

Geochimica et Cosmochimica Acta—Special Issue on Isotopic Studies of Planetary and Nuclear Materials: A scientific tribute to Ian Dougllass Hutcheon



Geochimica et Cosmochimica Acta publishes original work in a wide range of subjects in terrestrial geochemistry, meteoritics, and planetary geochemistry. The March 15, 2017 issue (volume 201) contains 22 papers covering isotopic studies of planetary and nuclear materials in a special issue dedicated to Ian Dougllass Hutcheon (1947-2015), preeminent scientist known for his work on the chronology of the early Solar System and his contributions to the development of instrumentation and techniques for isotopic and elemental microanalysis. Editors of the special issue are Trevor Ireland (Australian National University), Andrew M. Davis (The University of Chicago), Alexander N. Krot (University of Hawai'i), Yuri Amelin (Australian National University), Sara S. Russell (Natural History Museum, London), and Qing-Zhu Yin (University of California at Davis).

Though a subscription, individual or institutional, is needed to access the articles online, the **Table of Contents and Abstracts** are available to everyone. Articles:

"Calcium-aluminum-rich inclusions with fractionation and unidentified nuclear effects (FUN CAIs): II. Heterogeneities of magnesium isotopes and ^{26}Al in the early Solar System inferred from in situ high-precision magnesium-isotope measurements" by C. Park, K. Nagashima, A. N. Krot, G. R. Huss, A. M., Davis, and M. Bizzarro, p. 6-24, doi: [10.1016/j.gca.2016.10.002](https://doi.org/10.1016/j.gca.2016.10.002).

"Thermal and chemical evolution in the early solar system as recorded by FUN CAIs: Part I – Petrology, mineral chemistry, and isotopic composition of Allende FUN CAI CMS-1" by C. D. Williams, T. Ushikubo, E. S. Bullock, P. E. Janney, R. R. Hines, N. T. Kita, R. L. Hervig, G. J. MacPherson, R. A. Mendybaev, F. M. Richter, and M. Wadhwa, p. 25-48, doi: [10.1016/j.gca.2016.10.053](https://doi.org/10.1016/j.gca.2016.10.053).

"Thermal and chemical evolution in the early Solar System as recorded by FUN CAIs: Part II – Laboratory evaporation of potential CMS-1 precursor material" by R. A. Mendybaev, C. D. Williams, M. J. Spicuzza, F. M. Richter, J. W. Valley, A. V. Fedkin, and M. Wadhwa, p. 49-64, doi: [10.1016/j.gca.2016.08.034](https://doi.org/10.1016/j.gca.2016.08.034).

"High precision Al–Mg systematics of forsterite-bearing Type B CAIs from CV3 chondrites" by G. J. MacPherson, E. S. Bullock, T. J. Tenner, D. Nakashima, N. T. Kita, M. A. Ivanova, A. N. Krot, M. I. Petaev, and S. B. Jacobsen, p. 65-82, doi: [10.1016/j.gca.2016.12.006](https://doi.org/10.1016/j.gca.2016.12.006).

"Chronological study of oxygen isotope composition for the solar protoplanetary disk recorded in a fluffy Type A CAI from Vigarano" by N. Kawasaki, S. Itoh, N. Sakamoto, and H. Yurimoto, p. 83-102, doi: [10.1016/j.gca.2015.12.031](https://doi.org/10.1016/j.gca.2015.12.031).

"A long duration of the ^{16}O -rich reservoir in the solar nebula, as recorded in fine-grained refractory inclusions from the least metamorphosed carbonaceous chondrites" by T. Ushikubo, T. J. Tenner, H. Hiyagon, and N. T. Kita, p. 103-122, doi: [10.1016/j.gca.2016.08.032](https://doi.org/10.1016/j.gca.2016.08.032).

"The initial $^{41}\text{Ca}/^{40}\text{Ca}$ ratios in two type A Ca–Al-rich inclusions: Implications for the origin of short-lived ^{41}Ca " by M.-C. Liu, p. 123-135, doi: [10.1016/j.gca.2016.10.011](https://doi.org/10.1016/j.gca.2016.10.011).

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"High-temperature rims around calcium-aluminum-rich inclusions from the CR, CB and CH carbonaceous chondrites" by A. N. Krot, K. Nagashima, E. M.M. van Kooten, and M. Bizzarro, p. 155-184, doi: [10.1016/j.gca.2016.09.031](https://doi.org/10.1016/j.gca.2016.09.031).

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chondrites" by A. N. Krot, K. Nagashima, E. M.M. van Kooten, and M. Bizzarro, p. 185-223, doi: [10.1016/j.gca.2016.09.001](https://doi.org/10.1016/j.gca.2016.09.001).

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"A renewed search for short-lived ¹²⁶Sn in the early Solar System: Hydride generation MC-ICPMS for high sensitivity Te isotopic analysis" by G. A. Brennecka, L. E. Borg, S. J. Romaniello, A. K. Souders, Q. R. Shollenberger, N. E. Marks, and M. Wadhwa, p. 331-344, doi: [10.1016/j.gca.2016.10.003](https://doi.org/10.1016/j.gca.2016.10.003).

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"Calcium isotopic compositions of chondrites" by S. Huang and S. B. Jacobsen, p. 364-376, doi: [10.1016/j.gca.2016.09.039](https://doi.org/10.1016/j.gca.2016.09.039).

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See also:

PSRD article: [Discovery of a New Garnet Mineral, Hutcheonite, in the Allende Meteorite.](#)

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