

Special Issue

Atomic and Ionic Collisions with Formation of Quasimolecules

Message from the Guest Editors

Many fields in physics and astronomy, depend on data for ionic, atomic and molecular collision processes. Nowadays, in the field of astrophysics modeling of these data is especially important and needed for simulations/calculations. Additionally, these processes are important for diagnostics, analysis and modeling of fusion plasma, laser produced plasma, lasers design and development and various plasmas in industry and technology. Among these amounts of data collection, there are collisional and radiative processes that even today are poorly represented. Therefore, there is an urgent need to collect these data, as well as to develop methods for improving the existing ones. This Special Issue aims to encourage further dialogue and knowledge transfer. Potential topics include, but are not limited to:

- atomic data
- molecular data
- stellar spectra
- laboratory plasma
- fusion plasma
- stars
- atomic and molecular databases
- Rydberg atoms
- collisional atomic processes

Dr. Vladimir A. Sreckovic

Dr. Nikolai N. Bezuglov

Guest Editors

Prof. Dr. Vladimir Sreckovic

The Astrophysics and Ionospheric Laboratory, Institute of Physics
Belgrade, University of Belgrade, 11080 Belgrade, Serbia

Prof. Dr. Milan S. Dimitrijević

Astronomical Observatory, Volgina 7, 11060 Belgrade, Serbia

Dr. Nikolai N. Bezuglov

Saint Petersburg State University, 7/9 Universitetskaya nab., St.
Petersburg 199034, Russia

Deadline for manuscript submissions

closed (31 May 2020)

Atoms

an Open Access Journal
by MDPI

Impact Factor 1.5
CiteScore 3.1



mdpi.com/si/18683

Atoms

Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atoms@mdpi.com

mdpi.com/journal/

[atoms](https://mdpi.com/journal/atoms)



Atoms

an Open Access Journal
by MDPI

Impact Factor 1.5
CiteScore 3.1



[mdpi.com/journal/
atoms](https://mdpi.com/journal/atoms)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Pascal Quinet

1. Physique Atomique et Astrophysique, Université de Mons, B-7000 Mons, Belgium
2. IPNAS, Université de Liège, B-4000 Liège, Belgium

Author Benefits

Open Access

— free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), Astrophysics Data System, Inspec, CAPlus / SciFinder, INSPIRE, and other databases.

Journal Rank:

CiteScore - Q2 (Nuclear and High Energy Physics)