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Cover

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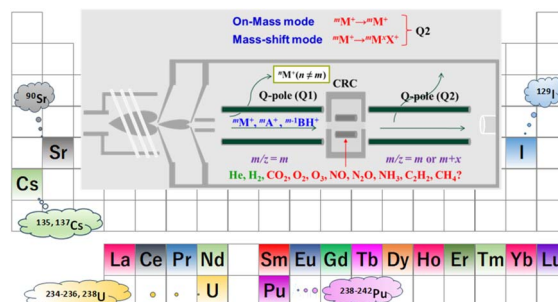
See Sarah E. Szakas, Benjamin T. Manard et al., pp. 1483–1493. Image reproduced by permission of Oak Ridge National Laboratory, US Department of Energy from *J. Anal. At. Spectrom.*, 2025, **40**, 1483.

CRITICAL REVIEW

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Tandem quadrupole inductively coupled plasma mass spectrometry for the quantitative and isotopic analysis of rare earth elements and radionuclides

Yanbei Zhu,* Guosheng Yang, Aya Sakaguchi, Tsutomu Miura, Yasuyuki Shikamori and Jian Zheng*

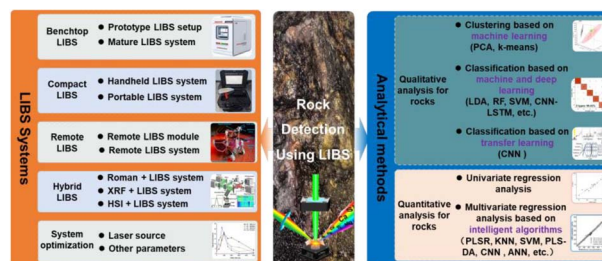


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Recent advances in LIBS technology for rock detection: from systems to methods

Jiujiang Yan, Jinxiu Ma, Ke Liu, Yang Li* and Kailong Li



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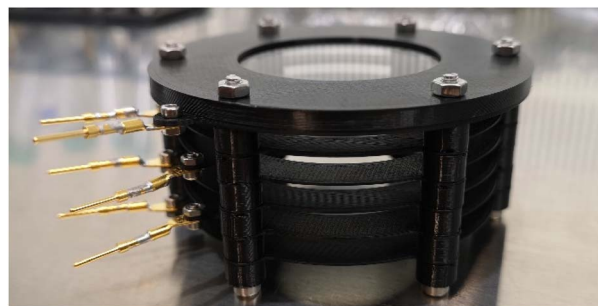
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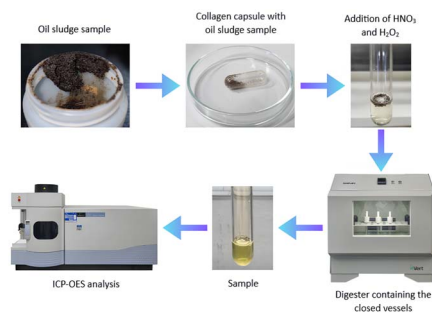
Andreas Riedo,* Peter Keresztes Schmidt, Nikita J. Boeren, Salome Gruchola, Luca N. Knecht, Marek Tulej and Peter Wurz



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Aline Leone Muguet Pinto,* Alexandre Luiz de Souza, Leandro Goulart de Araujo, Julio Takehiro Marumo, Marycel Elena Barboza Cotrim and Sabine Neusatz Guilhen*

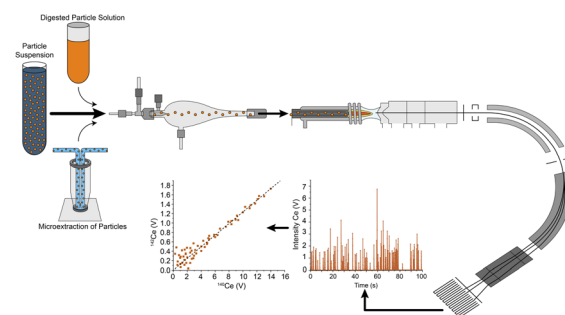


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Particle signal considerations for isotope ratio analysis with single particle multi-collector inductively coupled plasma mass spectrometry

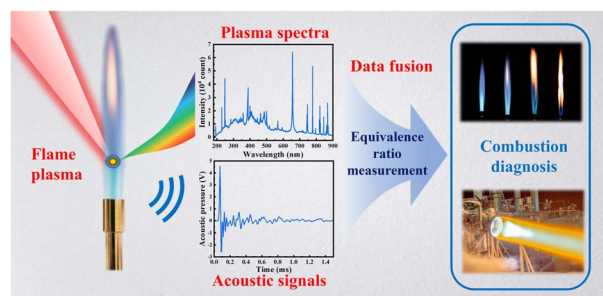
Sarah E. Szakas,* Jordan S. Stanberry, N. Alex Zirakparvar, Hunter B. Andrews, Daniel R. Dunlap, Matt Darnell, Brian W. Ticknor, Lorianne R. Shultz-Johnson, Shawna K. Tazik and Benjamin T. Manard*



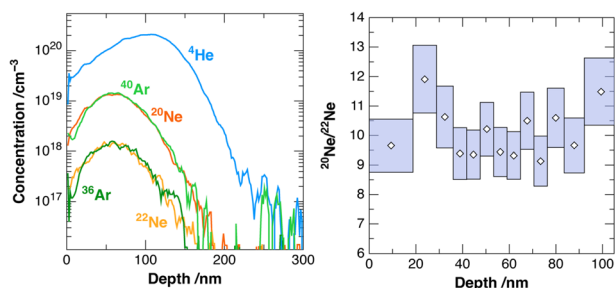
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Flame equivalence ratio measurement using data fusion based on laser-induced plasma spectra and acoustic signals

Yifan Luo, Yangyang Zhao, Jiaxu Zhang, Nan Li,* Linglei He,* Yongqiu Zheng and Chenyang Xue



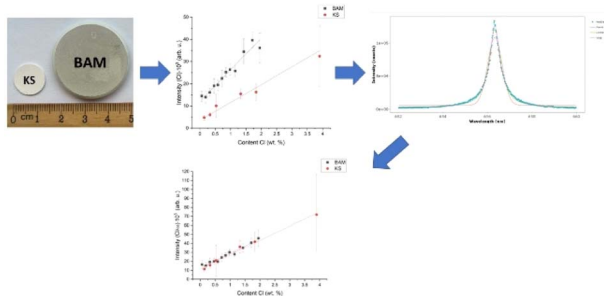
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Depth profiling of noble gases in ilmenite and olivine substrates

Yuta Otsuki,* Ken-ichi Bajo, Tomoya Obase and Hisayoshi Yurimoto

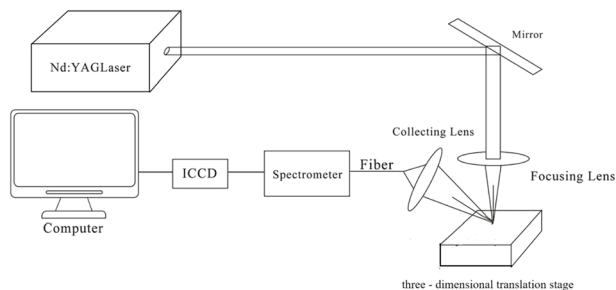
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Chlorine determination in cement paste samples using laser-induced breakdown spectroscopy and non-matching matrix calibration samples

Lucie Kratochvilová, David Prochazka,* Tomáš Opravil, Pavel Pořízka and Jozef Kaiser

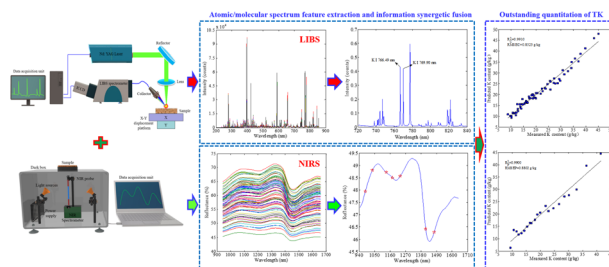
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Study on the identification of soybean origins combining laser-induced breakdown spectroscopy and convolutional neural networks

Li Wang,* Tolok Galina, Longkun Jing, Li Xu, Yuanxia Fu, Hui Gao and Li Li

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Comparing atomic spectroscopy, molecular spectroscopy and multi-source spectroscopy synergetic fusion for quantitation of total potassium in culture substrates

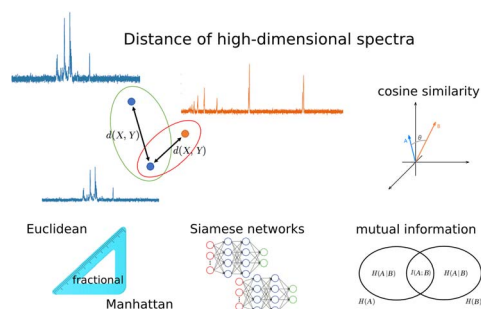
Bing Lu, Xufeng Wang, Can Hu, Shiping Zhu* and Xiangyou Li*



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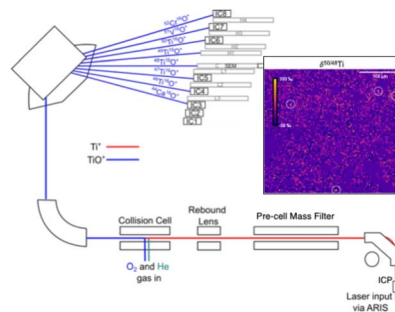
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In situ analysis of titanium isotope ratios in stardust using LA-CC-MC-ICPMS/MS

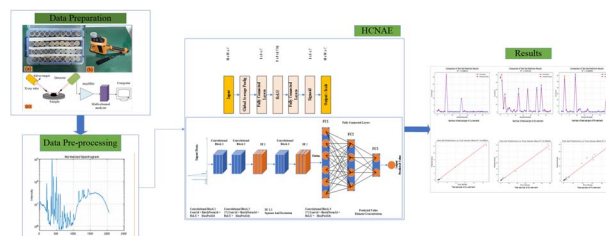
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Ahmed A. AL-Tameemi, Fusheng Li,* Qinglun Zhang, Zenan Xiao, Wanqi Yang and Shubin Lyu



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On the use of end-on observation in optical emission spectroscopy measurements of the maximum electric field strength in the cathode sheath of Grimm-type glow discharges in helium

Nikodin V. Nedić, Nikola V. Ivanović, Ivan R. Videnović,* Djordje Spasojević and Nikola Konjević

