Roller G.

**A Nuclear Production Ratio Th/U = 0.96 from Lunar and Terrestrial Rocks: Implications for Future Lunar Sample Return Missions** [#5041]

Based upon findings from lunar rocks, a preliminary nuclear production ratio of = 1 is suggested for element pairs Th/U, Pu/U, Re/Os, Ir/Os and Au/Ir. Hence, the moon could become an astrophysical reference as to r-process isotope and element ratios.

Korotev R. L.

**In the Feldspathic Highlands of the Moon, High MgO/FeO Equals High Olivine Abundance** [#5078]

Highlands of the Moon / MgO to FeO / Olivine goes up.

Muftakhetdinova R. F., Grokhovsky V. I., Yakovlev G. A.

**Structure and Composition of Shock Remelting Lunar Metallic Particles** [#5292]

In this work we investigated structure and composition of shock re-melting lunar metallic particles.


**40Ar/39Ar Ages for Lunar Meteorites MIL 090034, MIL 090036, and MIL 090070 and Excess 40Ar in MIL 090036** [#5237]

Young ages of ~3500–3540 Ma of MIL 090034, MIL 090036 and MIL 090070 for each breccia probably date the time of breccia assembly. The regolith breccia MIL0 90036 contains excess 40Ar implanted from the lunar atmosphere.