A New Target Decomposition Technique for Compact Polarimetric SAR Data

In this paper, we have proposed a new compact polarimetric SAR decomposition technique. The decomposition results are obtained for the Mini-RF LRO data.

Cordierite from the Dhofar 025 Lunar Feldspathic Meteorite

Cordierite is an extremely rare phase in lunar rocks. Here we report on an occurrence of cordierite in the Dhofar 025 lunar feldspathic meteorite.

Shallow Subsurface Structure of the Moon at the Chang’e-3 Landing Site as Revealed by the Lunar Penetrating Radar

Chang’e-3 lunar penetrating radar images show four major stratigraphic zones: a reworked zone, an ejecta layer, a paleoregolith, and the underlying mare basalt.

Possible Thermal State, Composition and Core Sizes of the Moon

The possible temperature distribution, heat source intensity (uranium content), and chemical composition in the lunar mantle; core sizes have been estimated.

Exploiting Human-Robotic Partnership Missions to Obtain a Pristine Sample from Previously Inaccessible Sites on the Moon

A human-robotic mission scenario for lunar sample return is presented — proposed for the phase in the mid-2020s after the ongoing near-term missions.

Low-Viscosity Zone of the Moon and Some Petrological Constrains on Its Interior Temperature

We provide estimation of the interior temperature of a low-viscosity layer at the Moon core-mantle boundary using developed petrological model.

Regional Geology of the Chang’e-3 Landing Zone II

A new geologic map of northwest Imbrium was produced. Highlands surrounding Imbrium are mafic. The CE-3 unit is olivine rich. A nearby low-Ti unit is rich in pyroxene.