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ASTROMINERALOGY AND COSMOCHEMISTRY OF THE KABA METEORITE: A MESSAGE FROM THE EARLY SOLAR SYSTEM

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DESCRIPTION

We are happy to devote a new Topical Issue of Open Astronomy (https://www.degruyter.com/astro) to one of the most primitive and almost un-metamorphosed carbonaceous chondrites.

Kaba is classified as a CV3.0 in the Bali-type oxidized sub-group CV3oxB meteorite and can be regarded as one of the most primitive as well as least metamorphosed carbonaceous chondrites. Therefore, this meteorite is of great interest to the experts because it will give us a better understanding of the mineralogy of crystallization processes of the Solar System and hydrothermal alteration of the parent body. The purpose of this Topical Issue is to publish detailed investigation and interpretation of scientific results, which have been obtained by using modern analytical methods such as SEM, Raman, IR, TEM, ICPMS, CT, CL, as well as OM. The table of the key topics that may be included in the Topical Issue in the field of Meteoritics, Cosmochemistry, Astromineralogy, Astrobiology, as well as Astronomy can be found below.

KEY TOPICS

- Noble gas analysis of Kaba meteorite.
- Possible microbial alteration in the inner structure of Kaba meteorite.
- Historical review of the Kaba meteorite fall.
- Amoeboid Olivine Aggregates (AOA) of the Kaba meteorites.
- Calcium-Aluminium-rich inclusions (CAI) in the Kaba.
- 14C and isotopic studies of the Kaba Meteorite.
- Elemental bulk composition of Kaba Meteorite.
- Hydrothermal alteration of Kaba.
- Mg/Fe ratio in silicate mineral constituents of the Kaba meteorite.
- Oxygen isotope ratios in chondrules and CAIs of Kaba.
- Composition of *OM* in the Kaba meteorite.
- Magnetic properties of Kaba carbonaceous meteorite.
- Kaba meteorite and its astromineralogical implication.
- XRD analysis of CAIs from Kaba meteorite.

KEYWORDS

- carbonaceous chondrite,
- the Solar System,
- hydrothermal alteration,
- parent body,
- meteoritics.

HOW TO SUBMIT

Before submission authors should carefully read the Instructions for Authors.

All submissions to the Topical Issue must be made electronically via the Editorial Manager submission and tracking review system: https://www.editorialmanager.com/astro.

All manuscripts will undergo the standard peer-review process (single-blind, at least two independent reviewers). When entering your submission via the online submission system please choose "Topical Issue: Kaba". Submission of a manuscript implies that the work described has not been published before and is not under consideration for publication anywhere else.

The deadline for submissions is **December 31st, 2021**, but individual papers will be reviewed and published online on an ongoing basis.

Your benefits due to contribution to the Topical Issue:

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