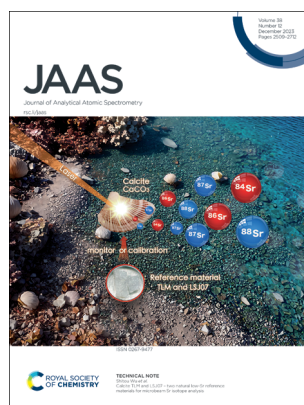


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See Zongyu Hou, Zhe Wang et al., pp. 2554–2561. Image reproduced by permission of Zhe Wang from *J. Anal. At. Spectrom.*, 2023, **38**, 2554.



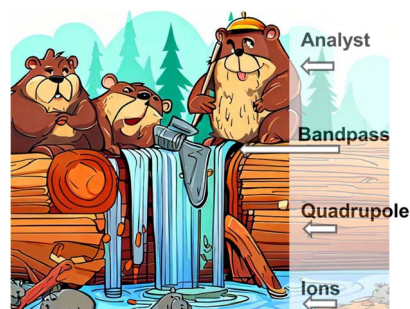
Inside cover
See Shitou Wu et al., pp. 2528–2537. Image reproduced by permission of Shitou Wu from *J. Anal. At. Spectrom.*, 2023, **38**, 2528.

PERSPECTIVE

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Swimming against the current – sacrificing unit mass resolution in ICP-MS to improve figures of merit

David Clases

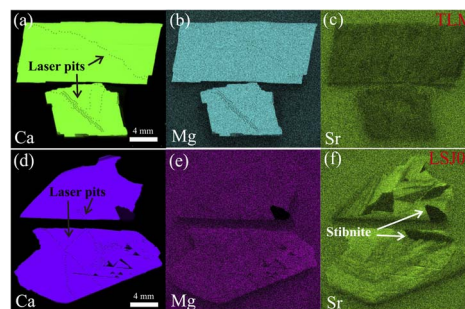


TECHNICAL NOTES

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Calcite TLM and LSJ07 – two natural low-Sr reference materials for microbeam Sr isotope analysis

Shitou Wu,* Yuehang Yang, Tianyi Li, Chao Huang, Zhian Bao, Youlian Li, Chaofeng Li, Lei Xu, Hao Wang, Liewen Xie, Jinhui Yang and Fuyuan Wu



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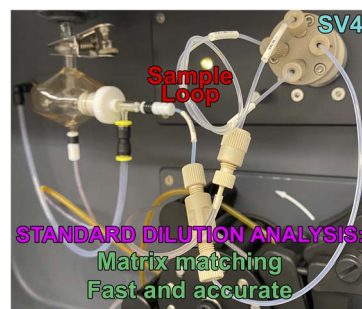


TECHNICAL NOTES

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Automated standard dilution analysis using a four-port switching valve for fast inductively coupled plasma optical emission spectrometry determination

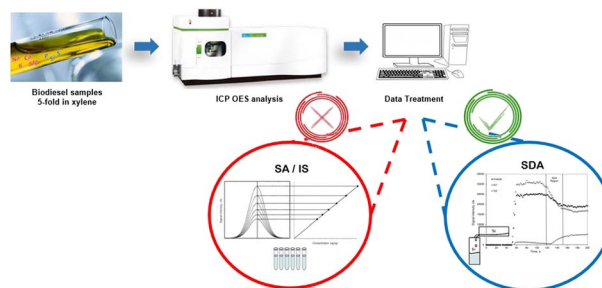
Jesse R. Ingham, Bradley T. Jones and George L. Donati*



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Standard dilution analysis (SDA) as a powerful tool for elemental determination in biodiesel by inductively coupled plasma optical emission spectrometry (ICP OES)

Vitor Cornaqui P. Marrocos,* Jefferson R. de Souza and Tatiana D. Saint Pierre

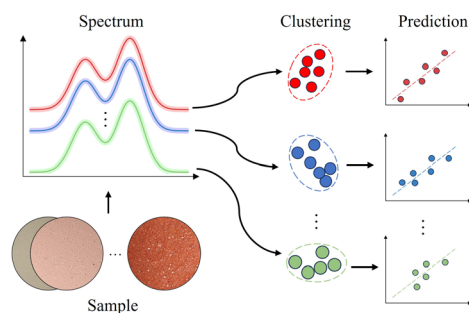


PAPERS

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Improving quantitative analysis of cement elements in laser-induced breakdown spectroscopy through combining matrix matching with regression

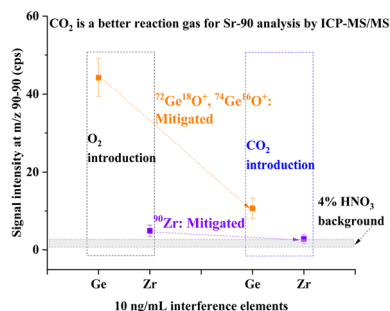
Chenwei Zhang, Weiran Song, Zongyu Hou* and Zhe Wang*



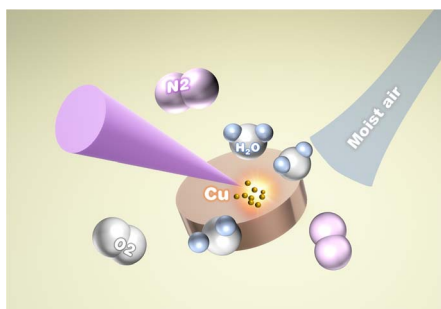
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⁹⁰Sr bioassay in small-volume urine by ICP-MS/MS with CO₂ as the reaction gas

Guosheng Yang,* Hirofumi Tazoe, Eunjoo Kim, Jian Zheng, Munehiko Kowatari and Osamu Kurihara



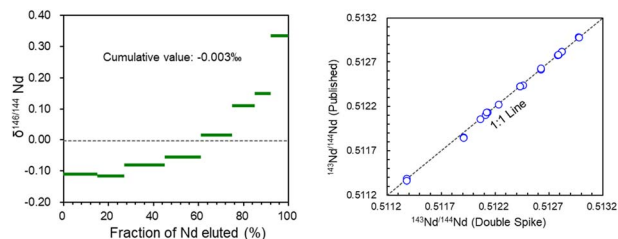
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The influences of ambient humidity on laser-induced breakdown spectroscopy

Jiacen Liu, Zongyu Hou* and Zhe Wang*

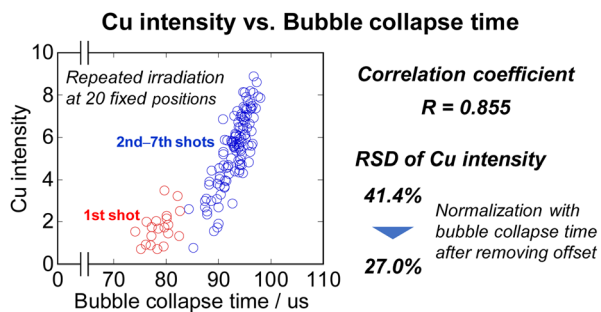
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Simultaneously obtaining stable and radiogenic Nd isotope ratios through a single DGA column using double spike TIMS

Fang Liu,* Xin Li,* Hong Yang, Qingyao Peng, Jiaojiao Wu and Zhaofeng Zhang

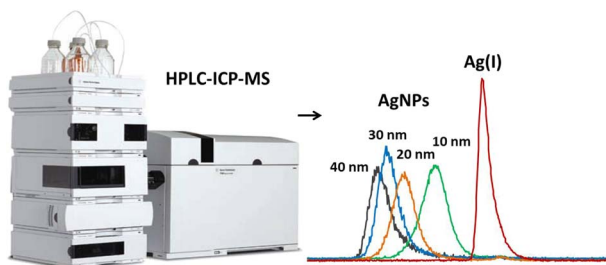
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Effect of repeated irradiation on laser-induced breakdown spectroscopy of copper immersed in a sodium chloride aqueous solution and normalization with bubble collapse time

Ayumu Matsumoto,* Yusuke Shimazu, Shinji Yae and Tetsuo Sakka

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Selection of chromatographic separation conditions for reliable monitoring of the transformation of AgNPs/Ag(I) species by HPLC-ICP-MS in surface water and green algae cells

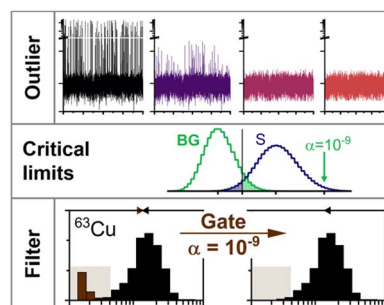
Julita Malejko, Weronika Liszewska and Beata Godlewska-Żytkiewicz*



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Improving detection thresholds and robust event filtering in single-particle and single-cell ICP-MS analysis

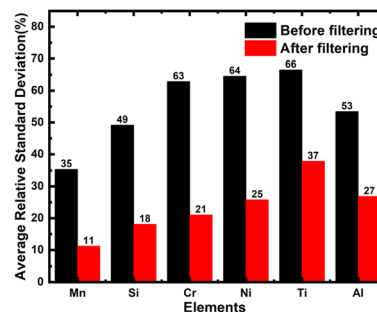
Matthias Elinkmann,* Sarah Reuter, Michael Holtkamp, Steffen Heuckeroth, Alexander Köhrer, Katharina Kronenberg, Michael Sperling, Oliver Rubner, C. Derrick Quarles, Jr, Michael Hippler and Uwe Karst



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Long-term reproducibility detection method for quantitative LIBS using Kalman filtering

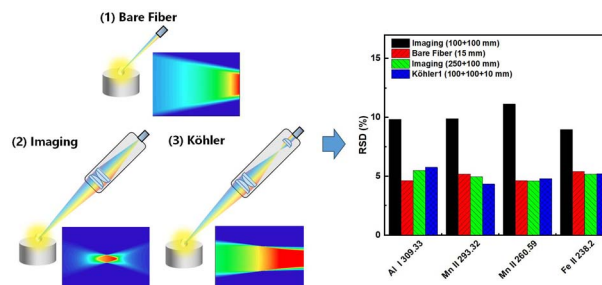
Ying Lu, Li Liu, Zechuan Wu, Zhishuai Xu, Ziyi Zhao, Zhongqi Hao,* Jiulin Shi and Xingdao He



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Spectral stability improvement through wide fields of view collection optics in laser-induced breakdown spectroscopy applications

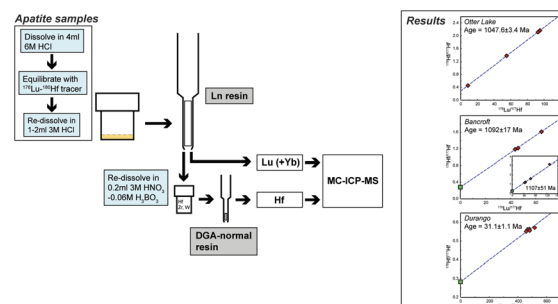
Guangda Wang, Ying Zeng, Lianbo Guo,* Shenglin Li and Zhenlin Hu*



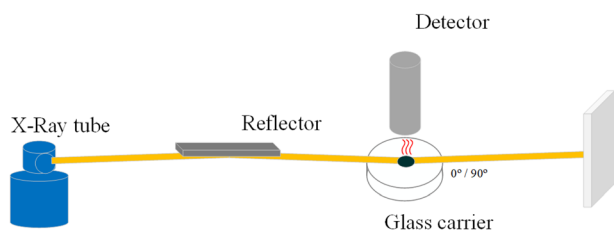
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An optimized chromatography method and MC-ICP-MS technique for apatite Lu–Hf geochronology

Chao Zhang,* Tsai-Wei Chen and Jeffrey D. Vervoort



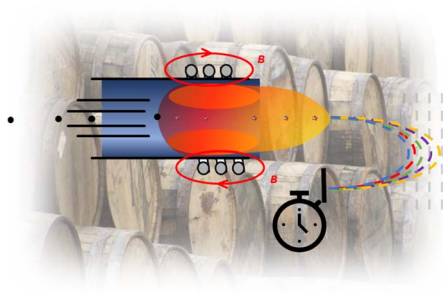
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Exploratory studies on total reflection X-ray fluorescence spectrometry combined with slurry sampling for the multi-element analysis of copper-nickel sulfide ore

Yongsheng Zhang, Yaxiong He, Hui Chen, Shuolei Wei, Guanqing Mo, Tao Xu* and Jian Yuan*

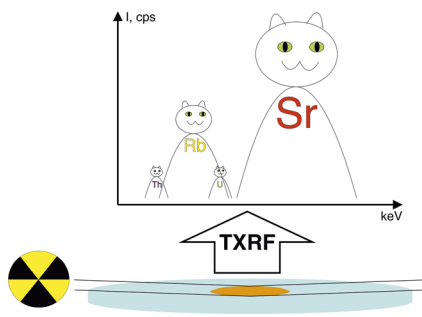
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Non-target analysis and characterisation of nanoparticles in spirits via single particle ICP-TOF-MS

Raquel Gonzalez de Vega, Thomas E. Lockwood, Lhiam Paton, Lukas Schlatt and David Clases*

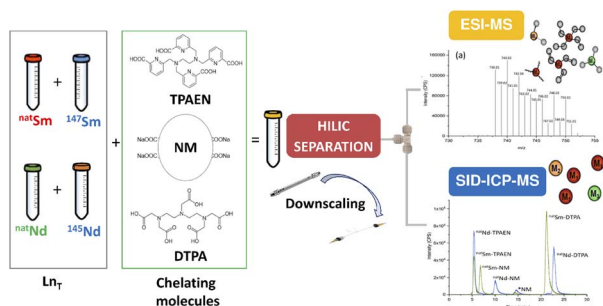
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Total-reflection X-ray fluorescence determination of thorium and uranium in the presence of interfering elements in solid geological objects of natural and technogenic origin

Timur F. Akhmetzhanov, Tatiana Y. Cherkashina,* Alena N. Zhilicheva, Victor M. Chubarov and Galina V. Pashkova

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Developing and downscaling a method by HILIC coupled simultaneously to ESIMS and ICPMS to determine the affinity of lanthanide chelating molecules using specific isotope dilution

Marina Amaral Saraiva, Pascal E. Reiller, Cécile Marie and Carole Bresson*

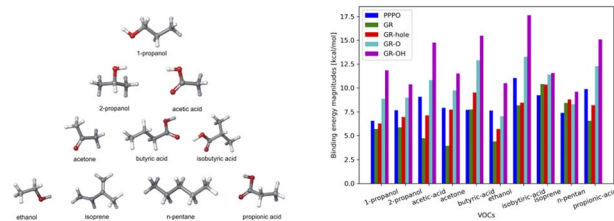


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Multiscale modeling of VOC–graphene nanostructure interactions: designing new sorbents for portable mass spectrometric applications

Stevan Armaković,^{*} Milena Aleksić, Stamatios Giannoukos and Boris Brkić^{*}

Binding between VOC molecules and graphene derivatives



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Experimental determination of total M shell and subshell X-ray production cross sections for uranium by proton impact

Mariano Bonifacio, Sergio Gabriel Suárez, Tabatha Pamela Rodríguez Cabello, Andrés Sepúlveda Peñaloza, Jorge Carlos Trincavelli and Pablo Daniel Pérez^{*}

