

Special Issue

Electronic Dynamics in Atomic and Molecular Collisions

Message from the Guest Editors

The study of electronic dynamics in atomic and molecular collisions sits at the heart of understanding matter and energy interactions. These processes, where the rapid rearrangement of electrons dictates outcomes like energy transfer, ionization, and fragmentation, are critical in diverse environments, from astrophysical plasmas to radiation damage and radiobiological processes. The field is currently being transformed by sophisticated experimental techniques, such as cold target recoil ion momentum spectroscopy (COLTRIMS) and ultrafast light sources, alongside cutting-edge theoretical and computational methods. This Special Issue aims to highlight the latest breakthroughs in unraveling the complex, time-evolving behavior of electrons during collisional events.

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Message from the Editor-in-Chief

The scope of *Atoms* is deliberately wide and encompasses a large part of theoretical and experimental atomic, molecular, nuclear, and chemical physics in order to encourage cross-disciplinary connections, while supporting the more traditional idea of individual subfields. The journal is also interested in papers concerning the computation and compilation of data related to applications in the above areas. Details of experimental methods and codes are welcome. Your research is taken seriously and peer-reviewed with care. I encourage you to contact me or any of the Editorial Board Members for further information.

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