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Intermetallic Compounds and Applications in Solder Joints, Photovoltaic Modules and Electronics Packaging

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Message from the Guest Editors

The related advanced packaging technology is widely used in the production of high-performance chips. However, the packaging process still faces many challenges, such as solder jointing, heat dissipation and reliability.

Solder is currently the most mainstream material for joints. The miniaturization of solder makes it easier to form intermetallic compounds (IMCs), necking and holes during reflow process, resulting in a deterioration in the yield, conductivity and reliability of joints.

Silicon solar cells are usually connected in series with photovoltaic ribbon. The interfacial reaction plays a very important role in the reliability of solar cell modules under the influences of dynamic current and static heat. The interfacial reaction of various solar materials and the evolution of the reliability of solar cell modules are extremely important basic research for academic and industry.

Suitable topics include:

The relationship between new solder materials and interfacial reaction.
Growth mechanism of intermetallic compounds in related optoelectronic devices.
The influences of intermetallic compounds on the reliability and performance of optoelectronic devices.

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Message from the Editor-in-Chief

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