Special Issue

Mechanical Behavior of Interconnection Materials in Power Device Packaging Under Harsh Applications

Message from the Guest Editors

Power devices have complex service environments and high reliability requirements. For instance, the service environment of automotive-grade power devices is very harsh, often requiring them to withstand severe temperatures (–40~150 ℃) and mechanical loads (vibration or shock) at the same time and still be able to operate normally; additionally, power devices applied to power systems often work in extreme weather conditions. In practical applications, interconnection materials in power devices also tend to experience harsh loading conditions. The degradation of the mechanical properties of the interconnection materials seriously affects the conductive and heat transfer characteristics of power devices and ultimately leads to them failing; therefore, the methods, testing, and evaluation of the mechanical behavior of interconnection materials in power device packaging under harsh applications are important issues.

Guest Editors

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Deadline for manuscript submissions

closed (20 June 2025)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/202298

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Indexed in PubMed

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