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Plasma Spectroscopy and Plasma Diagnostics: From Classical to Sophisticated Methods

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Message from the Guest Editor

The objective of this Special Issue of *Atoms*, entitled “Plasma Spectroscopy and Plasma Diagnostics: From Classical to Sophisticated Methods”, is to summarize in a single issue all the major techniques and methods which are used in spectroscopy and diagnostics of plasmas from traditional/classical methods to the latest and sophisticated ones, including those combining physical models with artificial intelligence, e.g., machine learning. It is intended to cover all kinds of plasmas, from astrophysical low-density low-temperature plasmas to high-density high-energy plasmas which are produced in laboratories using intense and ultra-fast laser beams. This Special Issue concerns both magnetized and non-magnetized plasmas, as well as plasmas at thermal equilibrium and those deviating from it. It also aims to increase the interactions between communities by sharing the various techniques and ideas related to plasma spectroscopy and plasma diagnostics between these various plasma communities and others, such as atomic physicists.



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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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