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Electron Scattering from Atoms, Ions and Molecules

Guest Editors:

Prof. Dr. Rajesh Srivastava

Department of Physics, Indian Institute of Technology (IIT), Roorkee 247667, India

Prof. Dr. Dmitry V. Fursa

Department of Physics and Astronomy, Curtin University, Perth, WA 6845, Australia

Deadline for manuscript submissions: closed (30 November 2022)

Message from the Guest Editors

For this Special Issue, our aim is to provide recent developments and new results in the area of electron initiated atomic and molecular collision physics and their related applications in plasma modelling. We invite original contributions covering all aspects of electron collisions with atoms, ions, and molecules, such as:

- Relativistic and non-relativistic elastic scattering from atoms, ions and molecules;
- Electron impact excitation and ionization of light and heavy atoms and ions;
- Relativistic and non-relativistic atomic structure calculations;
- Electron-molecule scattering, including rotational, vibrational and electronic excitations;
- Correlation, polarization, and ionization in electron impact atomic and molecular collisions;
- Electron impact inner shell excitations and Auger's electron spectroscopy;
- Plasma related optical emission spectroscopy (OES) measurements;
- Application of electron impact atomic and molecular collision data in astrophysical and laboratory plasma modelling.

Specialsue



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Editor-in-Chief

Dr. James F. Babb

Institute for Theoretical Atomic and Molecular Physics, Center for Astrophysics | Harvard & Smithsonian, Cambridge, MA 02138, USA

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

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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Atoms Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/atoms atoms@mdpi.com X@Atoms_MDPI