Special Issue

Plasma–Surface Interaction: Theory, Simulation and Application

Message from the Guest Editors

Plasma–surface interactions lie at the heart of many fundamental and applied processes in plasma physics and related technologies. Material surfaces in contact with the plasmas are subject to particle, charge, and energy exchange, where complex surface processes such as secondary electron emission, chemical reactions, and surface charging can occur. These interactions not only influence the plasma properties but also play a decisive role in determining the physical and chemical characteristics of the material surfaces. This Special Issue aims to bring together recent developments in the theoretical modeling, numerical simulation, and experimental investigation of plasma–surface interaction phenomena. We welcome both original research articles and review papers, and encourage contributions that explore the fundamental plasma–surface interaction mechanisms and their practical implications in emerging plasma technologies.

Guest Editors

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Deadline for manuscript submissions

20 March 2026

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/250413

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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