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Recent Innovations in Plasma Sensing and Diagnosis Technology

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Deadline for manuscript
submissions:

closed (29 May 2025)

Message from the Guest Editor

Plasma-based techniques have become essential in the manufacturing of advanced, high-performance semiconductor devices that consume less power. Additionally, sensing and diagnosis technology plays a critical role in ensuring the quality and reliability of semiconductor products by detecting defects, contamination, and process variations.

The aim of this issue is to bring together original research and reviews covering plasma synthesis, deposition, and etching, with a focus on enhancing the development of semiconductor devices, enabling the fabrication of more complex and functional structures, and improving the manufacturing process yield. Furthermore, the application of plasma sensing and diagnosis technology has the potential to drive the development of new technologies and applications, such as flexible electronics, the Internet of Things (IoT), and artificial intelligence (AI).

Furthermore, by analyzing the collected data and extracting relevant features, machine learning algorithms can predict whether the plasma process is normal or abnormal, leading to more accurate diagnoses than traditional methods can provide.



mdpi.com/si/170389

Special Issue



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Message from the Editor-in-Chief

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