

## Accepted Manuscript

Evolution of primary producers and productivity across the Ediacaran-Cambrian transition

Lei Xiang, Shane D. Schoepfer, Hua Zhang, Chang-qun Cao, Shu-zhong Shen

PII: S0301-9268(18)30014-7

DOI: <https://doi.org/10.1016/j.precamres.2018.05.023>

Reference: PRECAM 5095

To appear in: *Precambrian Research*

Received Date: 4 January 2018

Revised Date: 12 May 2018

Accepted Date: 16 May 2018



Please cite this article as: L. Xiang, S.D. Schoepfer, H. Zhang, C-q. Cao, S-z. Shen, Evolution of primary producers and productivity across the Ediacaran-Cambrian transition, *Precambrian Research* (2018), doi: <https://doi.org/10.1016/j.precamres.2018.05.023>

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.

# Evolution of primary producers and productivity across the Ediacaran-Cambrian transition

Lei Xiang <sup>a, b, \*</sup>, Shane D. Schoepfer <sup>c</sup>, Hua Zhang <sup>a, b, \*</sup>, Chang-qun Cao <sup>a, b</sup>, Shu-zhong  
Shen <sup>a, b</sup>

<sup>a</sup> State Key Laboratory of Palaeobiology and Stratigraphy, Nanjing Institute of  
Geology and Palaeontology and Center for Excellence in Life and Palaeoenvironment,  
Chinese Academy of Sciences, 39 East Beijing Road, Nanjing 210008, China

<sup>b</sup> Centre for Research and Education on Biological Evolution and Environment,  
Nanjing University, 163 Xianlin Avenue, Nanjing 210023, China

<sup>c</sup> Department of Geosciences and Natural Resources, Western Carolina University,  
1 University Way, Cullowhee, NC 28779, USA

\* Corresponding authors: leixiang@nigpas.ac.cn; hzhang@nigpas.ac.cn

**Abstract:** Nearly all extant animal phyla first appeared during the  
Ediacaran-Cambrian transition. A revolution in primary producer ecology and marine  
productivity has been proposed as a bottom-up ecological driver for this rapid  
diversification of metazoans. However, the control(s) driving the evolution of primary  
producers and primary productivity around the Ediacaran-Cambrian transition, and  
their potential relationship to the Cambrian Explosion, are not fully understood. In  
this study, we measured the nitrogen content and the nitrogen isotopic composition of

Download English Version:

<https://daneshyari.com/en/article/8912525>

Download Persian Version:

<https://daneshyari.com/article/8912525>

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