

Thursday, March 22, 2012

## POSTER SESSION II: LUNAR CHRONOLOGY BY ANY MEANS NECESSARY

6:00 p.m. Town Center Exhibit Area

Seddio S. M. Jolliff B. L. Korotev R. L. Carpenter P. K.

[\*Thorite in an Apollo 12 Granite Fragment and Age Determination Using the Electron Microprobe\*](#) [#2704]

We present the first quantitative analysis of lunar thorite. It contains a 12% xenotime component. We calculate an age of 3.88 Ga. Yttrobetafite and monazite, also present in the sample, yield similar ages.

Zhou Q. Zeigler R. A. Yin Q.-Z. Korotev R. L. Jolliff B. L. Amelin Y. Marti K. Wu F. Y.

Li X. H. Li Q. L. Lin Y. T. Liu Y. Tang G. Q.

[\*U-Pb Dating of Zircons and Phosphates in Lunar Meteorites, Acapulcoites and Angrites\*](#) [#1554]

New zircon and phosphate dating techniques are developed and applied to two KREEPIest lunar meteorites (SaU 169 and Dhofar 1442). We also report results for Acapulco and NWA 4950 phosphates with precisely known TIMS U-Pb ages.

Shirley K. A. Zanetti M. Jolliff B. L. van der Bogert C. H. Hiesinger H.

[\*Crater Size-Frequency Distribution Measurements at the Compton-Belkovich Volcanic Complex\*](#) [#2792]

We present and discuss the results of CSFDs determined on areas within the Compton-Belkovich Volcanic Complex (CBVC) and surrounding areas, including immediately adjacent terrain and the nearby Copernican Hayn Crater.

Thiessen F. Hiesinger H. van der Bogert C. H. Pasckert J. H. Robinson M. S.

[\*Surface Ages and Mineralogy of Lunar Light Plains in the South-Pole Aitken Basin\*](#) [#2060]

In this study we obtained crater size-frequency distribution measurements to derive absolute model ages of light plains in the South Pole Aitken basin. Furthermore we analyzed their mineralogical composition.

Demidova S. I. Nazarov M. A. Anosova M. O. Kostitsyn Y. A. Brandstätter F. Ntaflos Th.

[\*U-Pb Dating of Zircons from the Dhofar 1442 Lunar Meteorite\*](#) [#1090]

U-Pb dating of eight zircon grains from the Dho 1442 lunar meteorite was performed. There are two groups of different age: old and young. The age of the old group is  $4309 \pm 13$  Ma. The young group includes two grains of  $3934 \pm 19$  and  $3998 \pm 32$  Ma ages.

Cho Y. Morota T. Yasui M. Hirata N. Haruyama J. Sugita S.

[\*Young Mare Volcanism in the Orientale Region Contemporary with ~2 Ga PKT Volcanism Peak Period\*](#) [#1575]

Crater counting analyses with Kaguya images reveal that maria along Orientale Basin rings, far from PKT, are covered with lava erupted contemporarily with the PKT volcanic activity peak at ~2 Ga, suggesting a widespread nature of this volcanic event.