

Special Issue

Molecular Mechanisms of Mitochondrial Autophagy

Message from the Guest Editor

The mitochondrion is a double membrane-bound organelle that generates most of the cellular ATP through oxidative phosphorylation (OXPHOS) in the majority of eukaryotic cells. In addition, the mitochondrion plays an essential role in a number of cellular processes. Mitochondrial autophagy (mitophagy) is a conserved cellular process for selectively eliminating dysfunctional or unneeded mitochondria in eukaryotic cells. Mitophagy plays a crucial role in maintaining cellular homeostasis. Defects in mitophagy contribute to a variety of human diseases, such as cancer and neurodegenerative, cardiovascular, and metabolic diseases. The PINK1/Parkin- and FUNDC1-mediated pathways mainly regulate mitophagy. However, the molecular mechanisms of mitophagy under certain cellular stresses remain largely unknown. For this Special Issue, we seek original research or review articles that focus on the molecular mechanisms and signaling pathways of mitophagy under certain physiological conditions, the novel methods detecting mitophagy, and the identification and synthesis of new biomolecules (or small-molecule compounds) regulating mitophagy.

Guest Editor

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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