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Electron Scattering in Gases –from Cross Sections to Plasma Modeling

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Deadline for manuscript submissions:
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Message from the Guest Editor

Dear Colleagues,

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.

Prof. Grzegorz Piotr Karwasz
Guest Editor

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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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