

IN THIS ISSUE

ISSN 0267-9477 CODEN JASPE2 41(6) 1967–2282 (2026)



Cover

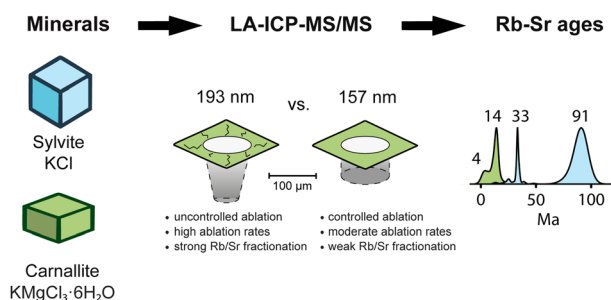
See V. M. Scharek, H. Traub, and B. Meermann, pp. 2005–2011. Image reproduced by permission of Björn Meermann from *J. Anal. At. Spectrom.*, 2026, **41**, 2005. Artwork generated with Microsoft Copilot.

COMMUNICATION

1978

In situ Rb/Sr dating of potassium salt minerals (sylvite and carnallite) by 157 nm LA-ICP-MS/MS

Martin Kutzschbach,* Tobias Erhardt, Michael Mertineit, Linda Marko, Michael Schramm, Lisa Richter, Wilhelm Nikonow and Wolfgang Müller*

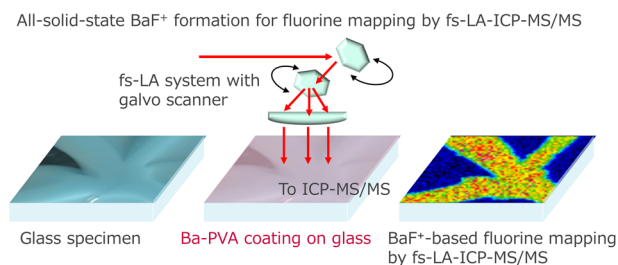


TECHNICAL NOTES

1990

All-solid-state fluorine mapping by BaF⁺ formation from surface-coated barium in femtosecond LA-ICP-MS/MS

Yoshitaka Saijo,* Makiko Murata, Yuya Hamada and Junichi Hirata



**GOLD
OPEN
ACCESS**

EES Batteries

**Exceptional research on
batteries and energy storage**

Part of the EES family

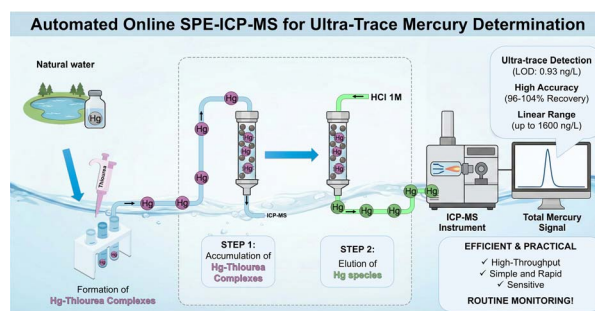
**Join
in** | Publish with us
rsc.li/EESBatteries

TECHNICAL NOTES

1997

Automated online SPE-ICP-MS for ultra-trace determination of mercury in freshwaters

Alejandro R. López, Simone Mason, Sandro Recchia, Damiano Monticelli and Davide Spanu*

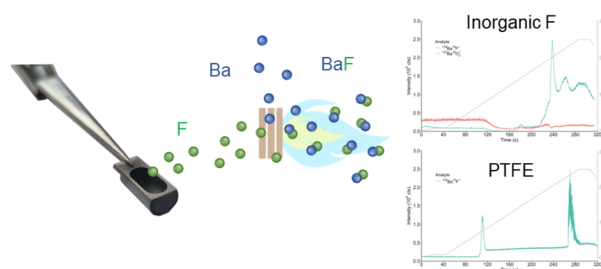


PAPERS

2005

A direct solid sampling approach for fluorine determination via ETV/ICP-QQQ-MS

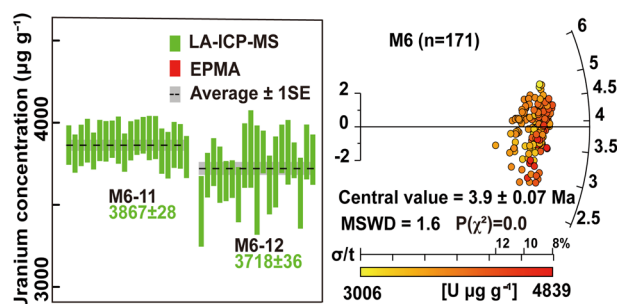
Vera M. Scharek, Heike Traub and Björn Meermann*



2012

M6, a monazite reference material for fission-track thermochronology

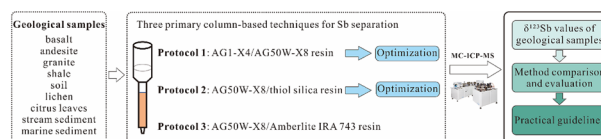
Jianzhang Pang,* Yan Ma, Dewen Zheng, Weixing Li, Zhiyong Zhang, Jing Yang, Huiping Zhang, Ying Wang, Xi Ma, Jingxing Yu, Yizhou Wang and Chaopeng Li



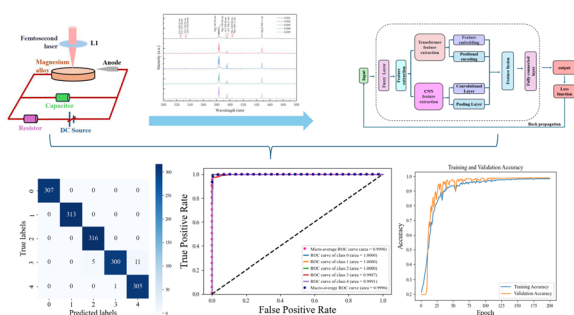
2024

Comparison and optimization of chromatographic separation methods for the accurate measurement of antimony isotopic composition

Jianfeng Liu, Shengliu Yuan, Wengang Liu, Wang Zheng, Hongming Cai, Wei Yuan and Jiubin Chen*



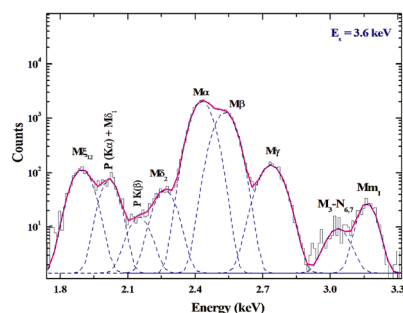
2037



Hybrid fuzzy-transformer-CNN network combined with fs-LA-SIBS for accurate classification of magnesium alloy components

Xiaoyong He,* Chunhui Huang and Zhenman Gao*

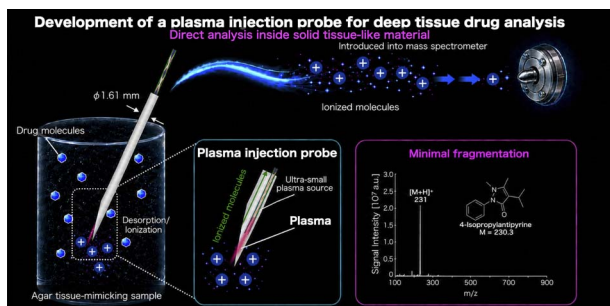
2050



Measurements of M-shell fluorescence yields and Coster–Kronig transition probabilities for Bi and Th employing synchrotron radiation-induced selective photoionization

Priya, Harpreet Singh, Anil Kumar, A. G. Karydas and Sanjiv Puri*

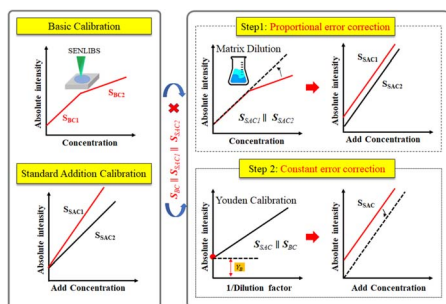
2060



Development of a plasma injection probe for deep tissue drug analysis

Yuya Shimizu, Masaya Tahara, Akane Yaida, Yukiko Moriwa, Toshihiro Takamatsu,* Atsushi Shoji and Akitoshi Okino

2068



Determination and correction of systematic errors in surface-enhanced LIBS

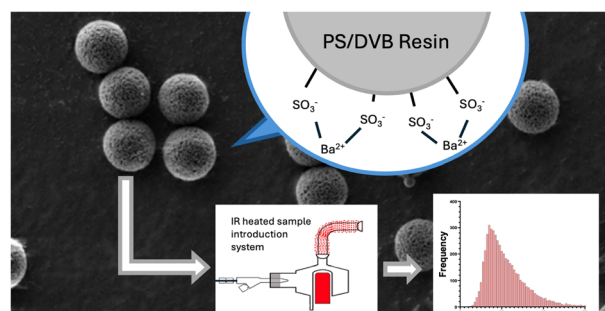
Dongdong Li, Kelong Liu, Zhongfa Sun, Xinyan Yang* and Xianfeng Zheng



2074

Optimization of an infrared-heated sample introduction system for single-particle inductively coupled plasma mass spectrometry analysis of metal-labelled ion-exchange polymer microparticles

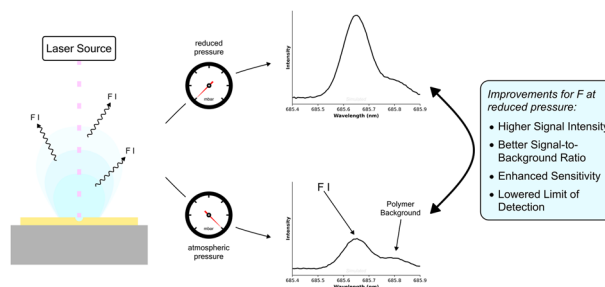
Zichao Zhou, Matthias Schmitt, Andreas Seubert and Diane Beauchemin



2081

Less is more: how reducing the ablation atmosphere pressure can boost sensitivity for fluorine in laser-induced breakdown spectroscopy

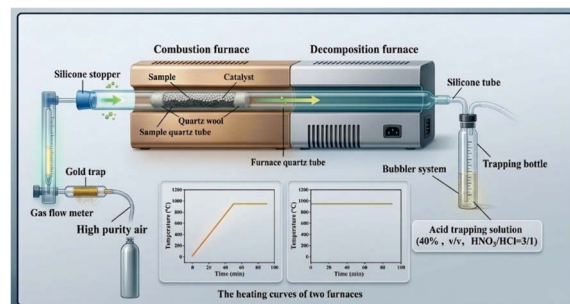
David Ken Gibbs and Andreas Limbeck*



2097

A MnO₂-Co₃O₄-CaO catalytic pyrolysis method for mercury isotope analysis in marine sediments

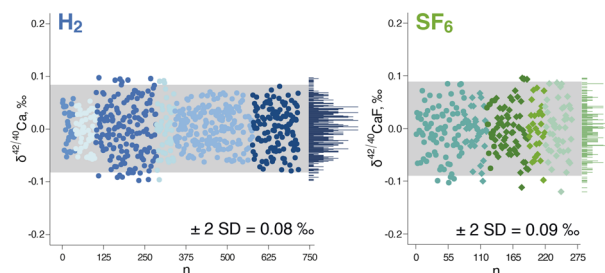
Yu Lei, Guangyi Sun,* Chenmeng Yang, Xinyu Li and Xinbin Feng*



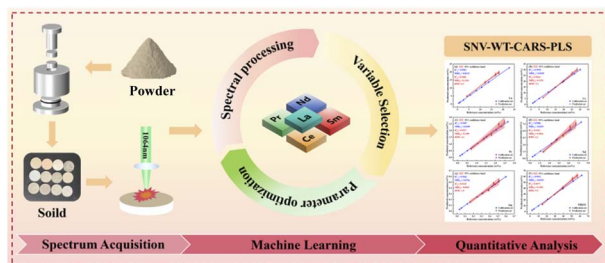
2107

Continuous-flow analyses of calcium isotopes using a Neoma MC-ICPMS/MS with H₂ or SF₆

Emmanuelle Albalat, Philippe Télouk and Vincent Balter*



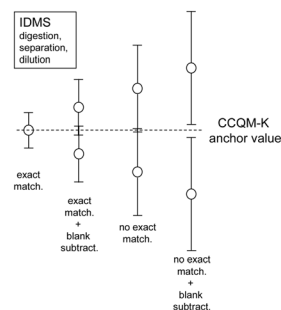
2117



PLS regression-assisted LIBS for simultaneous quantitative analysis of five REEs and TREOs in rare earth ores

Jingzhong Liu, Rongling Zhang, Qiao Li, Xudong Ren,*
Yu Liu, Yanyan Xu, Tianlong Zhang,*
Hongsheng Tang and Hua Li*

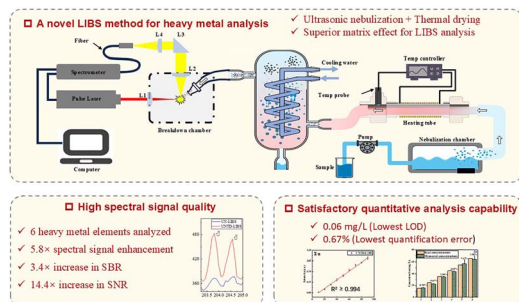
2127



Blank correction in IDMS: possible pitfalls

Axel Pramann* and Olaf Rienitz

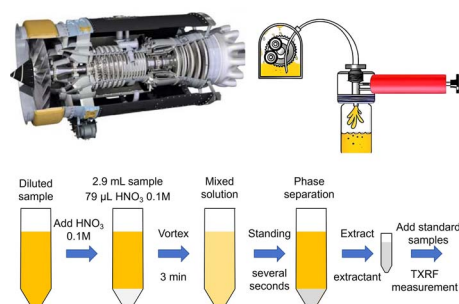
2137



Combination of ultrasonic nebulization and thermal drying to assist LIBS (UNTD-LIBS): a sensitive online method for heavy metal element analysis in liquid samples

Changhong Zhang, Junxian Lu, Shoujiang Zhang,
Yunpeng Dai, Peng Zhu and Shilei Zhong*

2150



Vortex-assisted reverse-phase dispersive liquid-liquid microextraction for on-site determination of Ti, Cr, Mn, Ni, and Cu in lubricating oil using total reflection X-ray fluorescence spectroscopy

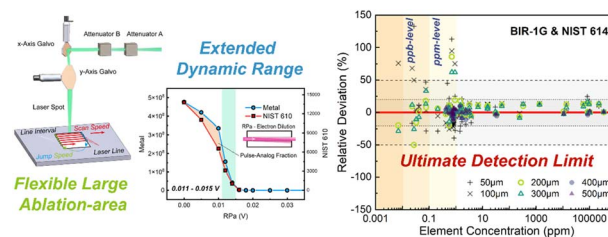
Kuan Wang, Xiao Fu,* Fajie Duan, Jijia Jiang, Jingxin Wu,
Rui Wang and Xinxing Wang



2158

Evaluation of a galvo-based novel fs-LA-ICP-MS/MS platform for high-precision elemental analysis with flexible large spots

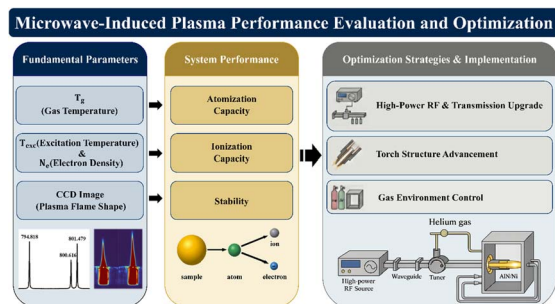
Ran Bi, Zhengbin Deng,* Yuanyuan Tian, Weibiao Hsu, Fangyue Wang, Can Ge, Chao Wu, Hanbao Chong, Mei Sun and Fang Huang*



2170

Integrated optical emission spectroscopy and imaging diagnostics of atmospheric-pressure argon microwave-induced plasma

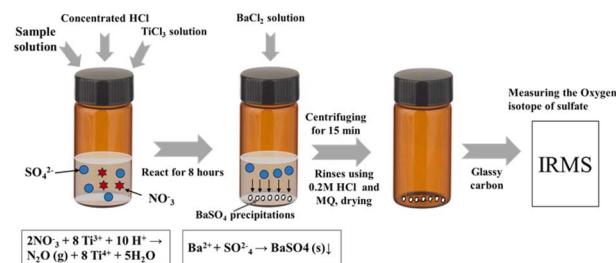
Yubo Zhang, Yongsheng Liu,* Jie Lin, Xiaoming Jiang, Wengui Liu, Zhenyi Liu, Wen Zeng, Meng Zhang and Qingsong Tang



2181

A titanium(III) chloride based approach for accurate measurement of sulfate oxygen isotope composition

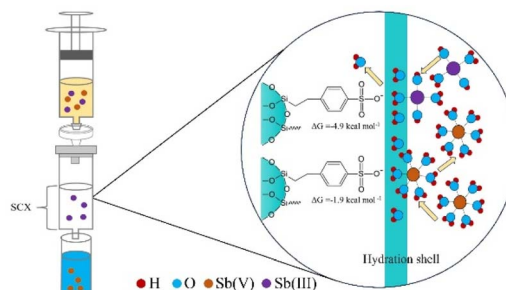
Guangliang Wu, Wenjing Liu,* Hao Dong, Jiangyi Zhang and Zhifang Xu



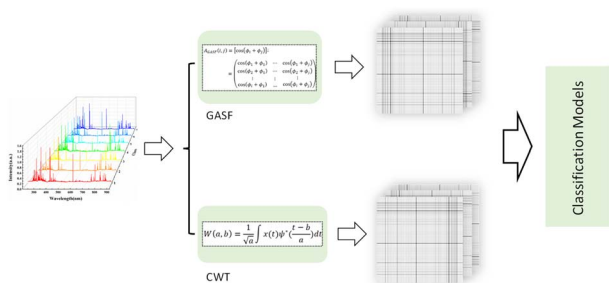
2189

On-site separation of Sb(III) and Sb(V) and antimony stable isotope analysis by a sulfonated silane strong cation exchange resin

Meng Tan, Yan Wan, Jianwei Zhou, Mengyuan Hao, Ziyi Zhou, Weiqing Zhou, Yanbo Feng, Shufang Zeng, Peng Liu* and Guangyi Sun*



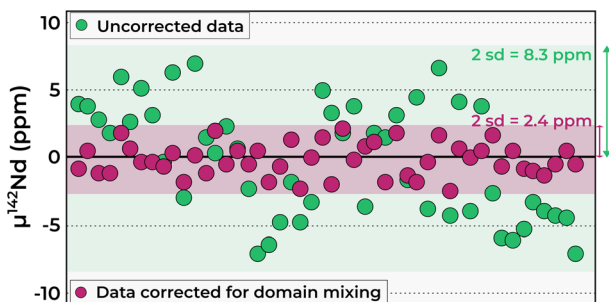
2202



Comparative analysis of one- and two-dimensional spectral representations for LIBS-based classification of rocks

Tengfeng Ni, Yun Tang,* Zeen Yang, Xiang Zhang, Zhanke Peng, Wenlong Xie, Bingjie Xu and Wanjin Yuan

2211

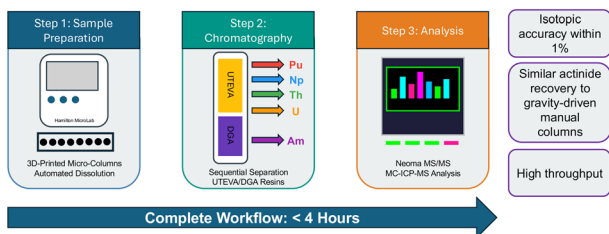


Effects of domain mixing on high-precision $^{142}\text{Nd}/^{144}\text{Nd}$ measurements using thermal-ionization mass spectrometry

Thomas Rouyer,* Régis Doucelance, Maud Boyet, Marion Garçon and Delphine Auclair

2227

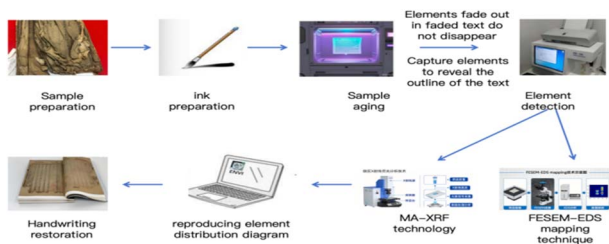
Automated Actinide Separation Workflow High-Throughput Actinide Analysis



Towards an automated approach for rapid separation of actinides using a liquid handling system

Nicholas P. Richard,* Sean R. Scott, Christian Berry, Matthew RisenHuber, William Munley, Karen Noyes, Matt Douglas and Lori Metz

2243



Elemental mapping-based reconstruction of faded handwriting in paper documents using FESEM-EDS and MA-XRF

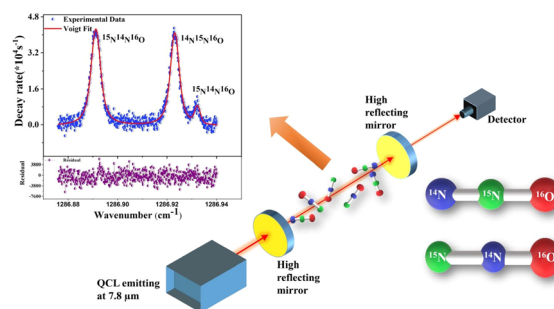
Qinwen Wang,* Jingqi Wang and Xiaoshuang Guo



2254

High-resolution simultaneous probing of site-specific N_2O -isotopologues at $7.8 \mu m$ using cavity ring-down spectroscopy

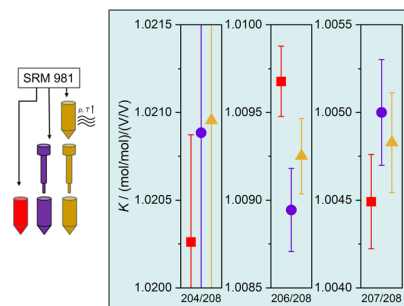
Arup Biswas, Indrayani Patra, Soumyadipta Chakraborty and Manik Pradhan*



2263

Impact of sample preparation history on isotopic fractionation: isotope ratios of lead SRM 981

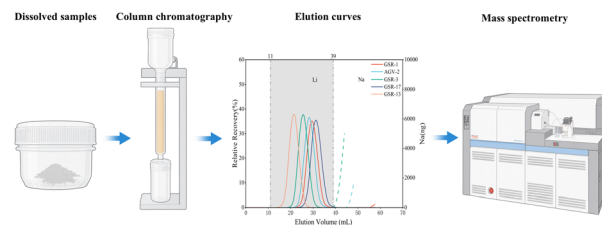
Axel Pramann,* Anita Röthke and Olaf Rienitz



2273

A rapid single-column separation of lithium isotopes from diverse matrices for MC-ICP MS analysis

Wei Dong, Guo-Chao Sun, Zhao-Ya Li,* Jian-Dong Sun* and Li-Qun Dai



A rapid single-column method for efficient lithium purification from diverse rock and seawater

