

Special Issue

Electron Scattering in Gases – from Cross Sections to Plasma Modeling

Message from the Guest Editor

The first experiments on electron scattering were completed before the “official” discovery of this particle by J. J. Thomson. In spite of this, our knowledge of cross sections is still far from complete. More recent experiments had some unexpected results, like selective fragmentation of DNA constituents by low-energy electrons, or “reverse” phenomena, i.e., synthesis of simple amino acids from inorganic precursors, triggered by slow electrons. The most recent need for cross sections comes from modeling plasmas for industrial and thermonuclear applications, and atmospheres of solar and extra-solar planets. Both fundamental research (experiments, theory, reviews) and applications of electron-scattering cross sections in various processes are welcome.

Guest Editor

Prof. Dr. Grzegorz Piotr Karwasz

Institute of Physics, Uniwersytet Mikołaja Kopernika w Toruniu, 87 100
Torun, Poland

Deadline for manuscript submissions

closed (15 November 2021)

Atoms

an Open Access Journal
by MDPI

Impact Factor 1.5
CiteScore 3.1



mdpi.com/si/70268

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)