Special Issue

Semiconductor Power Devices: Reliability and Applications

Message from the Guest Editor

This Special Issue on "Semiconductor Power Devices: Reliability and Applications" aims to advance the state of the art of power devices, from technology reliability to its application in discrete and integrated power circuits.

Papers are solicited in, but not limited to, the following areas:

Semiconductor power device reliability:

FEOL: bias temperature instability; threshold voltage hysteresis; hot carrier phenomena; dielectric wear-out and breakdown; charge trapping; time-dependent breakdown; self-heating effects and thermal issues; etc.

BEOL: electromigration; stress migration; thermal management; dielectric breakdown; etc.

Simulation of power devices and circuits:

TCAD, empirical and compact modeling: power device characteristics; reliability; degradation and failure mechanisms; lifetime prediction;

Guest Editor

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Deadline for manuscript submissions

closed (28 February 2023)



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About the Journal

Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

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