

PRINT ONLY: CHONDRITES

Cole K. J. Schultz L. Sipiera P. P. Welten K. C.

Kilabo and Bensour, Two LL6 Chondrite Falls from Africa with Very Similar Mineralogical Compositions but Different Cosmic-Ray Exposure Histories [#1477]

In 2002 two LL6 chondrites fell five months apart from each other in Africa. Mineralogically they are similar and raise the possibility that they are from the same meteoroid stream. To answer this question the meteorites were analyzed for their cosmogenic nuclides and their metallic compositions.

Cooper R. F.

Redox Dynamics in Silicate Melts: The Semiconductor Condition and Its Impact on Texture [#2182]

Electronic defects in silicate melts allow redox reactions to be dominated by the chemical diffusion of cations. The reactions create "non-equilibrium" textures that have implications regarding, e.g., the evolution of metal-bearing chondrules.

Huber L. Hofmann B. Gnos E. Welten K. C. Leya I.

Another Meteorite with a Complex Exposure History: JaH 073 [#1294]

Noble gases and radionuclides of the large strewnfield meteorite JaH 073 confirm a complex exposure history with a possible first stage exposure on the parent body.

Ivliev A. I. Alexeev V. A. Kuyunko N. S.

Research of the Shock Metamorphism of Ordinary Chondrites by the Thermoluminescence Method [#1043]

The collision processes obviously played a leading role in the formation of meteorites. Shock and thermal metamorphism accompanying the collisions is considered therefore as the most fundamental process in the evolution of the primordial matter.

Kalinina G. V. Kashkarov L. L.

Results of Track Investigation for the Chondrites Barwell L6, Kilabo LL6, Tugalin Bulen H6 and Bukhara CV3 [#1067]

VH-nuclei cosmic-ray track study in olivine and pyroxene grains from the chondrites Barwell L6, Kilabo LL6, Tugalin Bulen H6 and Bukhara CV3 has been performed.

Llorca J. Trigo-Rodriguez J. M.

Normative and Modal Mineralogy in Ordinary Chondrites: A Comparative Study Between Chemical Analysis, EPMA, XRD, Mössbauer, FTIR, and Raman Spectroscopy [#1148]

A fresh meteorite fall is used to compare normative mineralogy values obtained by chemical analysis and EPMA with band areas obtained by XRD, Mössbauer, FTIR, and Raman spectroscopy.

Moggi-Cecchi V. Pratesi G. Salvadori A. Franchi I. A. Greenwood R. C.

Textural and Mineralogical Features of NWA 1807 and 2180, Two New CV3 Chondrites from Northwest Africa [#2338]

A textural and mineralogical study has been performed on NWA 1807 and 2180 chondrites in order to determine sizes and typologies of chondrules, relative abundances of mineral phases, compositions of main phases and bulk oxygen isotope composition.

Yokoyama T. Nakamura T. Okazaki R. Saiki K.

Petrology, Mineralogy, and Noble Gas Composition of the Dubrovnik L Chondrite Breccia [#1131]

Petrology, mineralogy, and noble gas composition of the Dubrovnik L chondrite breccia showing beautiful dark-light structure are characterized. It consists mainly of L6 material with minor amounts of less equilibrated material and experienced little heating after formation of breccia.