

# Special Issue

## Interaction of Ionizing Photons with Atomic and Molecular Ions

### Message from the Guest Editors

Studies of photoionization provide information on the inverse processes of radiative and dielectronic recombination, important in many laboratory and astrophysical plasmas. Laser plasma, HHG, synchrotron, and FEL sources provide complementary capabilities and new theoretical approaches interpret the wide spectrum of results on atomic ions achievable with these light sources. Studies of the photoionization of molecular ions (and variable size clusters) have been initiated and are expected to become of increasing importance in the future. This Special Issue will include original and review papers over the broad range of photoionization studies achievable with atomic and molecular ions, including experiments on relative and/or absolute cross-sections, linear, and nonlinear behaviors, new instrumental and facility developments, and current theoretical challenges. Studies directed towards important laboratory and astrophysical plasma requirements are also welcome.

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### Guest Editors

Prof. Dr. Eugene T. Kennedy

Prof. Dr. John T Costello

Dr. Jean-Paul Mosnier

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### Deadline for manuscript submissions

closed (16 November 2020)

## Atoms

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*Atoms*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[atoms@mdpi.com](mailto:atoms@mdpi.com)

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## 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.

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### 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

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