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Positronium Collisions with Atoms, Molecules, and Ions

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Message from the Guest Editors

Positronium (Ps) interaction with matter is of a great interest from a fundamental physics perspective. Processes involving Ps collisions with atoms and molecules are also important in studies of biological media, the interstellar gas, the Earth's atmosphere, and industrially important materials. A review on Ps collisions was written in 2012 and a Special Issue on Antihydrogen and Positronium was published in 2017. Since then, significant advances have been made both experimentally and theoretically. In particular, studies of Ps collisions with protons and antiprotons have led to a better understanding of mechanisms of antihydrogen formation. Observations of similarities between Ps and electron scattering by atoms and molecules, followed by theoretical investigations, allowed a better understanding of the mechanisms involved in Ps interactions with neutral targets. The purpose of the present Special Issue is to update the information on the physics of Ps interaction with atoms, molecules, protons, and antiprotons by the inclusion of new developments in experimental and theoretical studies of these processes.











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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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