

## Special Issue

# Advances in Brazing and Solder Joint in Microelectronic Packaging

### Message from the Guest Editors

Advanced electronic devices are essential in every aspect of our life today. One of the main processes in joining electronic components into a functional circuit is soldering. In addition, the solder alloys used during the soldering process are continuously improved to meet the needs of advanced electronic devices. Microelectronic packaging technology has recently seen progress towards miniaturization, high density, multifunction, and high speed. With the growing complexity and functionality of integrated circuits in electronic devices, solder joints should be reliable during soldering and service. In the soldering process, formation of intermetallic compounds (IMCs) is a necessary condition for the formation of solder joints. The reliability of solder joints depends strongly on the formation and growth of IMCs at the interface. With the growth of IMCs at the interface, stress concentration tends to form that leads to cracks and reduces the reliability of solder joints. The purpose of this Special issue is to compile works related to the development of alloys for soldering and brazing of advanced microelectronic packaging.

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 April 2024)



## Metals

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## About the Journal

### Message from the Editor-in-Chief

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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### Editor-in-Chief

Prof. Dr. Yong Zhang

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