Special Issue

Microelectronic Devices: Physics, Design and Applications

Message from the Guest Editor

With the aggressive scaling of CMOS technologies and constantly emerging diversified devices, semiconductor device modeling and designing techniques pose severe challenges to circuit and system designers, especially for RF/MW/mmW/THz/Power/optics. In particular, emerging semiconductor devices based on wide-band semiconductors or carbon-based semiconductors are leading devices in semiconductor physics and fabrication technologies. The Special Issue aims to strengthen communications among experts in the field, providing a forum for the presentation and discussion of leading-edge research and development results in analytical modeling, emerging devices, fabrication, and integration techniques for advanced devices, circuits, and technologies. Modeling and validation techniques of all solid-state devices, including, Si, III-V, power, nanoscale electronic structures, and other related new devices, are within the scope of this Special Issue. Accordingly, this Special Issue seeks to showcase research papers, communications, and review articles focusing on novel methodological developments in micro- and nano-scale semiconductor devices.

Guest Editor

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Editor-in-Chief

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