

# Ludovic Ferrière

## List of Publications by Year in descending order

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Version: 2024-02-01

79  
papers

1,571  
citations

361413

20  
h-index

345221

36  
g-index

85  
all docs

85  
docs citations

85  
times ranked

1363  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | New insights into the formation and emplacement of impact melt rocks within the Chicxulub impact structure, following the 2016 IODP-ICDP Expedition 364. <i>Bulletin of the Geological Society of America</i> , 2022, 134, 293-315.            | 3.3  | 10        |
| 2  | Formation of the crater suevite sequence from the Chicxulub peak ring: A petrographic, geochemical, and sedimentological characterization. <i>Bulletin of the Geological Society of America</i> , 2022, 134, 895-927.                          | 3.3  | 15        |
| 3  | Search for a meteoritic component within the impact melt rocks of the Chicxulub impact structure peak ring, Mexico. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 323, 74-101.  | 3.9  | 7         |
| 4  | Hydrogen emission from meteors and meteorites: mapping traces of H <sub>2</sub> O molecules and organic compounds in small Solar system bodies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 513, 3982-3992.               | 4.4  | 6         |
| 5  | Unique evidence of fluid alteration in the Kakowa (L6) ordinary chondrite. <i>Scientific Reports</i> , 2022, 12, 5520.   | 3.3  | 1         |
| 6  | Scientific Comment on Klokoň et al. "Support for two subglacial impact craters in northwest Greenland from Earth gravity model EIGEN 6C4 and other data"; <i>Tectonophysics</i> 780 (2020), 228396. <i>Tectonophysics</i> , 2021, 800, 228578. | 2.2  | 0         |
| 7  | The Mesoproterozoic Stac Fada Member, NW Scotland: an impact origin confirmed but refined. <i>Journal of the Geological Society</i> , 2021, 178, .   | 2.1  | 1         |
| 8  | Globally distributed iridium layer preserved within the Chicxulub impact structure. <i>Science Advances</i> , 2021, 7, .   | 10.3 | 47        |
| 9  | Ocean surge-induced impact melt dynamics on the peak-ring of the Chicxulub impact structure, Mexico. <i>International Journal of Earth Sciences</i> , 2021, 110, 2619-2636.  | 1.8  | 5         |
| 10 | High frame rate emission spectroscopy for ablation tests in plasma wind tunnel. <i>Review of Scientific Instruments</i> , 2021, 92, 033101.  | 1.3  | 4         |
| 11 | Definition and use of functional analogues in planetary exploration. <i>Planetary and Space Science</i> , 2021, 197, 105162.   | 1.7  | 10        |
| 12 | Shocked quartz in distal ejecta from the Ries impact event (Germany) found at ~180 km distance, near Bernhardzell, eastern Switzerland. <i>Scientific Reports</i> , 2021, 11, 7438.  | 3.3  | 3         |
| 13 | Microtextures in the Chelyabinsk impact breccia reveal the history of Phosphorus-Olivine Assemblages in chondrites. <i>Meteoritics and Planetary Science</i> , 2021, 56, 742-766.  | 1.6  | 5         |
| 14 | Lunar meteorite Northwest Africa 11962: A regolith breccia containing records of titanium-rich lunar volcanism and the high alkali suite. <i>Meteoritics and Planetary Science</i> , 2021, 56, 971-991.  | 1.6  | 3         |
| 15 | Resolving the age of the Puchezh-Katunki impact structure (Russia) against alteration and inherited <sup>40</sup> Ar* - No link with extinctions. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 301, 116-140.                                 | 3.9  | 3         |
| 16 | Shock metamorphism in samples from the Shili impact structure (Kazakhstan) and discussion of its size and age. , 2021, , .   |      | 0         |
| 17 | Chicxulub impact structure, IODP-ICDP Expedition 364 drill core: Geochemistry of the granite basement. <i>Meteoritics and Planetary Science</i> , 2021, 56, 1243-1273.   | 1.6  | 5         |
| 18 | Origin of micrometer-sized impact diamonds in ureilites by catalytic growth involving Fe-Ni-silicide: The example of Kenna meteorite. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 309, 286-298.   | 3.9  | 7         |

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|----|--|------|-----------|
| 19 | Shock impedance amplified impact deformation of zircon in granitic rocks from the Chicxulub impact crater. <i>Earth and Planetary Science Letters</i> , 2021, 575, 117201.   | 4.4  | 15        |
| 20 | Shock-induced metamorphic microstructures in quartz grains from Albian sandstones from the Tin Bider impact structure, Algeria. <i>Meteoritics and Planetary Science</i> , 2021, 56, 2273-2280.                          | 1.6  | 0         |
| 21 | Characterization of shocked quartz grains from Chicxulub peak ring granites and shock pressure estimates. <i>Meteoritics and Planetary Science</i> , 2020, 55, 2206-2223.  | 1.6  | 12        |
| 22 | Preferred orientation distribution of shock-induced planar microstructures in quartz and feldspar. <i>Meteoritics and Planetary Science</i> , 2020, 55, 1082-1092.   | 1.6  | 8         |
| 23 | Donwilhelmsite, [CaAl <sub>4</sub> Si <sub>2</sub> O <sub>11</sub> ], a new lunar high-pressure Ca-Al-silicate with relevance for subducted terrestrial sediments. <i>American Mineralogist</i> , 2020, 105, 1704-1711.  | 1.9  | 33        |
| 24 | Shocked titanite records Chicxulub hydrothermal alteration and impact age. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 281, 12-30.  | 3.9  | 20        |
| 25 | Probing the hydrothermal system of the Chicxulub impact crater. <i>Science Advances</i> , 2020, 6, eaaz3053.   | 10.3 | 69        |
| 26 | Shock metamorphism in plagioclase and selective amorphization. <i>Meteoritics and Planetary Science</i> , 2020, 55, 1103-1115.   | 1.6  | 6         |
| 27 | Analyses of radionuclides in the Oued Awlitis 001 and Galb Inal lunar meteorites by HPGe gamma-ray spectrometry. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2020, 324, 349-357.                           | 1.5  | 2         |
| 28 | Geochemistry, geochronology and petrogenesis of Maya Block granitoids and dykes from the Chicxulub Impact Crater, Gulf of Mexico: Implications for the assembly of Pangea. <i>Gondwana Research</i> , 2020, 82, 128-150. | 6.0  | 26        |
| 29 | The history of the Tissint meteorite, from its crystallization on Mars to its exposure in space: New geochemical, isotopic, and cosmogenic nuclide data. <i>Meteoritics and Planetary Science</i> , 2020, 55, 294-311.   | 1.6  | 9         |
| 30 | An Early Jurassic age for the Puchezh-Katunki impact structure (Russia) based on <sup>40</sup> Ar/ <sup>39</sup> Ar data and palynology. <i>Meteoritics and Planetary Science</i> , 2019, 54, 1764-1780.                 | 1.6  | 8         |
| 31 | Best practices for the use of meteorite names in publications. <i>Meteoritics and Planetary Science</i> , 2019, 54, 1397-1400.   | 1.6  | 2         |
| 32 | New shock microstructures in titanite (CaTiSiO <sub>5</sub> ) from the peak ring of the Chicxulub impact structure, Mexico. <i>Contributions To Mineralogy and Petrology</i> , 2019, 174, 1.                             | 3.1  | 22        |
| 33 | Petrography and perovskite U-Pb age of the Katuba kimberlite, Kundelungu Plateau (D.R. Congo): Implications for regional tectonism and mineralisation. <i>Journal of African Earth Sciences</i> , 2019, 156, 35-43.      | 2.0  | 1         |
| 34 | Libyan Desert Glass area in western Egypt: Shocked quartz in bedrock points to a possible deeply eroded impact structure in the region. <i>Meteoritics and Planetary Science</i> , 2019, 54, 2398-2408.                  | 1.6  | 10        |
| 35 | Exploring the microbial biotransformation of extraterrestrial material on nanometer scale. <i>Scientific Reports</i> , 2019, 9, 18028.   | 3.3  | 21        |
| 36 | Shocked quartz in polymict impact breccia from the Upper Cretaceous Yallalie impact structure in Western Australia. <i>Meteoritics and Planetary Science</i> , 2019, 54, 621-637.  | 1.6  | 10        |

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|----|---|------|-----------|
| 37 | Formation of CV chondrules by recycling of amoeboid olivine aggregate-like precursors. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 247, 121-141.   | 3.9  | 64        |
| 38 | Estimating average shock pressures recorded by impactite samples based on universal Åstage investigations of planar deformation features in quartz”Sources of error and recommendations. <i>Meteoritics and Planetary Science</i> , 2018, 53, 110-130.    | 1.6  | 19        |
| 39 | FRIGN zircon”The only terrestrial mineral diagnostic of high-pressure and high-temperature shock deformation. <i>Geology</i> , 2018, 46, 891-894.   | 4.4  | 55        |
| 40 | Rapid recovery of life at ground zero of the end-Cretaceous mass extinction. <i>Nature</i> , 2018, 558, 288-291.  | 27.8 | 123       |
| 41 | Extraordinary rocks from the peak ring of the Chicxulub impact crater: P-wave velocity, density, and porosity measurements from IODP/ICDP Expedition 364. <i>Earth and Planetary Science Letters</i> , 2018, 495, 1-11.                                   | 4.4  | 65        |
| 42 | High pressure minerals in the ChÅteau-Renard (L6) ordinary chondrite: implications for collisions on its parent body. <i>Scientific Reports</i> , 2018, 8, 9851.  | 3.3  | 39        |
| 43 | The role of sulfides in the fractionation of highly siderophile and chalcophile elements during the formation of martian shergottite meteorites. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 210, 1-24.  | 3.9  | 15        |
| 44 | The variability of ruthenium in chromite from chassignite and olivine”phyric shergottite meteorites: New insights into the behavior of <sc>PGE</sc> and sulfur in Martian magmatic systems. <i>Meteoritics and Planetary Science</i> , 2017, 52, 333-350. | 1.6  | 7         |
| 45 | On the occurrence and origin of anthropogenic radionuclides found in a fragment of the Chelyabinsk (<sc>LL</sc>5) meteorite. <i>Meteoritics and Planetary Science</i> , 2017, 52, 1244-1250.  | 1.6  | 0         |
| 46 | Combining shock barometry with numerical modeling: Insights into complex crater formation”The example of the Siljan impact structure (Sweden). <i>Meteoritics and Planetary Science</i> , 2017, 52, 2521-2549.  | 1.6  | 13        |
| 47 | The fourth Arab Impact Cratering and Astrogeology Conference (<sc>AICAC IV</sc>), April 9”12, 2017, Algiers (Algeria). <i>Meteoritics and Planetary Science</i> , 2017, 52, 2067-2071.  | 1.6  | 2         |
| 48 | Search (and Discovery) of New Impact Craters on Earth. <i>Elements</i> , 2017, 13, 358-359.   | 0.5  | 1         |
| 49 | Geophysical and magneto”structural study of the MaÅdna structure (Talemzane, Algeria): Insights on its age and origin. <i>Meteoritics and Planetary Science</i> , 2016, 51, 2249-2273.  | 1.6  | 8         |
| 50 | Shatter cones: (Mis)understood?. <i>Science Advances</i> , 2016, 2, e1600616.   | 10.3 | 32        |
| 51 | The formation of peak rings in large impact craters. <i>Science</i> , 2016, 354, 878-882.   | 12.6 | 181       |
| 52 | WIP: A Web”based program for indexing planar features in quartz grains and its usage. <i>Meteoritics and Planetary Science</i> , 2016, 51, 647-662.   | 1.6  | 8         |
| 53 | Impact origin for the Hummeln structure (Sweden) and its link to the Ordovician disruption of the L chondrite parent body. <i>Geology</i> , 2015, 43, 279-282.  | 4.4  | 17        |
| 54 | Cosmogenic radionuclides and mineralogical properties of the Chelyabinsk (LL5) meteorite: What do we learn about the meteoroid?. <i>Meteoritics and Planetary Science</i> , 2015, 50, 273-286.  | 1.6  | 20        |

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|----|--|------|-----------|
| 55 | Comment on: "Direct evidence of ancient shock metamorphism at the site of the 1908 Tunguska event"; by P. Vannucchi et al. [Earth Planet. Sci. Lett. 409 (2015) 168-174]. Earth and Planetary Science Letters, 2015, 419, 222-223. | 4.4  | 5         |
| 56 | Revisiting the Rochechouart impact structure, France. Meteoritics and Planetary Science, 2014, 49, 2152-2168.  | 1.6  | 9         |
| 57 | No Martian soil component in shergottite meteorites. Geochimica Et Cosmochimica Acta, 2014, 125, 23-33.  | 3.9  | 24        |
| 58 | Impact controversies: Impact recognition criteria and related issues. Meteoritics and Planetary Science, 2014, 49, 723-731.  | 1.6  | 44        |
| 59 | Enigmatic tubular features in impact glass: REPLY. Geology, 2014, 42, e348-e348.   | 4.4  | 1         |
| 60 | Advanced EDS and <sup>49</sup> Ti XRF Analysis of Earth and Planetary Materials using Spectrum Imaging, Computer-Controlled SEM and an Annular SDD. Microscopy and Microanalysis, 2014, 20, 1716-1717.                             | 0.4  | 2         |
| 61 | Opaque minerals, magnetic properties, and paleomagnetism of the Tissint Martian meteorite. Meteoritics and Planetary Science, 2013, 48, 1919-1936.   | 1.6  | 29        |
| 62 | ANIE: A mathematical algorithm for automated indexing of planar deformation features in quartz grains. Meteoritics and Planetary Science, 2011, 46, 1418-1424.   | 1.6  | 20        |
| 63 | The newly confirmed Luizi impact structure, Democratic Republic of Congo "Insights into central uplift formation and post-impact erosion. Geology, 2011, 39, 851-854.  | 4.4  | 19        |
| 64 | Geochemistry of basement rocks and impact breccias from the central uplift of the Bosumtwi crater, Ghana—Comparison of proximal and distal impactites. , 2010, , .   |      | 6         |
| 65 | Ballen quartz and cristobalite in impactites: New investigations. , 2010, , .  |      | 17        |
| 66 | Single crystal U-Pb zircon age and Sr-Nd isotopic composition of impactites from the Bosumtwi impact structure, Ghana: Comparison with country rocks and Ivory Coast tektites. Chemical Geology, 2010, 275, 254-261.               | 3.3  | 8         |
| 67 | The Keurusselkä impact structure, Finland "Impact origin confirmed by characterization of planar deformation features in quartz grains. Meteoritics and Planetary Science, 2010, 45, 434-446.                                      | 1.6  | 19        |
| 68 | Characterisation of ballen quartz and cristobalite in impact breccias: new observations and constraints on ballen formation. European Journal of Mineralogy, 2009, 21, 203-217.  | 1.3  | 61        |
| 69 | Systematic study of universal stage measurements of planar deformation features in shocked quartz: Implications for statistical significance and representation of results. Meteoritics and Planetary Science, 2009, 44, 925-940.  | 1.6  | 94        |
| 70 | Petrographic and shock metamorphic studies of the impact breccia section (1397-1551 m depth) of the Eyreville drill core, Chesapeake Bay impact structure, USA. , 2009, , .  |      | 7         |
| 71 | Geochemistry of the impact breccia section (1397-1551 m depth) of the Eyreville drill core, Chesapeake Bay impact structure, USA. , 2009, , .  |      | 4         |
| 72 | Shock Metamorphism of Bosumtwi Impact Crater Rocks, Shock Attenuation, and Uplift Formation. Science, 2008, 322, 1678-1681.  | 12.6 | 49        |

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|----|---|-----|-----------|
| 73 | Petrography, geochemistry, and alteration of country rocks from the Bosumtwi impact structure, Ghana. <i>Meteoritics and Planetary Science</i> , 2007, 42, 513-540.                               | 1.6 | 17        |
| 74 | Drill core LB08A, Bosumtwi impact structure, Ghana: Petrographic and shock metamorphic studies of material from the central uplift. <i>Meteoritics and Planetary Science</i> , 2007, 42, 611-633. | 1.6 | 20        |
| 75 | Drill core LB08A, Bosumtwi impact structure, Ghana: Geochemistry of fallback breccia and basement samples from the central uplift. <i>Meteoritics and Planetary Science</i> , 2007, 42, 689-708.  | 1.6 | 7         |
| 76 | Expedition 364 summary. <i>Proceedings of the International Ocean Discovery Program</i> , 0, , .  | 0.0 | 7         |
| 77 | Site M0077: introduction. <i>Proceedings of the International Ocean Discovery Program</i> , 0, , .  | 0.0 | 2         |
| 78 | Site M0077: Upper Peak Ring. <i>Proceedings of the International Ocean Discovery Program</i> , 0, , .   | 0.0 | 7         |
| 79 | Nova Colinas, Maranhão State: A newly confirmed, complex impact structure in Brazil. <i>Meteoritics and Planetary Science</i> , 0, , .  | 1.6 | 1         |