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Cover

See Jian Wu *et al.*, pp. 1235–1247. Image reproduced by permission of Jian Wu from *J. Anal. At. Spectrom.*, 2024, **39**, 1235.



Inside cover

See Bastian Wiggershaus *et al.*, pp. 1248–1259. Image reproduced by permission of Thomas Vogt from *J. Anal. At. Spectrom.*, 2024, **39**, 1248.

ATOMIC SPECTROMETRY UPDATES

1188

Atomic spectrometry update: review of advances in atomic spectrometry and related techniques

E. Hywel Evans,* Jorge Pisonero, Clare M. M. Smith and Rex N. Taylor



Atomic
Spectrometry
Updates

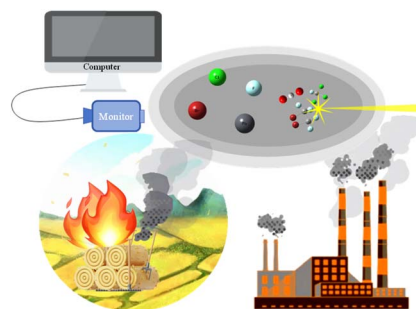


TUTORIAL REVIEW

1212

In situ online detection of atmospheric particulate matter based on laser induced breakdown spectroscopy: a review

Zhuoyi Sun, Cong Yu, Jun Feng, Junyi Zhu and Yuzhu Liu*



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Fundamental questions
Elemental answers

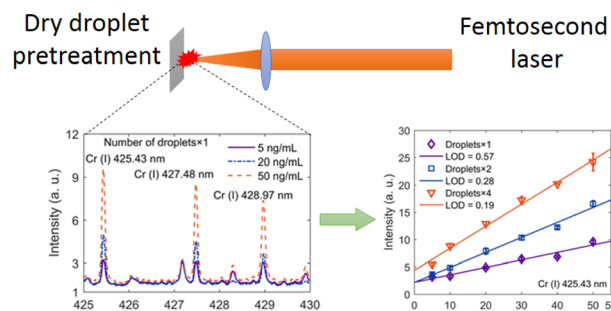


TECHNICAL NOTE

1225

High-sensitivity analysis of trace elements in water using femtosecond LIBS with dry droplet pretreatment on a metallic substrate

Yutong Chen, Xiangtong Wan, Jiarui Si, Jianhui Han,*
Anmin Chen* and Mingxing Jin*

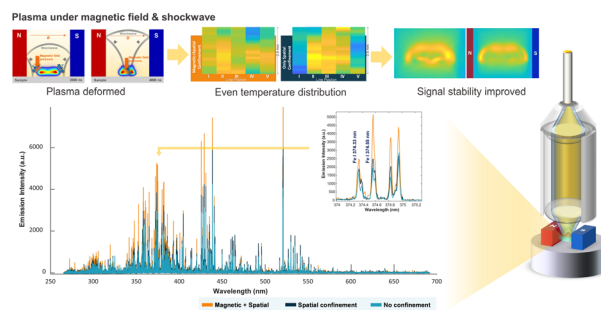


PAPERS

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Synergy enhancement and signal uncertainty of magnetic-spatial confinement in fiber-optic laser-induced breakdown spectroscopy

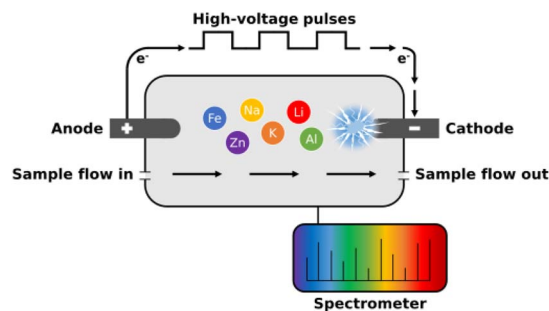
Jinghui Li, Jian Wu,* Mingxin Shi, Yan Qiu, Ying Zhou,
Hao Sun, Xinyu Guo, Di Wu, Yuhua Hang, Hailiang Yang
and Xingwen Li



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Trace element analysis in lithium matrices using micro-discharge optical emission spectroscopy

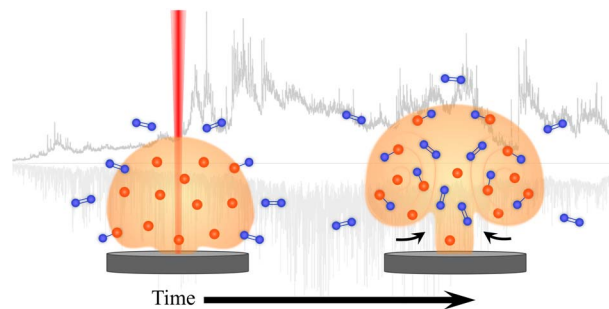
Bastian Wiggershaus, Miisamari Jeskanen, Aappo Roos,
Carla Vogt* and Toni Laurila



1260

Spatiotemporal characterization of cerium monoxide in laser ablation plasmas using spectrally-resolved fast-gated imaging

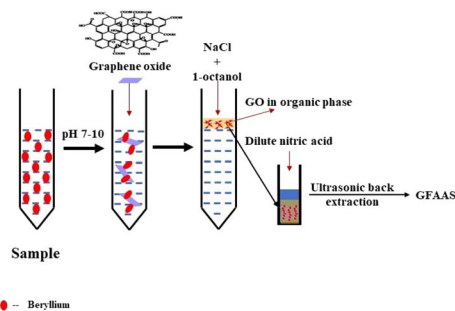
Emily H. Kwapis* and Kyle C. Hartig



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Interference free ultratrace beryllium determination in alkaline effluents of beryllium processing plants by graphite furnace atomic absorption spectrometry after a novel graphene oxide-assisted dispersive micro solid phase extraction without using a chelating agent

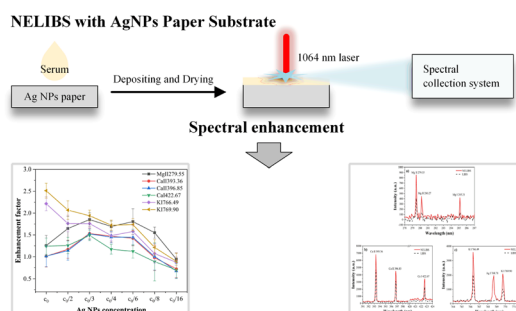
Saikrishna Devulapally,* N. N. Meeravali and A. C. Sahayam



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Nanoparticle-enhanced laser-induced breakdown spectroscopy for serum element analysis using an Ag NP-coated filter paper substrate

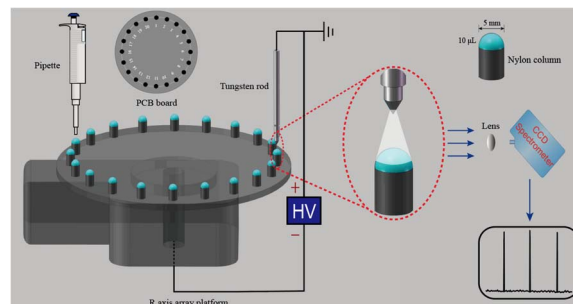
Xinxin Zhang, Xiaohui Li,* Xue Chen, Mengshan Shi and Tao Ren



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Development of a droplet cathode glow discharge excitation source for high throughput detection of Li, Ca and K in serum samples

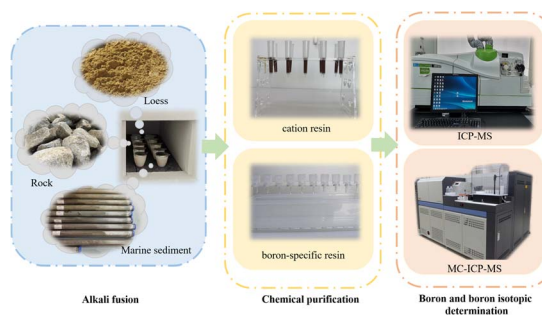
Jinzhao Liu, Junhang Dong, Shanru Han, Jingwen Zhang, Xing Liu, Hongtao Zheng and Zhenli Zhu*



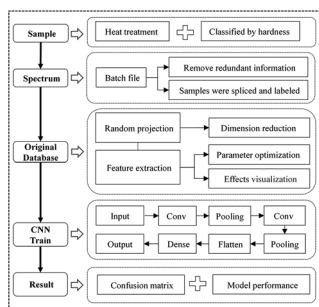
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Purification of boron using a combination of cationic and boron-specific resins and determination of boron isotopic composition in sediments by MC-ICP-MS

Ning Zhang, Xue-Qin Wen, Mao-Yong He,* Tongxiang Ren,* Li Deng, Yuanyuan Cheng, Xiaolin Zhang and Junhua Guo



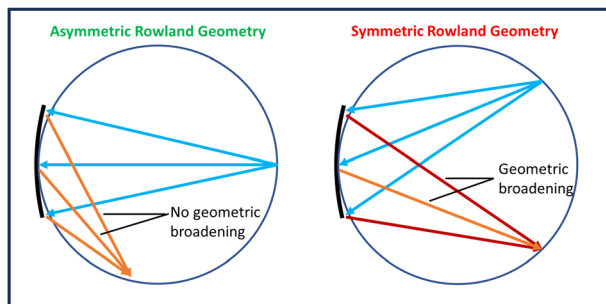
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Microstructure classification of steel samples with different heat-treatment processes based on laser-induced breakdown spectroscopy (LIBS)

Minchao Cui,* Guangyuan Shi, Lingxuan Deng, Haorong Guo, Shilei Xiong, Liang Tan, Changfeng Yao, Dinghua Zhang and Yoshihiro Deguchi*

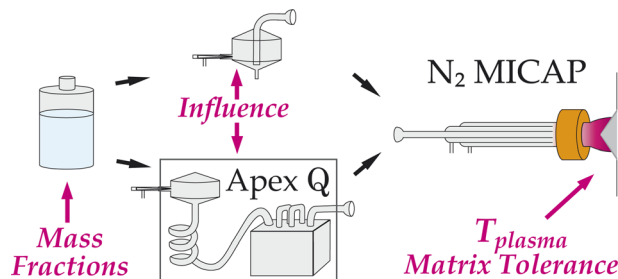
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Asymmetric Rowland circle geometries for spherically bent crystal analyzers in laboratory and synchrotron applications

Anthony J. Gironda, Jared E. Abramson, Yeu Chen, Mikhail Solovyev, George E. Sterbinsky and Gerald T. Seidler*

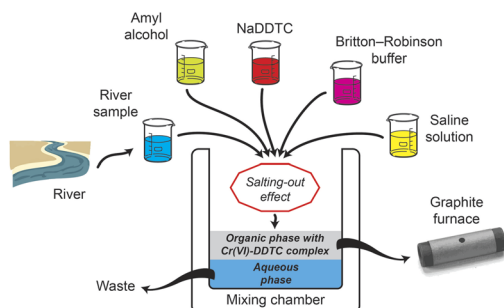
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Quantification capabilities of N₂ MICAP-MS with solution nebulization and aerosol desolvation

Monique Kuonen, Bodo Hattendorf and Detlef Günther*

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Automated salting-out assisted single-phase liquid-liquid extraction of Cr(vi) from river water samples prior to its atomic absorption spectrometric determination

Francisco Antonio S. Cunha,* Julys Pablo A. Fernandes, Wellington S. Lyra, Amalia Geiza G. Pessoa, Josué C. C. Santos, Mario C. U. Araújo and Luciano F. Almeida



