

**Monographies (auteur)**

1. *Un ciel de pierres. Voyage en Atacama*, Gallimard, 2022, 130 pages
2. *Météorites, entre ciel et terre*, Catalogue de l'exposition éponyme, Éditions du Muséum, 2017, 96 pages
3. *Une belle histoire de météorites*, Flammarion & Éditions du Muséum, 2017, 112 pages.
4. *Météorites - à la recherche de nos origines*, Flammarion, 2013, 214 pages. Édition de poche dans la collection « Champs », 2017
5. *Météorites*. Coll. Que Sais-Je, 2009, 128 pages. 3<sup>ème</sup> édition revue et corrigée en 2022. Traductions en japonais et en arabe

**Articles dans des revue scientifiques**

1. Ciocco M., Roskosz M., Doisneau B., Beyssac O., Deloule E., Fiquet G., Delbo M., **Gounelle M.** (2022) A collisional history of the L chondrites parent-bodies, *Nature Astronomy*, **In review**
2. Viennet J.C. et al. [**Gounelle**] (2023) Interaction between clay minerals and organics in asteroid Ryugu, *Geochemical Perspective Letters*, **Sous presse**
3. Avdellidou C., Delbo M., Morbidelli A., Walsh K. J., Munaibari E., Bourdelle de Micas J., Devogèle M., Fornasier S., **Gounelle M.** and van Belle G. (2022) A thor asteroid family as the source of the EL enstatite meteorites, *Astronomy & Astrophysics*, **665**, id.L9, 13 pp.
4. Martinet S., Meynet G., Nandal D., Ekström S., Georgy C., Haemmerlé L., Hirschi R., Yusof N., **Gounelle M.**, Dwarkadas V. (2022) Very massive star winds as sources of the short-lived radioactive isotope <sup>26</sup>Al, *Astronomy & Astrophysics*, **664**, id.A181, 10 pp.
5. Rochette P., Bezaeva N. S., Beck P., Debaille V., Folco L., Gattacceca J., **Gounelle M.**, Masotta M. (2022) Obsidian and mafic volcanic glasses from the Philippines and Vietnam found in the Paris Museum Australasian tektite collection, *Meteoritics & Planetary Science*, Volume **57**, Issue 7, pp. 1460-1471
6. Ciocco M., Roskosz M., Doisneau B., Beyssac O., Mostefaoui S., Remusat L., Leroux H., **Gounelle M.** (2022) Impact dynamics of the L chondrites' parent asteroid, *Meteoritics & Planetary Sciences*, **57**, 759-775
7. J. Gattacceca, B. Devouard, J.-A. Barrat, P. Rochette, M.L. Balestrieri, G. Bigazzi, G. Ménard, F. Moustard, E. Dos Santos, R. Scorzelli, M. Valenzuela, Y. Quesnel, M. **Gounelle**, V. Debaille, P. Beck, L. Bonal, B. Reynard, M. Warner (2021) A 650 km<sup>2</sup> Miocene strewnfield of splash-form impact glasses in the Atacama Desert, Chile, *Earth & Planetary Science Letters*, **569**, 2021, 10 pages
8. Marrocchi Y., Delbo M., **Gounelle M.** (2021) The astrophysical context of collision processes in meteorites, *Meteoritics Planet. Sci.*, **56**, 1406-1421
9. J. Rojas, J. Duprat, C. Engrand, E. Dartois, L. Delauche, M. Godard, M. **Gounelle**, J.D. Carrillo-Sánchez, P. Pokorný, J.M. Plane (2021) The micrometeorite flux at Dome C (Antarctica), monitoring the accretion of extraterrestrial dust on Earth, *Earth & Planetary Science Letters*, **560**, 11 pages
10. Piralla M., Marrocchi Y., Verdier-Paoletti M., Vacher L., Villeneuve J., Piani L., Bekaert D., **Gounelle M.** (2020) Primordial water and dust of the Solar System: Insights from in-situ oxygen measurements of CI chondrites *Geochimica et Cosmochimica Acta* **269**, 451-464.
11. Gounelle M. and **Gounelle** (2019) Meteorites and international law, *Meteoritics Planet. Sci.*, **54**, 2887-2901.
12. Vacher, L. Piralla, M., **Gounelle M.**, Bizzaro M., Marrocchi Y. (2019) Thermal evolution of hydrated asteroids inferred from O-isotopes *Astrophysical Journal Letters* **882**, L20 (8 pages).

13. Drouard A., Gattecca J., Hutzler A., Rochette P., Braucher R., Boulès D. **Gounelle** M., Morbidelli A., Debaille V. Van Ginneken M., Valenzuela M., Quesnel Y., Martinez, R (2019) The meteorite flux of the past 2 m.y. recorded in the Atacama Desert, *Geology* **47**, 673-676.
14. Heck P. et al. [**Gounelle**] (2019) Best practices for the use of meteorite names in publications, *Meteoritics Planet. Sci.* **54**, pp. 1397-1400
15. Verdier-Paoletti M., Marrocchi Y., Vacher L., Gattacceca J., Gurenko A., Sonzogni C., **Gounelle** M. (2019) Testing the genetic relationship between fluid alteration and brecciation in CM chondrites, *Meteoritics Planet. Sci.* **54**, 1692–1709
16. **Gounelle**, M. (2018) Celebrating the 50<sup>th</sup> anniversary of CAIs discovery by Mireille Christophe Michel–Lévy, *Meteoritics Planet. Sci.* **53**, 2427-2429.
17. Vacher, L. G., Marrocchi, Y., Villeneuve, J., Verdier-Paoletti, M. J. & **Gounelle**, M. (2018). Collisional and alteration history of the CM parent body. *Geochemica et Cosmochemica Acta* **239**, 213-234.
18. Gounelle M. & **Gounelle** M. (2017) Météorites et droit des relations internationales, *Revue générale de droit international public*, **121**, 5-32.
19. Sossi, P., Moynier F., Chaussidon M., Villeneuve J., Kato S., **Gounelle** M. (2017) Early Solar System irradiation quantified by linked vanadium and beryllium isotope variations in meteorites, *Nature Astronomy* **1**, #055.
20. Vacher, L. G., Marrocchi, Y., Villeneuve, J., Verdier-Paoletti, M. J. & **Gounelle**, M. (2017). Petrographic and Isotopic C & O Characteristics of the Earliest Stages of Aqueous Alteration of CM Chondrites. *Geochemica et Cosmochemica Acta* **213**, 271-290.
21. Verdier-Paoletti M., Marrocchi Y., Avice G., Roskosz M., Gurenko A., **Gounelle** M. (2017) Oxygen isotope constraints on the alteration temperatures of CM chondrites, *Earth Planet. Sci. Lett.* **458**, 273-281.
22. Pignatelli I., Marrocchi Y., Mugnaioli E., Bourdelle F., **Gounelle** M. (2017) Mineralogical, crystallographic and redox features of the earliest stages of fluid alteration in CM chondrites, *Geochimica et Cosmochimica Acta* **209**, 106-122
23. Gattacceca J., Weiss B., **Gounelle** M., Rochette P. (2016) Additional constraints on the magnetic history of the CV parent body from a paleomagnetic study of Kaba meteorite, *Earth Planet. Sci. Lett.*, **455**, 166-175
24. Vacher L., Marrocchi Y., Verdier-Paoletti M., Villeneuve J., **Gounelle** M. (2016) Inward Radial Mixing of Interstellar Water Ices in the Solar Protoplanetary Disk, *Astrophysical Journal Letters*, **827**, L1-L6
25. Hutzler et al. [**Gounelle**] (2016) Description of a very dense meteorite collection area in western Atacama: Insight into the long-term composition of the meteorite flux to Earth *Meteoritics Planet. Sci.* **51**, 468-482.
26. Pignatelli I., Marrocchi Y., Vacher L., and **Gounelle** M. (2016) Multiple precursors of secondary mineralogical assemblages in CM chondrites. *Meteoritics Planet. Sci.* **51**, 785-805.
27. Morbidelli A., Bitsch B., Crida A., **Gounelle** M., Guillot T., Jacobson S., Johansen A., Lambrechts M. and Lega E. (2016) Fossilized condensation lines in the Solar System protoplanetary disk. *Icarus*, **267**, 368-376.
28. Jacquet E., Barrat J.A., Beck P., Caste F., Gattacceca J., Sonzogni C., **Gounelle** (2016) Northwest Africa 5958: A weakly altered CM-related ungrouped chondrite, not a CI3 *Meteoritics Planet. Sci.* **51**, 861-869.
29. **Gounelle** M. (2015) The abundance of <sup>26</sup>Al-rich planetary systems in the Galaxy, *Astronomy & Astrophysics*, **582**, A26 (7 pages).
30. Jacquet, E., Alard, O., **Gounelle**, M. (2015) The formation conditions of enstatite chondrites: Insights from trace element geochemistry of olivine-bearing chondrules in Sahara 97096 (EH3). *Meteoritics Planet. Sci.* **50**, 1-19.

31. Pflanzner S., Davies M. B., **Gounelle M.**, Johansen A., Münker C., Lacerda P., Portegies Zwart S., Testi L., Trialet M., and Veras D. (2015) The formation of the solar system. *Physica Scripta*. **068001 (18pp)**
32. Cournède C., Gattacceca J., **Gounelle M.**, Rochette P., Weiss B. P., and Zanda B. (2015) An Early solar system magnetic field recorded in CM chondrites. *Earth Planet. Sci. Lett.* **410**, 62-74.
33. Luu T. H., Young E. D., **Gounelle M.**, and Chaussidon M. (2015) A short time interval for condensation of high temperature silicates in the solar accretion disk. *Proc. Natl. Acad. Sci. USA* **112**, 1298–1303.
34. Jacquet E., Alard O. and **Gounelle M.** (2015) Trace element geochemistry of ordinary chondrite chondrules: The type I/type II chondrule dichotomy *Geochimica et Cosmochimica Acta*, **155**, 47-67.
35. **Gounelle M.** and Zolensky M. E. (2014) The Orgueil meteorite: 150 years of history. *Meteoritics and Planetary Science* **49**, 1769-1794.
36. Zolensky M. E., Mikouchi T., Fries M., Bodnar R. J., Jenniskens P., Yin Q.-Z., Hagiya K., Ohsumi K., Komatsu M., Nakamura T., Matsukoa M., Sasaki S., Tsuchiyama A., and **Gounelle M.** (2014) Mineralogy and petrography of C asteroid regolith : The Sutter's Mill meteorite *Meteoritics Planet. Sci.* **49**, 1996-2017.
37. Marrocchi Y., **Gounelle M.**, Blanchard I., Caste F., Kearsley A. T. (2014) The Paris CM chondrite: Secondary minerals and asteroidal processing *Meteoritics & Planetary Science*, **49**, 1232–1249.
38. **Jacquet E.**, Paulhiac-Pison M., Alard O., Kearsley A., **Gounelle M.** (2013) Trace element geochemistry of CR chondrite metal *Meteoritics and Planetary Sciences*, **48**, 1981-1999.
39. Briani G., Quirico E., **Gounelle M.**, Paulhiac-Pison M., Montagnac G., Beck P., Orthous-Daunay F.-R., Bonal L., Jacquet E., Kearsley A., Russell S. S. (2013) Short duration thermal metamorphism in CR chondrites *Geochimica et Cosmochimica Acta*, **122**, p. 267-279.
40. **Gounelle M.**, Chaussidon M., and Rollion-Bard C. (2013) Variable and Extreme Irradiation Conditions in the Early Solar System Inferred from the Initial Abundance of <sup>10</sup>Be in Isheyevo CAIs *The Astrophysical Journal*, **763**, 2-6.
41. Sephton M.A., James R. H., Fehr M. A., Bland P. A., **Gounelle M.** (2013) Lithium isotopes as indicators of meteorite parent body alteration *Meteoritics & Planetary Science* **48**, 872-878.
42. Jacquet E., Alard O. and **Gounelle M.** (2012) Chondrule trace element geochemistry at the mineral scale *Meteoritics & Planetary Science*, **47**, Nr 11, 1695–1714.
43. **Gounelle M.** and Meynet G. (2012) Solar system genealogy revealed by extinct short-lived radionuclides in meteorites *Astronomy & Astrophysics*, **545**, A4-A12.
44. Jacquet E., **Gounelle M.**, Fromang S. (2012) On the aerodynamic redistribution of chondrite components in protoplanetary disks *Icarus* **220**, 162–173.
45. Briani G., **Gounelle M.**, Bourot-Denise M., and Zolensky M.E. (2012) Xenoliths and microxenoliths in H chondrites: Sampling the zodiacal cloud in the asteroid Main Belt *Meteoritics & Planetary Science* **47**, Nr 5, 880–902
46. **Gounelle M.** (2011) The asteroid-comet continuum: In search of lost primitivity. *Elements* **7**, 29-34. **REVUE INVITÉE**
47. Young E. D., **Gounelle M.**, Smith R. L., Morris M. R., and Pontoppidan K. M. (2011) Astronomical Oxygen Isotopic Evidence for Supernova Enrichment of the Solar System Birth Environment by Propagating Star Formation. *Astrophysical Journal* **729**, 43-55.
48. Jacquet E., Fromang S., and **Gounelle M.** (2011) Radial transport of refractory inclusions and preservation in the dead zone. *Astronomy & Astrophysics Letters* **526**, L8-L11.
49. Petit M., Marrocchi, Y., McKeegan, K.D., Mostefaoui, S., **Gounelle M.**, Meibom, A., Zolensky, E.M., 2011. <sup>53</sup>Mn-<sup>53</sup>Cr ages of Kaidun carbonates. *Meteoritics Planet. Sci.* **46**, 275-283.

50. Petit, M., Birck, J.-L., Luu, T.H., **Gounelle**, M., 2011. The chromium isotopic composition of the ungrouped carbonaceous chondrite Tagish Lake. *Astrophysical Journal* **736**, 23.
51. Briani, G., Morbidelli, A., **Gounelle**, M., Nesvorný, D., 2011. Evidence for an asteroid-comet continuum from simulations of carbonaceous microxenolith dynamical evolution. *Meteoritics Planet. Sci.* **46**, 1863-1877.
52. Moynier F., Paniello R. C., **Gounelle** M., Albarède F., Beck P., Podosek F., and Zanda B. (2011) Nature of volatile depletion and genetic relationships in enstatite chondrites and aubrites inferred from Zn isotopes. *Geochim. Cosmochim. Acta* **75**, 297-307.
53. Gattaceca, J., Valenzuela, M., Uehara, M., Jull, A.J.T., Giscard, M., Rochette, P., Braucher, R., Suavet, C., **Gounelle**, M., D., M., Munayco, P., Bourot-Denise, M., Bourles, D., Demory, F., 2011. The densest meteorite collection area in hot deserts: The San Juan meteorite field (Atacama desert, Chile). (2011) *Meteoritics Planet. Sci.* **46**, 1279-1287.
54. Duprat J., Dobrica E., Engrand C., Aléon J., Marrochi Y., Meibom A., Mostefaoui S., Leroux H., Rouzaud J.-N., **Gounelle** M., and Robert F. (2010) Extreme deuterium excesses in ultracarbonaceous micrometeorites from central Antarctic snow. *Science* **328**, 742-745.
55. Nesvorný D., Jenniskens P., Levison H. F., Bottke W. F., Vokrouhlický D., and **Gounelle** M. (2010) Cometary origin of the Zodiacal cloud and carbonaceous micrometeorites. Implications for hot debris disks. *Astrophysical Journal* **713**, 816-836.
56. Bullock E. S., McKeegan K. D., Gounelle M., Grady M. M., and Russell S. S. (2010) Sulphur isotopic composition of Fe-Ni sulphide grains in CI and CM carbonaceous chondrites. *Meteoritics Planet. Sci.* **45**, 885-898.
57. Levison H. F., Bottke Jr W. F., **Gounelle** M., Morbidelli A., Nesvorný D., and Tsiganis K. (2009) Embedding Comets in the Asteroid Belt. *Nature* **460**, 364-366.
58. **Gounelle** M., Krot A. N., Nagashima K., and Kearsley A. T. (2009) Extreme  $^{16}\text{O}$  enrichment in calcium-aluminium-rich inclusions from the Isheyevo (CH/CB) chondrite. *Astrophysical Journal Letters*. **698**, L18-L22.
59. **Gounelle** M., Meibom A., Hennebelle P., and Inutsuka S.-I. (2009) Supernova Propagation and Cloud Enrichment: A New Model for the Origin of  $^{60}\text{Fe}$  in the Early Solar System. *Astrophysical Journal Letters*. **694**, L1-L5.
60. Briani G., **Gounelle** M., Marrochi Y., Mostefaoui S., Leroux H., Quirico E., and Meibom A. (2009) Pristine extraterrestrial material with unprecedented nitrogen isotopic variation. *Proc. Natl. Acad. Sci. USA* **106**, 10522-10527.
61. **Gounelle** M., Chaussidon M., Morbidelli A., Barrat J. A., Engrand C., Zolensky M. E., and McKeegan K. D. (2009) A unique basaltic micrometeorite expands the inventory of solar system planetary crusts. *Proc. Natl. Acad. Sci. USA* **106**, 6904-6909.
62. Mikouchi T., Zolensky M. E., Ivanova M. A., Tachikawa O., Le L., and **Gounelle** M. (2009) Dmitryivanovite: A new calcium aluminum oxide from the Northwest Africa 470 CH3 chondrite described using electron back-scatter diffraction analysis *American Mineralogist*, **94**, 746-750.
63. Fitoussi C., Duprat J., Tatischeff V., Kiener J., Naulin F., Raisbeck G., Assunção M., Bourgeois C., Chabot M., Coc A., Engrand C., **Gounelle** M., Hammache F., Lefebvre A., Porquet M.-G., Scarpaci J.-A., de Séreville N., Thibaud J.-P., and Yiou F. (2008) Measurement of  $^{24}\text{Mg}(^3\text{He},p)^{26}\text{Al}$  cross section: Implication for  $^{26}\text{Al}$  production in the early solar system. *Phys. Rev. C* **78**, 044613.
64. Rochette P., Gattaceca J., Bonal L., Bourot-Denise M., Chevrier V., Clerc J.-P., Consolmagno G. J., Folco L., **Gounelle** M., Kohout T., Pesonen L., Quirico E., Sagnotti L., and Skripnik A. (2008) Magnetic Classification of Stony Meteorites: 2. Non-Ordinary Chondrites. *Meteoritics Planet. Sci.* **43**, 959-980.
65. Zolensky M. E., Nakamura K., Rietmeijer F. J. M., Leroux H., Mikouchi T., Oshumi K., Simon S. B., Grossman L., Stephan T., Weisberg M. K., Velbel M. A., Zega T. J.,

- Stroud R. M., Tomeoka K., Ohnishi I., Tomioka N., Nakamura T., Matrajt G., Joswiak D. J., Brownlee D. E., Langenhorst F., Krot A. N., Kearsley A. T., Ishii H., Graham G., Dai Z. R., Chi M., Bradley J. P., Hagiya K., **Gounelle** M., and Bridges J. C. (2008) Comparing Wild 2 particles to chondrites and IDPs. *Meteoritics Planet. Sci.* **43**, 261-272.
66. **Gounelle** M. and Meibom A. The origin of short-lived radionuclides and the astrophysical environment of Solar System formation. (2008) *Astrophysical Journal*. **680**, 781-792.
67. Leroux H., Rietmeijer F. J. M., Velbel M. A., Brearley A. J., Jacob D., Langenhorst F., Bridges J. C., Zega T. J., Stroud R. M., Cordier P., Harvey R. P., Lee M., **Gounelle** M., and Zolensky E. M. (2008) A TEM study of thermally modified Comet 81P/Wild 2 dust particles by interactions with the aerogel matrix during the Stardust capture process. *Meteoritics Planet. Sci.* **43**, 97-120.
68. Zolensky M. E., **Gounelle** M., Mikouchi T., Ohsumi K., Le L., Hagiya K., and Tachikawa O. (2008) Andreyivanovite: A second new phosphide from the Kaidun meteorite. *American Mineralogist*, **93**, 1295-1299.
69. Genge M. J., Engrand C., **Gounelle** M., and Taylor S. (2008) The classification of micrometeorites. *Meteoritics Planet. Sci.* **43**, 497-515.
70. Gattacecca J., Rochette P., **Gounelle** M. and Van Gineken, M. (2008) The petrofabric of some achondrite meteorites as revealed by anisotropy of magnetic susceptibility *Earth Planet. Sci. Lett.*, **270**, 280-289.
71. Belhout A., Kiener J., Coc A., Duprat J., Engrand C., Fitoussi C., **Gounelle** M., Lefebvre-Schuhl A., De Séréville N., Tatischeff V., Thibaud J. P., Chabot M., Hammache F., and Benhabiles-Mezhoud H. (2007) g-ray line production by proton and  $\gamma$ -particle induced reactions on  $^{12}\text{C}$ ,  $^{16}\text{O}$ ,  $^{24}\text{Mg}$  and Fe. *Nuclear Physics A* **76**, 034607.
72. **Gounelle** M. & Meibom A. The Oxygen Isotopic Composition of the Sun as a Test of the Supernova Origin of  $^{26}\text{Al}$  and  $^{41}\text{Ca}$  in the Early Solar System. *Astrophysical Journal Letters*. **664**, L123-L125.
73. Duprat J., Engrand C., **Gounelle** M., Maurette M., Kurat G., and Hammer C. (2007) Micrometeorites from central Antarctica snow: the CONCORDIA collection. *Advances in Space Research* **39**, 605-611.
74. **Gounelle** M., Young E. D., Shahar A., Tonui E., and Kearsley A. T. (2007) Magnesium isotopic compositions of Calcium-, Aluminium-rich Inclusions and chondrules from CB<sub>6</sub> chondrites. *Earth Planet. Sci. Lett.*, **256**, 521-533.
75. Meibom A., Krot A. N., Robert F., Mostefaoui S., Russell S. S., Petaev M. I., and **Gounelle** M. (2007) Nitrogen and carbon isotopic composition of the Sun inferred from a high temperature nebular condensate *Astrophysical Journal Letters* **656**, L33-L36.
76. Bland P. A., Kearsley A. T., Wozniakiewicz P. J., Burchell M. J., **Gounelle** M., Zolensky M. E., and Genge M. J. (2007) A comet in the lab. *Astronomy & Geophysics* **48**, 6.29-6.32.
77. Zolensky M. E., et al. (**Gounelle**) (2006) Mineralogy and petrology of Comet 81P/Wild 2 nucleus samples. *Science* **314**, 1735-1739.
78. McKeegan, K. D. et al. (**Gounelle**) Isotopic compositions of cometary matter returned by Stardust. *Science* **314**, 1724-1728 (2006).
79. Sandford S. A. et al. (**Gounelle**) (2006) Organics Captured from Comet 81P/Wild 2 by the Stardust Spacecraft. *Science* **314**, 1720-1724.
80. Brownlee D. E., et al. (**Gounelle**) (2006) Comet 81P/ Wild 2 under a microscope. *Science* **314**, 1711-1716.
81. Montmerle T., Augereau J.- C., Chaussidon M., **Gounelle** M., Marty B., and Morbidelli A. (2006) Solar System Formation and Early Evolution: the First 100 Million Years. *Earth Moon Planets* **98**, 39-95. [REVUE INVITÉE](#)
82. **Gounelle** M. (2006) The origin of short-lived radionuclides in early Solar System. *New Astronomy Review* **50**, 596-599.



83. Morbidelli A., **Gounelle** M., Levison H. F., and Bottke W. F. (2006) Formation of the binary near-Earth object 1996 FG3: Can binary NEOs be the source of short-CRE meteorites? *Meteoritics Planet. Sci.* **41**, 875-887.
84. **Gounelle** M., Shu F. H., Shang H., Glassgold A. E., Rehm E. K., and Lee T. (2006) The irradiation origin of beryllium radioisotopes and other short-lived radionuclides. *Astrophysical Journal* **640**, 1163-1170.
85. **Gounelle** M., Spurny P., and Bland P. A. (2006) The atmospheric trajectory and orbit of the Orgueil meteorite. *Meteoritics Planet. Sci.* **41**, 135-150.
86. Mullane E., Russell S. S., and **Gounelle** M. (2005) Nebular and asteroidal modifications of the iron isotopic composition of chondritic components. *Earth Planet. Sci. Lett.* **239**, 203-218.
87. **Gounelle** M., Engrand C., Maurette M., Kurat G., McKeegan K. D., and Brandstätter F. (2005) Small Antarctic micrometeorites (25-50 mm): A mineralogical and in situ oxygen isotopes study. *Meteoritics Planet. Sci.* **40**, 917-932.
88. Bullock E. S., **Gounelle** M., Lauretta D. S., Grady M. M., and Russell S. S. (2005) The mineralogy and texture of Fe-Ni sulphides in C11 chondrites: clues to the extent of aqueous alteration. *Geochim. Cosmochim. Acta* **69**, 2687-2700.
89. **Gounelle** M. and Russell S. S. (2005) On early Solar System chronology: Implications of an heterogeneous distribution of extinct short-lived radionuclides. *Geochim. Cosmochim. Acta* **69**, 3129-3144.
90. **Gounelle** M., Engrand C., Alard O., Bland P. A., Zolensky M. E., Russell S. S., and Duprat J. (2005) The hydrogen isotopic composition of water from fossil micrometeorites. *Geochim. Cosmochim. Acta* **69**, 3431-3443.
91. Smith C. L., Russell S. S., **Gounelle** M., Greenwood R. C., and Franchi I. A. (2004) NWA1152 and Sahara 001282: A new carbonaceous chondrite grouplet with affinities to the CR and CV groups. *Meteoritics Planet. Sci.* **39**, 2009-2032.
92. Mullane E., Alard O., **Gounelle** M., and Russell S. S. (2004) Laser ablation ICP-MS study of IIIAB irons and pallasites: constraints on the behaviour of highly siderophile elements during and after planetesimal core formation. *Chem. Geol.* **208**, 5-28.
93. **Gounelle** M., Zolensky M. E., Liou J.-C., Bland P. A., and Alard O. (2003) Mineralogy of carbonaceous chondritic microclasts in howardites: Identification of C2 fossil micrometeorites. *Geochim. Cosmochim. Acta* **67**, 507-527.
94. Tatischeff V., Duprat J., Assunção M., Coc A., Engrand C., **Gounelle** M., Lefevre A., Porquet M. G., de Séréville N., Thibaud J. P., Bourgeois C., Chabot M., Hammache F., and Scarpaci J. A. (2003) Cross sections relevant to gamma-ray line emission in solar flares:  $^3\text{He}$ -induced reactions on  $^{16}\text{O}$  nuclei. *Phys. Rev. C* **68**, 5804.
95. Zolensky M., Nakamura K., Weisberg M. K., Prinz M., Nakamura T., Ohsumi K., Saitow A., Mukai M., and **Gounelle** M. (2003) A primitive dark inclusion with radiation-damaged silicates in the Ningqiang carbonaceous chondrite. *Meteoritics Planet. Sci.* **38**, 305-322.
96. Zolensky M. E., Nakamura K., **Gounelle** M., Mikouchi T., Kasama T., Tachikawa O., and Tonui E. (2002) Mineralogy of Tagish Lake: an ungrouped type 2 carbonaceous chondrite. *Meteoritics Planet. Sci.* **37**, 737-762.
97. **Gounelle** M. and Zolensky M. E. (2001) A terrestrial origin for sulfate veins in C11 chondrites. *Meteoritics Planet. Sci.* **36**, 1321-1329.
98. **Gounelle** M., Shu F. H., Shang H., Glassgold A. E., Rehm K. E., and Lee T. (2001) Extinct radioactivities and protosolar cosmic-rays: self-shielding and light elements. *Astrophysical Journal* **548**, 1051-1070.
99. Russell S. S., **Gounelle** M., and Hutchison R. (2001) Origin of short-lived radionuclides. *Phil. Trans. R. Soc. Lond. A* **359**, 1991-2004. [REVUE INVITÉE](#)
100. Shu F. H., Shang S. H., **Gounelle** M., Glassgold A. E., and Lee T. (2001) The origin of chondrules and refractory inclusions in chondritic meteorites. *Astrophysical Journal* **548**, 1029-1050.

101. Maurette M., Duprat J., Engrand C., Kurat G., Gounelle M., Matrajt G., and Toppani A. (2000) Accretion of neon, organics, CO<sub>2</sub>, nitrogen and water from large interplanetary dust particles on the early Earth. *Planet. Space Sci.* **48**, 1117-1137.
102. Tanguy A., **Gounelle M.**, and Roux S. (1998) From individual to collective pinning: Effect of long-range elastic interactions. *Phys. Rev. E* **58**(2), 1577-1590.
103. **Gounelle M.**, Lorientte V., and Boccara A. C. (1996) A compensated optical profilometer for wavefront control of Virgo gravitational wave antenna optics. *Meas. Sci. Technol.* **7**, 1032-1037.

### Chapitres d'ouvrage

1. Bergin T., Alexander C., Drozdovskaya M., **Gounelle M.** (2022) The Interstellar Heritage and Birth Environment of the Solar System, in *Comets III*, Arizona University Press, **Sous presse**, **REVUE INVITÉE**
2. **Gounelle M.** (2022) La représentation iconographique des météorites de l'Antiquité à l'époque moderne, in *L'image*, R. Gillet (ed), Presses Universitaires de Rennes, **Sous presse**
3. Prantzos, Braine, Charnoz, Ekström, Gargaud, **Gounelle**, d'Hendecourt, Jacquet and Lachièze-Rey (2015) Univers, galaxies, étoiles, planètes in *L'évolution, de l'univers aux sociétés*, Gargaud and Lecointre (eds), Editions Matériologiques, pp. 91-144.
4. Johansen, A., Jacquet, E., Cuzzi, J., Morbidelli, A., **Gounelle**, M. (2015). New Paradigms For Asteroid Formation, in *Asteroids IV*, Patrick Michel, Francesca E. DeMeo, and William F. Bottke (eds.), University of Arizona Press, Tucson, p.471-492 **REVUE INVITÉE**
5. Davis A. M., Alexander C. M. O. D., Ciesla F. J., **Gounelle M.**, Krot A. N., Petaev M. I., and Stephan T. (2014) Samples of the Solar System: Recent Developments, in *Protostars and Planets VI*, 809-831. Arizona University Press, Tucson. **REVUE INVITÉE**
6. **Gounelle M.** (2014) Comment les chutes de météorites sont-elles devenues une "vérité" scientifique, in *La vérité* (ed. O. Guerrier), pp. 73-89. Presses Universitaires de Saint Etienne, Saint Etienne.
7. **Gounelle**, M. (2011). Massive stars and short-lived radionuclides in the solar system, in *Star formation in the local universe*. Charbonnel, C., Montmerle, T. (Eds.). EDP Sciences, Paris, pp. 289-297.
8. **Gounelle M.** & Montmerle T. (2011) The birth and infancy of the solar system. In *Origin of Life: an astrobiology perspective*, eds. M. Gargaud, P. Lopez-Garcia, H. Martin, Cambridge University Press: Cambridge, 118-135. **REVUE INVITÉE**
9. **Gounelle M.** & Meibom A. (2010) The origin of <sup>60</sup>Fe and other short-lived radionuclides in the early solar system. In *Physics and Astrophysics of Planetary Systems*", eds. T. Montmerle, D. Ehrenreich, and A.-M. Lagrange, EAS Conf. Ser. 41, 301-311.
10. **Gounelle M.**, Morbidelli A., Bland P. A., Sephton M. A., Young E. D., and Spurny P. (2008) Meteorites from the outer solar system? In *The Solar System Beyond Neptune* (eds A. Barucci, H. Boehnhardt, D. Cruikshank, A. Morbidelli), pp. 525-541. Arizona University Press: Tucson. **REVUE INVITÉE**
11. **Gounelle M.**, Chaussidon, M. & Montmerle T. (2007) Irradiation in the early Solar System and the origin of short-lived radionuclides. *Comptes Rendus Acad. Sci. Paris*, **339**, 885-894. **REVUE INVITÉE**
12. Chaussidon M. and **Gounelle M.** (2007) Short-lived radionuclides in meteorites and early solar system processes. *Comptes Rendus Acad. Sci. Paris* **339**, 872-884. **REVUE INVITÉE**
13. Wadhwa M., Amelin Y., Davis A. M., Lugmair G. W., Meyer B. S., **Gounelle M.**, and Desch S. J. (2007) From dust to planetesimals: Implications for the solar protoplanetary disk from short-lived radionuclides in meteorites. In *Protostars and*

*Planets V* (ed. B. Reipurth, D. Lewitt & K. Keil) pp 835-848. University of Arizona Press: Tucson. **REVUE INVITÉE**

14. **Gounelle M.** (2006) The meteorite fall at l'Aigle and the Biot report: Exploring the cradle of Meteoritics. In *The history of meteoritics and key meteorite collections: Fireballs, finds and falls* (ed. G. J. H. McCall, A. J. Bowden, and R. J. Howarth), pp. 73-89. Geological Society Special Publications: London.
15. Chaussidon M. and **Gounelle M.** (2006) Irradiation processes in early Solar System. In *Meteorites and early solar system II* (eds. D. Lauretta and H. Y. McSween), pp 323-340. University of Arizona Press: Tucson. **REVUE INVITÉE**
16. Russell S. S., Hartmann L., Cuzzi J., Krot A. N., **Gounelle M.**, and Weidenschilling S. J. (2006) Timescales of the Solar Protoplanetary Disk. In *Meteorites and early solar system II* (ed. D. Lauretta and H. Y. McSween), pp 233-251. University of Arizona Press: Tucson. **REVUE INVITÉE**
17. **Gounelle M.** and Russell S. S. (2005) Spatial heterogeneity in the accretion disk and early solar chronology. In *Chondrites and the protoplanetary disk* (ed. A. N. Krot, E. R. D. Scott, and B. Reipurth), pp. 548-601. Publications of the Astronomical Society of the Pacific: San Francisco.
18. Goswami J. N., Marhas K. K., Chaussidon M., **Gounelle M.**, and Meyer B. S. (2005) Origin of short-lived radionuclides in the early solar system. In *Chondrites and the protoplanetary disk* (eds. A. N. Krot, E. R. D. Scott, and B. Reipurth), pp. 485-514. Publications of the Astronomical Society of the Pacific: San Francisco. **REVUE INVITÉE**
19. Duprat J., Engrand C., Maurette M., **Gounelle M.**, Kurat G., and Hammer C. (2005) The Micrometeorite Program at Dome C. In *Dome C Astronomy & Astrophysics Meeting*, Vol. 14 (ed. M. Giard, F. Casoli, and F. Paletou), pp. 51-56. EDP Sciences: Paris.
20. Maurette M., Matrajt G., **Gounelle M.**, Duprat J., Engrand C., and Blanot D. (2003) Juvenile KBOs dust and prebiotic organic chemistry. In *Frontiers of life* (ed. L. M. Celniquier and J. Trân Thanh Vân), pp. 7-22. Thê Gioi: Hanoi.
21. Mullane E., Russell S. S., **Gounelle M.**, Mason T. F. D., Din V., Weiss D., and Coles B. (2003) Precise and Accurate Determination of Iron isotopes by Multi-Collector Inductively Coupled Mass Spectrometry. In *Plasma Source Spectrometry: Applications and Emerging Technologies* (ed. G. Holland and S. D. Tanner), pp. 351-361. The Royal Society of Chemistry: Cambridge.
22. Maurette M., Matrajt G., **Gounelle M.**, Engrand C., and Duprat J. (2001) La matière extraterrestre primitive et les mystères de nos origines. In *Éléments d'exobiologie I: l'environnement de la Terre primitive et l'origine de la vie* (ed. M. Gargaud and D. Despois), pp. 99-127. Presses Universitaires de Bordeaux: Bordeaux.
23. Maurette M., **Gounelle M.**, Duprat J., Engrand C., and Matrajt G. (2000) The "early-micrometeorites-accretion" scenario and the origin of the Earth's hydrosphere. In *Bioastronomy 99: a new era in the search for life in the universe* (ed. G. Lemarchand and K. Meech), pp. 263-284. Astronomical Society of the Pacific: Hawaii.
24. Tanguy A., **Gounelle M.**, and Roux S. (1997) Crack roughness. In *PROBAMAT: Probabilities and Materials – Tests, Models and Applications for the 21st Century* (ed. George N. Frantziskonis), pp 73-92. Kluwer: New York.

#### **Rapports techniques ([www.euro-cares.eu](http://www.euro-cares.eu))**

- Meneghin I et al [Gounelle] (2018) *Eurocares final technical report*, 165 pages
- Aléon J, **Gounelle M** et al (2017) *WP4 : Workshop report*, 11 pages
- Aléon J, **Gounelle M** et al (2017) *WP4 : Industry visits*, 42 pages
- Aléon J, **Gounelle M** et al (2017) *WP4 : Summary report*, 22 pages



- Franchi I et al [Gounelle] (2016) *WP4 : Instrumentation*, 16 pages
- Franchi I et al [Gounelle] (2016) *WP4 : Space Agency visits*, 32 pages