DESCRIPTION

Spectrochimica Acta Part B: Atomic Spectroscopy, is intended for the rapid publication of both original work and reviews in the following fields: 

Atomic Emission (AES), Atomic Absorption (AAS) and Atomic Fluorescence (AFS) spectroscopy; Mass Spectrometry (MS) for inorganic analysis covering Spark Source (SS-MS), Inductively Coupled Plasma (ICP-MS), Glow Discharge (GD-MS), and Secondary Ion Mass Spectrometry (SIMS). Laser induced atomic spectroscopy for inorganic analysis, including non-linear optical laser spectroscopy, covering Laser Enhanced Ionization (LEI), Laser Induced Fluorescence (LIF), Resonance Ionization Spectroscopy (RIS) and Resonance Ionization Mass Spectrometry (RIMS); Laser Induced Breakdown Spectroscopy (LIBS); Cavity Ringdown Spectroscopy (CRDS), Laser Ablation Inductively Coupled Plasma Atomic Emission Spectroscopy (LA-ICP-AES) and Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS). X-ray spectrometry, X-ray Optics and Microanalysis, including X-ray fluorescence spectrometry (XRF) and related techniques, in particular Total-reflection X-ray Fluorescence Spectrometry (TXRF), and Synchrotron Radiation-excited Total reflection XRF (SR-TXRF). Manuscripts dealing with (i) fundamentals, (ii) methodology development, (iii) instrumentation, and (iv) applications, can be submitted for publication.

The emphasis is on papers having a relationship with "spectrochemical analysis". The main subjects will include theoretical or experimental studies of the physical and chemical processes connected with the generation of atomic or mass spectra; the determination of atomic data; diagnostics for spectrochemical sources; the fundamentals, design or performance of complete instrumental systems, components of instruments, or devices used in any of the above stated fields of spectrometry; qualitative and quantitative analysis in the sense of complete analytical procedures using a single method or a combination of methods, or parts of complete procedures: sampling, sample preparation, sample introduction, detection, data acquisition and handling (including calibration and statistical evaluation); analytical performance and analytical figures of merit: limits of detection and limits of determination, selectivity, precision, accuracy, interferences.

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Articles describing an application of a spectroscopic technique to analysis will also be considered. In this case, however, the spectroscopic flavor of the manuscript should be substantial: mere analytical recipes or papers emphasizing separation and pre-concentration techniques should not be submitted. Finally, to the editors' discretion, accelerated publication of short papers dealing with new important concepts, instrumental developments or applications will be considered.

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Authoritative and comprehensive review articles, dedicated to a particularly important topic or field of analysis, are published regularly. In addition, shorter, concise reviews or viewpoints focusing on the current status and future prospects of a field or topic particularly relevant to the development of a new analytical methodology or to a better understanding of its fundamental underlying principles are welcome. Tutorial reviews, illustrating in depth fundamental concepts in atomic spectroscopy and analytical atomic spectroscopy, are also published.

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