



Crystallization and Growth of Graphite

Guest Editors:

**Prof. Dr. Doru Michael
Stefanescu**

1. Department of Materials
Science Engineering, The Ohio
State University, Columbus, OH
43210, USA

2. Department of Metallurgical
and Materials Engineering, The
Lee J. Styslinger Jr. College of
Engineering, Tuscaloosa, AL, USA

Prof. Dr. Attila Diószegi

School of Engineering,
Jönköping University,
Gjuterigatan 5, SE-553 18
Jönköping, Sweden

Deadline for manuscript
submissions:

closed (19 February 2021)

Message from the Guest Editors

While carbon constitutes only about 0.032 mass % of the Earth's lithosphere (crust and outer mantle), its uses in modern technology span many fields—from graphite-reinforced polymers used in the manufacture of expensive sports cars, competition bicycles and motorbikes, or high-performance sailboats to graphitic cast iron for wind turbine parts, engine blocks, and cooking pans. Graphite is also a natural mineral. Understanding how to produce certain forms of graphite and graphite arrays from nature, such as nanotubes and conical shapes, can have scientific and technological paybacks. In addition, graphene can be obtained from graphite through exfoliation methods, as it is a basic layer of the graphite crystal. It can be used as a nanofiller in polymer composites with enhanced electrical, mechanical, and thermal properties. Hence, whether we consider natural graphite formed from a metamorphic fluid or cast-iron graphite crystallized from an iron–carbon melt, the need to understand its crystallization and growth transcends disciplines in science and technology.





an Open Access Journal by MDPI

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), GEOBASE, GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases.

Journal Rank: JCR - Q2 (Mineralogy) / 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/](https://twitter.com/Minerals_MDPI/)