Special Issue

Design and Simulation of Electrostatic Protection Device on Semiconductors

Message from the Guest Editors

Electrostatic discharge (ESD) is one of the most prevalent threats to the reliability of electronic components. ESD involves the transfer of a finite amount of charge from one object to another, and accounts for more than 35% of all catastrophic chip damage due to single events, as it can result in a very high current passing through the microchip in a very short period of time. However, it is becoming increasingly difficult to meet the progressively more stringent ESD protection requirements for various electronic applications. Latchup also poses a reliability threat, as it may occur during normal chip operation and lead to a runaway event that causes the chip to be destroyed. Therefore, Latchup mitigation solutions are also urgently needed in the semiconductor industry. The main objective of this dedicated Special Issue is to engage the global ESD and Latchup community in a serious discussion through scholarly contributions specifically focused on solving major challenges in the board area of ESD and Latchup solutions for semiconductor technologies.

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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