

## PRINT ONLY: PRESOLAR GRAINS AND EARLY SOLAR NEBULA

Makalkin A. B. Dorofeeva V. A.

[Formation of Satellites in the Accretion Disks of Jupiter and Saturn: Comparative Modeling](#) [#2309]

We present the results of comparative modeling of formation of regular satellites of Jupiter and Saturn in the accretion circumplanetary disks.

Pravdivtseva O. Meshik A. Hohenberg C. M. Kurat G.

[I-Xe System in Campo del Cielo Silicates](#) [#1578]

High precision I-Xe ages were determined for two distinct silicates separated from a polished section of Campo del Cielo.

Shiryaev A. A. Fisenko A. V. Krivobok V. S. Vlasov I. I. Semjonova L. F.

[Nitrogen in Meteoritic Nanodiamonds: Lattice Impurity in Diamond Core or a Constituent of an Associated Carbonaceous Phases?](#) [#1317]

Results of investigation of structure and of spectroscopically-active defects in nanodiamonds from Efremovka CV3 chondrite are presented. The data are discussed in comparison with known models of synthetic nanodiamonds.

Simon J. I. Young E. D.

[Resetting, Errorchrons and the Meaning of Canonical CAI Initial  \$^{26}\text{Al}/^{27}\text{Al}\$  Values](#) [#1945]

Here we use simple mass balance calculations to quantify the importance of open system isotopic exchange during CAI evolution and show that *in situ* supra-canonical and canonical and bulk canonical measurements can all exist for an individual CAI.

Throop H. Bally J.

[UV Photolysis and Creation of Complex Organic Molecules in the Solar Nebula](#) [#2139]

Nearby O/B stars in the Sun's birth environment can irradiate ices in the solar nebula and synthesize complex organic molecules. This process may explain the early solar system's complex organics, such as those found in chondritic meteorites.

Ustinova G. K.

[On Origin of Xe-HL in Meteoritic Nanodiamonds](#) [#1007]

The Xe-HL component is shown to be formed and captured simultaneously with the nanodiamond synthesis in the conditions of shock wave propagation from supernova explosions, and its isotopic composition is an effect of acceleration in the shock waves.