The Journal of Electron Spectroscopy and Related Phenomena publishes experimental, theoretical and applied work in the field of electron spectroscopy and electronic structure, involving techniques which use high energy photons (>10 eV) or electrons as probes or detected particles in the investigation.

The journal encourages contributions in the general area of atomic, molecular, ionic, liquid and solid state spectroscopy carried out using electron impact, synchrotron radiation (including free electron lasers) and short wavelength lasers. Papers using photoemission and other techniques, in which synchrotron radiation, Free Electron Lasers, laboratory lasers or other sources of ionizing radiation, combined with electron velocity analysis are especially welcome. The materials properties addressed include characterization of ground and excited state properties as well as time resolved electron dynamics.

The individual techniques of electron spectroscopy include photoelectron spectroscopy of both outer and inner shells; inverse photoemission; spin-polarised photoemission; time resolved 2-photon photoemission, resonant and non-resonant Auger spectroscopy including ion neutralization studies; edge techniques (EXAFS, NEXAFS,...), resonant and non-resonant inelastic X-ray scattering (RIXS), spectro-microscopy, high resolution electron energy loss spectroscopy; electron scattering and resonance electron capture; electron spectroscopy in conjunction with microscopy; penning ionization spectroscopy including scanning tunneling spectroscopy; theoretical treatments of the photoemission, X-ray emission, Auger, energy loss and Penning ionization processes. Contributions on instrumentation and technique development, data acquisition - analysis - quantification are also welcome.

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AUDIENCE

Physicists, Chemists, Surface Scientists and Technologists using the techniques of electron spectroscopy in their work.

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INTRODUCTION

Aims and scope
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