



atoms



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Editorial Board Members' Collection Series: Atomic Collision and Atomic Spectroscopy

Guest Editors:

Prof. Dr. Michael Schulz

Dr. Jean-Christophe Pain

Prof. Dr. Karoly Tokesi

Deadline for manuscript
submissions:

30 June 2024

Message from the Guest Editors

Since the Rutherford experiment, collision studies have made major contributions to advancing our understanding of atomic systems. They ultimately led to the development of the first viable atomic model. After a relatively short time following the advent of quantum mechanics, the structure of most neutral atoms was essentially understood. In spite of these successes, which date back several decades, atomic collision research continues to provide valuable insights into atomic and molecular physics. Studies of interactions of ions or electrons with solids, surfaces, and plasmas proved to be valuable to material science. Finally, atomic collision research addresses one of the most fundamental, and yet unsolved, problems in physics: the few-body problem. Its essence is that the Schrödinger equation is not analytically solvable for more than two mutually interacting particles, even if the underlying forces are precisely known. This Special Issue provides a sample of articles on some of the most significant research activities on these topics in recent years.

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Special Issue



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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 to contact me or any of the Editorial Board Members for further information.

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Journal Rank: CiteScore - Q2 (*Nuclear and High Energy Physics*)

Contact Us

Atoms Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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