



Showcasing research by Dr Pablo de Vera, ECT*/FBK (Trento, Italy), and Prof. Isabel Abril and Prof. Rafael Garcia-Molina, Universities of Alacant and Murcia (Spain), respectively.

Excitation and ionisation cross-sections in condensed-phase biomaterials by electrons down to very low energy: application to liquid water and genetic building blocks

A model is presented for obtaining reliable cross sections for electron-impact in condensed-phase biomaterials in a wide energy range. Total electronic excitation and ionisation cross sections and energy distributions of secondary electrons for liquid water and DNA building-blocks are obtained in agreement with experiments. This is essential for simulating electron transport in biomaterials and reaching a deeper understanding of the mechanisms underlying radiotherapy.

As featured in:



See Pablo de Vera *et al.*,
Phys. Chem. Chem. Phys.,
2021, **23**, 5079.