

Special Issue

Charge-State Evolution in Ion-Atom/Solid Collisions

Message from the Guest Editors

Since atomic collision phenomena are strongly affected by the charge-states of the projectile ions, both equilibrium and pre-equilibrium charge-states of penetrating ions in solid, dense-gas media and plasmas are essential to pure and applied atomic collision studies. As for the equilibrium charge-states, there has been a number of papers, compilations, and databases published in the literature, but there still a few for pre-equilibrium charge-state evolutions especially for heavy ion collisions in low-energy range although they are highly demanded in material science, biological physics, accelerator technology and so on. After recent advances in experiments (target preparations etc.), theories (cross section calculations etc.), as well as simulations (including more advanced models), this Special Issue of *Atoms* will highlight many kinds of contributions related to charge-state evolutions in ion-atom/solid and plasma collisions, ranging from basic data production, simulation codes and cross sections, to application studies which needs a knowledge of charge-state evolutions and to scope also their future needs.

Guest Editors

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About the Journal

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.

Editor-in-Chief

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