minerals

an Open Access Journal by MDPI

IMPACT FACTOR 2.2

CITESCORE 4.4

Highly Siderophile Elements and Their Isotopes in the Earth's Mantle

Guest Editor:

Dr. Kreshimir N. Malitch
Department of Geochemistry and Ore-Forming Processes, Zavaritsky Institute of Geology and Geochemistry, Ural Branch of Russian Academy of Sciences, Vonsovsky str. 15, Ekaterinburg 620110, Russia

Deadline for manuscript submissions:
closed (31 August 2023)

Message from the Guest Editor

Dear Colleagues,

Absolute and relative abundances of the highly siderophile elements (HSE = PGE (Os, Ir, Ru, Rh, Pt, Pd), Re, Au) and their isotopes are important for geological, petrological, and geochemical investigations. Since Re and Os have strongly contrasting partitioning behavior during mantle melting and magma differentiation, the ^{187}Re–^{187}Os isotopic system is particularly useful in (i) distinguishing between crustal and mantle sources of the HSE and (ii) tracking melt extraction events, which can be applied at both the whole-rock and mineral (i.e., chromite, Ru-Os-Ir alloy, sulfide) scale. Further advances in mass spectrometry have allowed PGE alloys and sulfides to be dated using the ^{190}Pt–^{186}Os system. In order to gain further insights into large-scale geodynamic processes as well as the concentration of the HSE at the local scale, we invite contributions that use combined mineralogical, geochemical and isotopic studies, including the integration of whole-rock and mineral separate (via N-TIMS) and sub-grain scale (via LA-MC-ICPMS) Pt-Re-Os isotopic data

minerals

an Open Access Journal by MDPI

IMPACT FACTOR 2.2

CITESCORE 4.4

Editor-in-Chief

Prof. Dr. Leonid Dubrovinsky
Bayerisches Geoinstitut,
University Bayreuth, D-95440
Bayreuth, Germany

Message from the Editor-in-Chief

Minerals welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases.
Journal Rank: JCR - Q2 (Mining and Mineral Processing) / CiteScore - Q1 (Geology)

Contact Us

Minerals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/minerals
minerals@mdpi.com
𝕏@Minerals_MDPI/