

Accepted Manuscript

Experimental investigation on the controls of clumped isotopologue and hydrogen isotope ratios in microbial methane

Danielle S. Gruen, David T. Wang, Martin Könneke, Begüm D. Topçuoğlu, Lucy C. Stewart, Tobias Goldhammer, James F. Holden, Kai-Uwe Hinrichs, Shuhei Ono

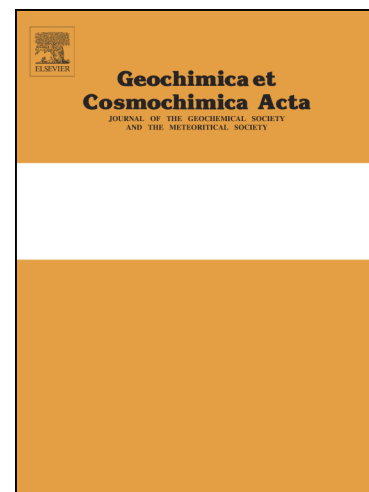
PII: S0016-7037(18)30344-2
DOI: <https://doi.org/10.1016/j.gca.2018.06.029>
Reference: GCA 10818

To appear in: *Geochimica et Cosmochimica Acta*

Received Date: 16 September 2017
Revised Date: 14 June 2018
Accepted Date: 22 June 2018

Please cite this article as: Gruen, D.S., Wang, D.T., Könneke, M., Topçuoğlu, B.D., Stewart, L.C., Goldhammer, T., Holden, J.F., Hinrichs, K-U., Ono, S., Experimental investigation on the controls of clumped isotopologue and hydrogen isotope ratios in microbial methane, *Geochimica et Cosmochimica Acta* (2018), doi: <https://doi.org/10.1016/j.gca.2018.06.029>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Title: Experimental investigation on the controls of clumped isotopologue and hydrogen isotope ratios in microbial methane

Authors and affiliations:

Danielle S. Gruen^{1,2,*}, David T. Wang^{1,2,+}, Martin Könneke³, Begüm D. Topçuoğlu⁴, Lucy C. Stewart^{4,^}, Tobias Goldhammer^{3,5}, James F. Holden⁴, Kai-Uwe Hinrichs³, and Shuhei Ono^{1,*}

¹Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139, USA.

²Marine Chemistry and Geochemistry Department, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543, USA.

³MARUM Center for Marine Environmental Sciences and Department of Geosciences, University of Bremen, Bremen D-28359, Germany.

⁴Department of Microbiology, University of Massachusetts, Amherst, Massachusetts 01003, USA.

⁵Leibniz-Institute for Freshwater Ecology and Inland Fisheries, Department of Chemical Analytics and Biogeochemistry, Mueggelseedamm 301, 12587 Berlin, Germany

⁺Present address: ExxonMobil Upstream Research Company, Spring, TX 77389, USA.

[^]Present address: GNS Science, Lower Hutt 5010, New Zealand.

*To whom correspondence should be addressed:

Danielle Gruen (dgruen@mit.edu),

Shuhei Ono (sono@mit.edu)

Department of Earth, Atmospheric, and Planetary Sciences

Massachusetts Institute of Technology

77 Massachusetts Ave, Cambridge, MA 02139

Download English Version:

<https://daneshyari.com/en/article/8910641>

Download Persian Version:

<https://daneshyari.com/article/8910641>

[Daneshyari.com](https://daneshyari.com)