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Over a Century of Nuclear Isomers: Challenges and Prospects

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Message from the Guest Editor

It is now 100 years since the discovery of nuclear isomerism by Otto Hahn.

More recently, as radioactive ion beam facilities develop to allow studies of the limits of existence of atomic nuclei, understanding the details of the stabilizing phenomena of nuclear isomers is becoming increasingly important for fundamental nuclear physics and astrophysics research. Moreover, the advance in laser technology over the last few decades has provided renewed interest and increased opportunities to study and apply nuclear isomers using electron–nucleus interactions.

In this Special Issue, we will bring together original research papers, review articles, and short communications to provide an up-to-date view of the nuclear physics behind nuclear isomerism and bring attention to the present challenges and prospects for studies and applications of nuclear isomers, particularly those enabled by recent advances in atomic physics techniques.

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Special Issue



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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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