Special Issue

Near-Field Probing for Integrated Circuits

Message from the Guest Editors

Near-field probing is a sensing technique developed to measure the electromagnetic fields close to and even inside an integrated circuit (IC). Such fields can be related to the electromagnetic compatibility properties of the IC and used to sense current or voltage signals inside the IC, enabling, for instance, non-invasive failure analysis. To probe the near field of an IC, electromagnetic field coupling is commonly used, but other techniques exist. This Special Issue will explore the use of electromagnetic field coupling in probing the near fields of ICs, highlighting its common applications and potential alternatives. These techniques are essential for detecting and analyzing the electromagnetic characteristics of ICs and play a key role in fault diagnosis and performance optimization. We invite you to submit short communications, full research articles, and up-to-date reviews, with a particular focus on advanced techniques based on near-field probing.

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Deadline for manuscript submissions

31 December 2025

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/226273

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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