis Fourier transform infrared spectroscopy of organic materials. Analytica Chimica Acta, 2009, 639, 62-66. | 5.4 | 33 |
| 107 | Conjugated steroids: analytical approaches and applications. Analytical and Bioanalytical Chemistry, 2009, 393, 453-458. | 3.7 | 33 |
| 108 | Analysis of conjugated steroid androgens: Deconjugation, derivatisation and associated issues. Journal of Pharmaceutical and Biomedical Analysis, 2009, 49, 1133-1140. | 2.8 | 105 |

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| 109 | Reply to comments on defining biominerals and organominerals: Direct and indirect indicators of life [Perry et al., Sedimentary Geology, 201, 157–179]. Sedimentary Geology, 2009, 213, 156. | 2.1 | 3 |
| 110 | Investigating the contribution of methane produced by ablating micrometeorites to the atmosphere of Mars. Earth and Planetary Science Letters, 2009, 288, 382-385. | 4.4 | 24 |
| 111 | Meteorite ablation products and their contribution to the atmospheres of terrestrial planets: An experimental study using pyrolysis-FTIR. Geochimica Et Cosmochimica Acta, 2009, 73, 3512-3521. | 3.9 | 50 |
| 112 | Extraterrestrial Organic Matter and the Detection of Life. Space Science Reviews, 2008, 135, 25-35. | 8.1 | 35 |
| 113 | A multidisciplinary study of silica sinter deposits with applications to silica identification and detection of fossil life on Mars. Icarus, 2008, 198, 331-350. | 2.5 | 47 |
| 114 | Plant spore walls as a record of long-term changes in ultraviolet-B radiation. Nature Geoscience, 2008, 1, 592-596. | 12.9 | 68 |
| 115 | Mars on Earth: soil analogues for future Mars missions. Astronomy and Geophysics, 2008, 49, 2.20-2.23. | 0.2 | 32 |
| 116 | Extraterrestrial nucleobases in the Murchison meteorite. Earth and Planetary Science Letters, 2008, 270, 130-136. | 4.4 | 317 |
| 117 | The Urey Instrument: An Advanced In Situ Organic and Oxidant Detector for Mars Exploration. Astrobiology, 2008, 8, 583-595. | 3.0 | 40 |
| 118 | Biomarker indicators of bacterial activity and organic fluxes during end Triassic mass extinction event. , 2008, , . | | 2 |
| 119 | The end Triassic mass extinction record of Williston Lake, British Columbia. Palaeogeography, Palaeoclimatology, Palaeoecology, 2007, 253, 385-406. | 2.3 | 84 |
| 120 | Raman spectroscopy of irradiated organic matter. Geochimica Et Cosmochimica Acta, 2007, 71, 2547-2568. | 3.9 | 27 |
| 121 | Rapid determination of spore chemistry using thermochemolysis gas chromatography-mass spectrometry and micro-Fourier transform infrared spectroscopy. Photochemical and Photobiological Sciences, 2007, 6, 689. | 2.9 | 58 |
| 122 | Searching for Life on Mars: Selection of Molecular Targets for ESA's Aurora ExoMars Mission. Astrobiology, 2007, 7, 578-604. | 3.0 | 172 |
| 123 | Biomedical and Forensic Applications of Combined Catalytic Hydrogenation-Stable Isotope Ratio Analysis. Analytical Chemistry Insights, 2007, 2, 117739010700200. | 2.7 | 4 |
| 124 | Adsorption of I-lysine on montmorillonite. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 307, 142-149. | 4.7 | 74 |
| 125 | The labelling of meteoritic organic material using osmium tetroxide vapour impregnation. Planetary and Space Science, 2007, 55, 1310-1318. | 1.7 | 18 |
| 126 | Defining biominerals and organominerals: Direct and indirect indicators of life. Sedimentary Geology, 2007, 201, 157-179. | 2.1 | 150 |

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| 127 | Biomedical and forensic applications of combined catalytic hydrogenation-stable isotope ratio analysis. Analytical Chemistry Insights, 2007, 2, 37-42. | 2.7 | 3 |
| 128 | The origin of dark inclusions in Allende: New evidence from lithium isotopes. Meteoritics and Planetary Science, 2006, 41, 1039-1043. | 1.6 | 14 |
| 129 | Baking black opal in the desert sun: The importance of silica in desert varnish. Geology, 2006, 34, 537. | 4.4 | 87 |
| 130 | Carbon molecules in space: from astrochemistry to astrobiology. Faraday Discussions, 2006, 133, 277. | 3.2 | 93 |
| 131 | The alteration of organic matter in response to ionising irradiation: Chemical trends and implications for extraterrestrial sample analysis. Geochimica Et Cosmochimica Acta, 2006, 70, 1020-1039. | 3.9 | 61 |
| 132 | The use of model compounds to investigate the release of covalently bound biomarkers via hydropyrolysis. Organic Geochemistry, 2006, 37, 1705-1714. | 1.8 | 26 |
| 133 | Carbon isotopic gradients in the Martian crust: implications for past or present life on Mars. , 2006, , . | | 0 |
| 134 | Desert varnish: an environmental recorder for Mars. Astronomy and Geophysics, 2006, 47, 4.34-4.35. | 0.2 | 12 |
| 135 | Delving into Allende's dark secrets. Astronomy and Geophysics, 2006, 47, 6.37-6.38. | 0.2 | 2 |
| 136 | Thiophenes as indicators of aqueous alteration in carbonaceous meteorites. , 2006, 6309, 232. | | 3 |
| 137 | Hydropyrolysis: A new technique for the analysis of macromolecular material in meteorites. Planetary and Space Science, 2005, 53, 1280-1286. | 1.7 | 27 |
| 138 | A noble record. Astronomy and Geophysics, 2005, 46, 2.12-2.14. | 0.2 | 1 |
| 139 | New strategies to detect life on Mars. Astronomy and Geophysics, 2005, 46, 6.26-6.27. | 0.2 | 23 |
| 140 | Hydropyrolysis as a preparative method for the compound-specific carbon isotope analysis of fatty acids. Rapid Communications in Mass Spectrometry, 2005, 19, 323-325. | 1.5 | 18 |
| 141 | Hydropyrolysis of steroids: a preparative step for compound-specific carbon isotope ratio analysis. Rapid Communications in Mass Spectrometry, 2005, 19, 3339-3342. | 1.5 | 12 |
| 142 | Making silica rock coatings in the lab: synthetic desert varnish. , 2005, , . | | 4 |
| 143 | Recognizing life in the Solar System: guidance from meteoritic organic matter. International Journal of Astrobiology, 2005, 4, 269-276. | 1.6 | 55 |
| 144 | Organic matter in carbonaceous meteorites: past, present and future research. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 2729-2742. | 3.4 | 48 |

ARTICLE IF CITATIONS Catastrophic soil erosion during the end-Permian biotic crisis. Geology, 2005, 33, 941. 145 4.4 234 How desert varnish forms?., 2005, 5906, 276. 146 9 Oxygen-containing aromatic compounds in a Late Permian sediment. Organic Geochemistry, 2005, 36, 1.8 28 371-384. Molecular, isotopic and in situ analytical approaches to the study of meteoritic organic material. 148 1.6 1 International Journal of Astrobiology, 2004, 3, 107-116. Carbon and nitrogen isotope ratios in meteoritic organic matter: indicators of alteration processes 149 1.6 on the parent asteroid. International Journal of Astrobiology, 2004, 3, 221-227. Environmental mutagenesis during the end-Permian ecological crisis. Proceedings of the National 150 7.1 208 Academy of Sciences of the United States of America, 2004, 101, 12952-12956. Combined element (H and C) stable isotope ratios of methane in carbonaceous chondrites. Monthly 4.4 Notices of the Royal Astronomical Society, 2004, 347, 807-812. Organic matter in ancient meteorites. Astronomy and Geophysics, 2004, 45, 2.08-2.14. 0.2 152 24 Hydropyrolysis of insoluble carbonaceous matter in the Murchison meteorite: new insights into its macromolecular structure 1 1Associate editor: G. D. Cody. Geochimica Et Cosmochimica Acta, 2004, 68, 104 1385-1393. Geochemistry of the end-Permian extinction event in Austria and Italy: No evidence for an 154 4.4 78 extraterrestrial component. Geology, 2004, 32, 1053. Lithium Isotope Analyses of Inorganic Constituents from the Murchison Meteorite. Astrophysical 4.5 Journal, 2004, 612, 588-591. Investigating the variations in carbon and nitrogen isotopes in carbonaceous chondrites. Geochimica 156 3.9 129 Et Cosmochimica Acta, 2003, 67, 2093-2108. Contamination by sesquiterpenoid derivatives in the Orgueil carbonaceous chondrite. Organic 1.8 Geochemistry, 2003, 34, 37-47. Synchronous record of Î<sup>13</sup>C shifts in the oceans and atmosphere at the end of 158 29 the Permian. , 2002, , . Carbon and nitrogen isotope disturbances and an end-Norian (Late Triassic) extinction event. Geology, 2002, 30, 1119. Organic compounds in carbonaceous meteorites. Natural Product Reports, 2002, 19, 292-311. 160 10.3 564 Separation of planetary noble gas carrier from bulk carbon in enstatite chondrites during stepped 4.4 combustion. Earth and Planetary Science Letters, 2002, 199, 243-255. Clay mineralâ€organic matter relationships in the early solar system. Meteoritics and Planetary Science, 162 1.6 115 2002, 37, 1829-1833.

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| 163 | High molecular weight organic matter in martian meteorites. Planetary and Space Science, 2002, 50, 711-716. | 1.7 | 63 |
| 164 | Organic Compounds in Carbonaceous Meteorites. ChemInform, 2002, 33, 262-262. | 0.0 | 0 |
| 165 | Normal alkanes in meteorites: molecular δ13C values indicate an origin by terrestrial contamination. Precambrian Research, 2001, 106, 47-58. | 2.7 | 57 |
| 166 | Supercritical fluid extraction of the non-polar organic compounds in meteorites. Planetary and Space Science, 2001, 49, 101-106. | 1.7 | 19 |
| 167 | Pyrolysis–gas chromatography–isotope ratio mass spectrometry of macromolecular material in meteorites. Planetary and Space Science, 2001, 49, 465-471. | 1.7 | 37 |
| 168 | Compound-specific isotope analysis of the organic constituents in carbonaceous chondrites. Mass Spectrometry Reviews, 2001, 20, 111-120. | 5.4 | 49 |
| 169 | Life's sweet beginnings?. Nature, 2001, 414, 857-858. | 27.8 | 9 |
| 170 | Aromatic Moieties in Meteorites: Relics of Interstellar Grain Processes?. Astrophysical Journal, 2000, 540, 588-591. | 4.5 | 45 |
| 171 | Macromolecular organic materials in carbonaceous chondrites: A review of their sources and their role in the origin of life on the early earth. , 2000, , 27-49. | | 6 |
| 172 | Aromatic moieties in meteoritic macromolecular materials: analyses by hydrous pyrolysis and δ13C of individual compounds. Geochimica Et Cosmochimica Acta, 2000, 64, 321-328. | 3.9 | 102 |
| 173 | Cyclic diaryl ethers in a Late Permian sediment. Organic Geochemistry, 1999, 30, 267-273. | 1.8 | 47 |
| 174 | δ13C of free and macromolecular aromatic structures in the murchison meteorite. Geochimica Et Cosmochimica Acta, 1998, 62, 1821-1828. | 3.9 | 120 |