



Plasma Dry Etching: Advanced Processes, Plasma Induced Damage and Plasma Diagnostics

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

This Special Issue will collect original research articles and review papers in the following concepts:

- Theoretical, modeling, and experimental research, knowledge, and new ideas in mechanisms of dry plasma etching;
- Recent developments in etching processes for different materials, including Si-based materials, dielectric materials, polymers, metallic films, and carbon-based materials;
- Advanced atomic layer etching and high aspect ratio contact etching with high speed;
- Etching characteristics at different environments: high temperature and cryogenic etching;
- The latest development of etching instruments considering but not limit to high-density plasma process reactors, surface temperature control and monitoring, and power and time modulations;
- Monitoring and understanding mechanisms of plasma-induced damage and new reduction processes;
- Computer modeling, simulation for etching characteristics and chemistries;
- Plasma diagnostics for etching processes.





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Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

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