



Plasma Diagnostics and Discharge Physics for Materials Processing

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Plasmas, comprising energetically charged particles and high reactive neutrals, have played a key role in state-of-the-art material processing, such as surface processing, material fabrication, and particle synthesis. To study factors and indicators, which directly influence processing quality and efficiency, numerous plasma diagnostics have been developed, including: electrostatic probes, microwave probes, optical emission/absorption spectroscopy, etc. These diagnostics have contributed to optimization, improvement, and development of material processing through elucidating the mechanisms underlying processing.

This Special Issue aims to present recent developments in plasma diagnostics and findings related to discharge physics for material processing. The Issue will cover various diagnostic methods and discharge physics for material processing utilizing plasma under either non-thermal equilibrium (non-LTE) or LTE conditions, regardless of operation pressure, such as plasma etching/deposition, plasma-enhanced atomic layer etching/deposition, surface coating/modification, particle/material synthesis, plasma catalysis, plasma combustion, plasma nitridation, etc.





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Message from the Editor-in-Chief

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