

Accepted Manuscript

Frontiers in Early Earth History and Primordial Life- Part I

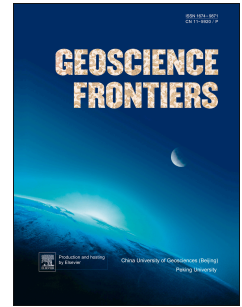
S. Maruyama, M. Santosh

PII: S1674-9871(16)30214-6

DOI: [10.1016/j.gsf.2016.12.002](https://doi.org/10.1016/j.gsf.2016.12.002)

Reference: GSF 520

To appear in: *Geoscience Frontiers*



Please cite this article as: Maruyama, S., Santosh, M., Frontiers in Early Earth History and Primordial Life- Part I, *Geoscience Frontiers* (2017), doi: 10.1016/j.gsf.2016.12.002.

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.

1 **Editorial**

2

3 **Frontiers in Early Earth History and Primordial Life- Part I**

4

5

6 The history of the Early Earth is shrouded in mystery, and one of the major outcomes of
7 the Apollo Program, lunar sampling, and the data acquired by subsequent orbiting
8 missions, is that the Moon is an important analogue for the Hadean Earth, which
9 includes primordial planet-forming materials. We assemble two special issues of
10 “Geoscience Frontiers” with state-of-the-art contributions that provide insights into
11 planetary formation, Earth’s early history and primordial life. New theories show why
12 the Earth began as a dry planetary system and was later seeded by an ocean-
13 atmosphere system through the bombardment of carbonaceous chondrites. A
14 combination of the information concerning the evolution of Earth, Mars, and the other
15 terrestrial planets is important in understanding the fate of the primordial continental
16 crustal materials and the making of habitable planets.

17

18 In this first volume of the special issue, we assemble fourteen contributions, starting
19 with the article by Sasaki and Ebisuzaki (2017-this issue) on “Population synthesis of
20 planet formation using a torque formula with dynamic effects” where the authors present
21 a new torque formula for Type I migration derived through dynamic corrections. The
22 study proposes significant slowdown of the inward migration of planet embryos and that

Download English Version:

<https://daneshyari.com/en/article/5780263>

Download Persian Version:

<https://daneshyari.com/article/5780263>

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