Special Issue

Enhancing Efficiency and Driving Innovation in the Semiconductor Industry through Artificial Intelligence Applications

Message from the Guest Editors

This Special Issue, entitled "Intelligent Semiconductors", delves into the transformative impact of Artificial Intelligence on the semiconductor industry, a critical driver of technological advancement across various sectors such as computing, telecommunications, healthcare, and the automotive industry. As these industries face increasing demands for efficiency, precision, and miniaturization, AI has emerged as an essential tool for enhancing the design, manufacturing, testing, and deployment of semiconductors. This issue aims to showcase cutting-edge research, case studies, and practical applications that demonstrate the integration of AI in optimizing semiconductor processes, from design and simulation to defect detection and quality control. It also explores AI-driven solutions for supply chain optimization, energy efficiency, and emerging technologies like quantum computing and flexible electronics. By fostering a dialogue among researchers, practitioners, and industry professionals, this SI seeks to provide a comprehensive overview of current advancements, address challenges, and outline future research directions at the intersection of AI and semiconductor technology.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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