Japan Geoscience Union Meeting 2010

(May 23-28 2010 at Makuhari, Chiba, Japan)

©2009. Japan Geoscience Union. All Rights Reserved.



PPS003-14 Room: 201A Time: May 24 11:57-12:09

On New origin of highland plagioclases on the Moon

Yasunori Miura^{1*}

¹Yamaguchi University

The present study on lunar anorthite plagioclase is summarized as follows:

- 1) Previous idea of lunar highland plagioclases formed by magma-ocean theory cannot explain missing of light K-Ca feldspars on the Moon.
- 2) Anorthite plagioclases with carbon can be formed by high-temperature condition with CO2 gas at the natural and artificial experiments, which is applied to lunar plagioclase formation by remnants at a giant-impact process.
- 3) Lunar constituent and mineral materials are considered to be relict materials of a giant-impact with high-temperature condition mainly from primordial Earth.

Keywords: lunar highland, plagioclases, origin, high-temperature condition, carbon, giant impact