Ozima M.  Podosek F. A.  Higuchi T.  Yin Q. Z.  Yamada A.

**Oxygen Isotopes in the Solar System [#1130]**

Bootstrap statistical examination of O isotopes in planetary objects such as meteorites, Mars (SNC), and Earth suggests that they formed by random accretion of planetesimals from the protosolar nebula, and have the same O isotopes as the Sun.

Chakraborty S.  Thiemens M. H.  Kimura Y.  Nuth J. A. III

**Non-Mass Dependent Oxygen Isotopic Fractionation of Refractory Oxide Dust Produced by a Chemical Process [#1389]**

The results of the observed non-mass dependent oxygen isotopic effect in solid oxides formed in a smoke experiment was discussed and interpreted based on symmetry based chemical reaction scheme.

Yin Q.-Z.  Jacobsen B.  Hutcheon I. D.

**Toward Tracing Redox State Evolution in the Protoplanetary Disk with High Resolution $^{26}$Al-26Mg Chronometry [#1531]**

The goal of the study is to apply high-resolution $^{26}$Al-26Mg chronometry to trace the redox state evolution in the protoplanetary disk. We have discovered one chondrule with negative $\varepsilon^{26}$Mg ($-57 \pm 14$ ppm). Significance of this finding will be discussed together with new data.

Ganguly J.  Ito M.  Zhang X.

**Mn-Cr Thermochronology of Early Solar System Processes [#1339]**

Cr diffusion was determined in olivine and enstatite and used to develop thermochronologic formulations of Mn-Cr decay system. The latter was used to estimate high temperature cooling rates and initial burial depth of a pallasite and cumulate eucrites.

Meyer B. S.  Adams D. C.

**Neutron Burst Production of $^{60}$Fe Necessarily Implies Production of $^{182}$Hf [#1403]**

Supernova neutron burst production of Fe-60 necessarily co-produces Hf-182. Our calculations demonstrate that the yield of Fe-60 is quite sensitive to the peak temperature and density in the burst, but that of Hf-182 is not. Detailed results are available on the Web.

Moynier F.  Fujii T.  Albarède F.

**Nuclear Field Vs Nucleosynthetic Effects as Cause of Isotopic Anomalies in FUN Inclusions [#1629]**

Mass-independent isotope effect due to nuclear field can lead to a number of isotope anomalies found in CAIs. A whole class of isotopic heterogeneities therefore reflect evaporation/condensation processes rather than nucleosynthetic effects.