

Special Issue

Cell and Molecular Biology of Archaea

Message from the Guest Editor

Archaea, which share closer evolutionary ties with eukaryotes than with bacteria, have proven to be invaluable model organisms for understanding fundamental biological processes.

This issue will focus on cutting-edge research on various aspects of archaeal biology, including genome structure and function, cellular architecture, metabolic pathways, and stress responses. Contributions should highlight the role of archaea in biotechnology, with a focus on extremophiles that thrive in extreme environments, offering novel enzymes and biomolecules for industrial and biotechnological applications. In addition, the research on the development of genetic tools and systems within archaeal species is welcomed, providing insight into the potential for genetic manipulation and the study of molecular evolution. Other articles delve into the regulation of key processes such as transcription and translation and the mechanisms underlying archaeal adaptation to environmental stressors. Through these contributions, we aim to highlight the growing importance of archaea in expanding our understanding of cellular function and genetic regulation across all domains of life.

Guest Editor

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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