



## Special Issue on Atomic and Molecular Physics

### Call for Papers

The field of Atomic and Molecular Physics explores the properties and behavior of atoms and molecules through experiments and theoretical models. This includes the study of the electronic structure and interactions of atoms and molecules, as well as their spectroscopic properties and reactivity. Researchers in this field investigate a wide range of phenomena, from quantum mechanical effects to chemical reactions, and may apply their findings to fields such as materials science, astrophysics, and biophysics. Ultimately, the goal of Atomic and Molecular Physics is to gain a deeper understanding of the fundamental building blocks of matter and their behavior in various environments and conditions. The goal of this special issue is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in the area of **atomic and molecular physics**.

In this special issue, we invite front-line researchers and authors to submit original research and review articles that explore **atomic and molecular physics**. In this special issue, potential topics include, but are not limited to:

- Atomic models
- Radiation and matter
- Wave equations for simple quantum systems
- Perturbation theory and radiative transitions
- Quantum Theory of One-Electron Atoms
- Many-electron atoms
- Molecular structure
- Approximation methods for many-electron systems
- Atomic spectroscopy
- Molecular spectroscopy
- Atomic and Molecular collision physics
- Optics and laser physics
- Quantum mechanics and quantum chemistry

Authors should read over the journal's [Authors' Guidelines](#) carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal's [Paper Submission System](#).

Please kindly specify the “**Special Issue**” under your manuscript title. The research field “**Special Issue - Atomic and Molecular Physics**” should be selected during your submission.



---

Special Issue timetable:

Submission Deadline	August 20th, 2023
Publication Date	October 2023

**Guest Editor:**

For further questions or inquiries  
Please contact the Editorial Assistant at  
[jmp@scirp.org](mailto:jmp@scirp.org)