Special Issue

Atomic and Molecular Spectra in Magnetically Confined Torus Plasmas

Message from the Guest Editors

The scope of this Special Issue is recent experimental and theoretical advances in relation to atomic and molecular spectra in magnetically confined torus plasmas. The capability of fusion plasmas allows us to investigate a number of elements, from hydrogen to heavy elements, which entirely covers the periodic table. As the electron temperature ranges from a few eV (edge) to 10 keV (core) in fusion plasmas, a wide range of charge states, from neutral to hydrogen-like ions, must be investigated. These investigations are associated with different spectroscopic techniques optimized for specific photon energies. Furthermore, prediction/validation of experimental spectra using collisional radiative modeling and other basic experiments such as EBITs is also of great interest. Spectral line shapes including shifts, widths and splittings are important as powerful diagnostic tools in fusion plasmas. Review papers relevant to the above topics are also in the scope of this Special Issue.

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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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