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PART B: ATOMIC SPECTROSCOPY
Including Spectrochimica Acta Electronica
and Spectrochimica Acta Reviews

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Review

Microplasmas for chemical analysis

Regular Papers

Microwave plasma torch characterization

Hydride generation for microwave plasma torch OES

Line shape in atomic beam laser spectroscopy

Speciation of chromium in natural waters

GFAS of Sm by multi-photon laser wave mixing

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State-selective charge transfer in ICP-AES

Application of negative ions in ICP-MS

Femtosecond and nanosecond laser plasma characterization

Analytical Note

Determination of inorganic arsenic species

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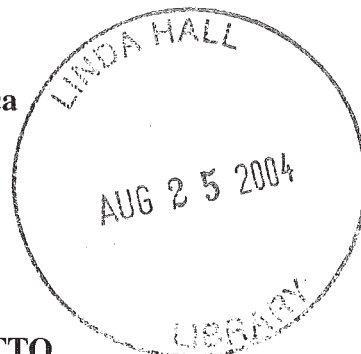
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AIMS AND SCOPE

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) spectrometry; 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) and MS of sputtered neutral atoms (SN-MS); laser induced spectrometry for inorganic analysis including laser enhanced ionization (LEIS), laser induced atomic fluorescence (LIF), resonance ionization spectrometry (RIS) and resonance ionization mass spectrometry (RIMS); X-ray spectrometry including X-ray fluorescence spectrometry (XRF) and related techniques, in particular total-reflection X-ray fluorescence spectrometry (TXRF), and synchrotron radiation-excited X-ray spectrometry (SYNFXRF). 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. 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. Finally, tutorial reviews, illustrating in depth fundamental concepts in atomic spectrometry and analytical atomic spectrometry, are also published. 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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