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**Cover**  
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**Inside cover**  
See Ye Tian *et al.*, pp. 99–108. Image reproduced by permission of Ye Tian from *J. Anal. At. Spectrom.*, 2024, **39**, 99.

## ATOMIC SPECTROMETRY UPDATES

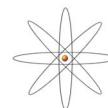
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### Atomic spectrometry update – a review of advances in environmental analysis

Jeffrey R. Bacon,\* Owen T. Butler, Warren R. L. Cairns, Olga Cavoura, Jennifer M. Cook, Christine M. Davidson and Regina Mertz-Kraus



Atomic  
Spectrometry  
Updates

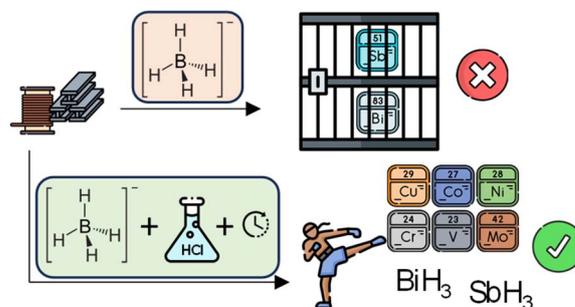


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### Managing transition metal interferences during chemical vapor generation using the hydrolysis products of tetrahydridoborate: a proof-of-concept study

Michelle Buoso, Beatrice Campanella,\* Massimo Onor, Emanuela Pitzalis and Alessandro D'Ulivo



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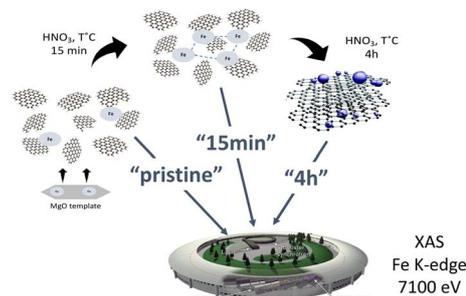
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### Stability of iron single atoms in graphene structures from X-ray absorption spectroscopy data

Anna Krot, Serguei Savilov, Ekatherina Arkhipova and Stepan Kalmykov\*

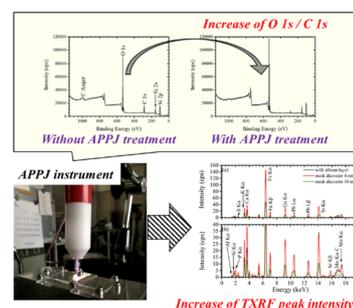


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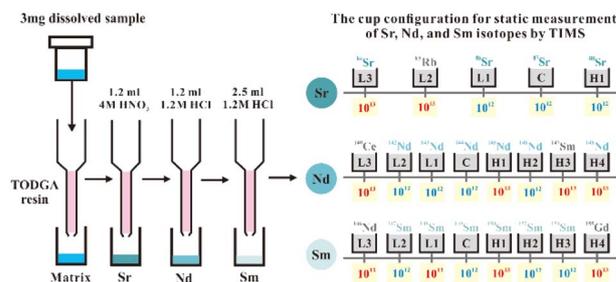


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### A single-column separation procedure for Sr, Nd, and Sm in small-size samples and high-precision isotope measurements using a TIMS with $10^{13}$ and $10^{12}$ $\Omega$ amplifiers

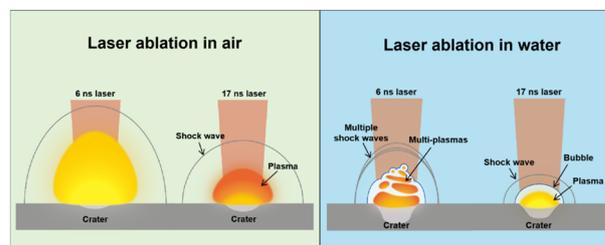
Yu-Ming Xu, Gui-Qin Wang,\* Zhen Yang, Yu-Ling Zeng and Feng Guo



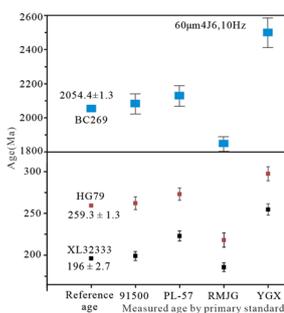
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### Characteristics of laser-induced plasma generated in water and in air with different nanosecond laser pulse durations

Canxu Zhai, Ye Tian,\* Longshang Wang, Ziwen Jia, Ying Li, Yuan Lu, Jinjia Guo, Wangquan Ye and Ronger Zheng



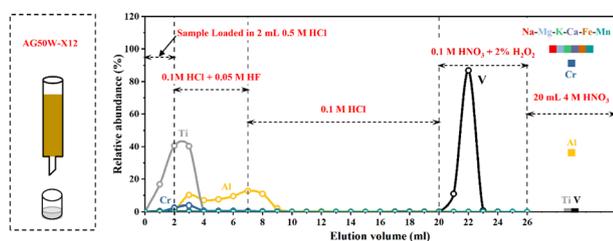
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### A new appraisal of ilmenite U–Pb dating method by LA-SF-ICP-MS

Yanwen Tang, Tingguang Lan, Jianfeng Gao, Zhongjie Bai,\* Xiaowen Huang,\* Junjie Han and Na Liu

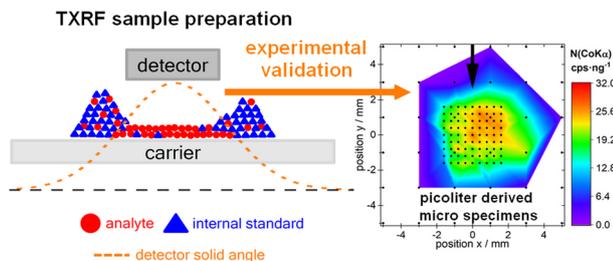
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### Rapid determination of V isotopes with MC-ICP-MS: new developments in sample purification

Zhen Zeng and Fei Wu\*

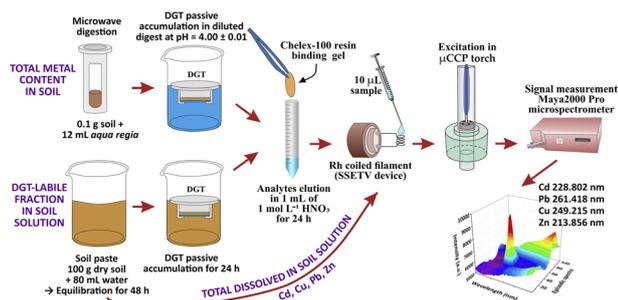
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Sven Hampel, Franziska Sand, Heiko Sebastian Till and Ursula Elisabeth Adriane Fittschen\*

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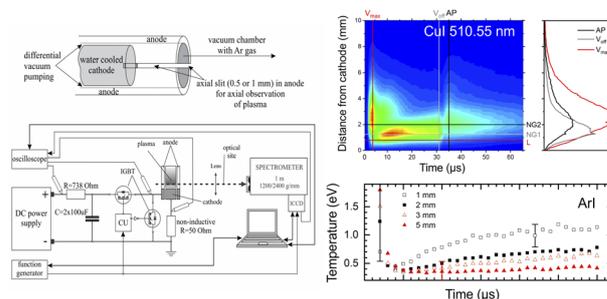
Simion Bogdan Angyus, Marin Senila, Eniko Covaci, Michaela Ponta, Maria Frentiu and Tiberiu Frentiu\*



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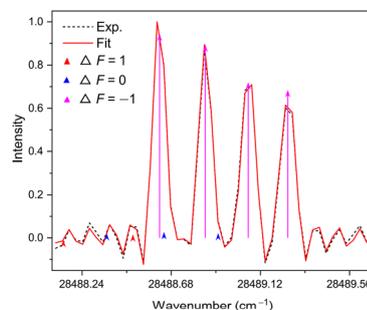
Ivan B. Krstić,\* Bratislav M. Obradović and Milorad M. Kuraica



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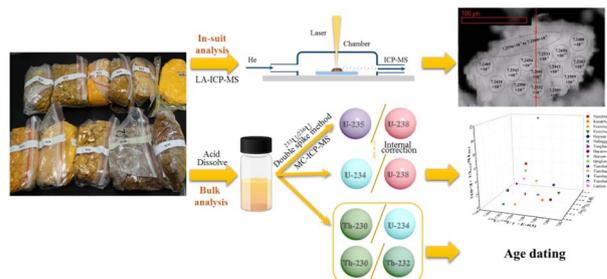
Yu Wang, Huiting Ma, Meina Liu, Xintong Li, Jia Wei and Zhenwen Dai\*



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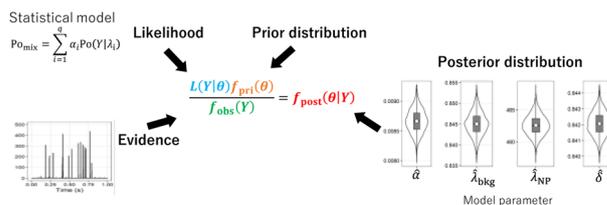
Wei Wang, Jiang Xu, Ruiyang Xi, Siqi Guo, Yongyang Su, Sui Fang, Haitao Zhang, Yalong Wang, Jinlong Fan, Lei Feng, Yufeng Wang and Zhiming Li\*



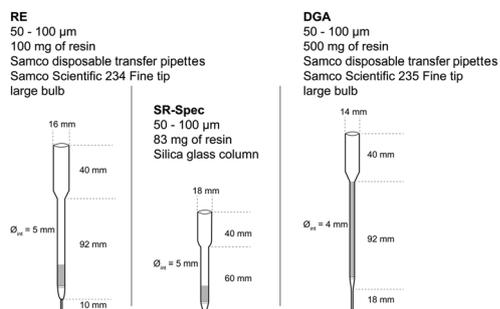
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## Bayesian estimation to deconvolute single-particle ICP-MS data with a mixed Poisson distribution

Yoshinari Suzuki,\* Midori Kondo, Masae Harimoto, Yusuke Okamoto, Yu-ki Tanaka, Yasumitsu Ogra and Hiroshi Akiyama



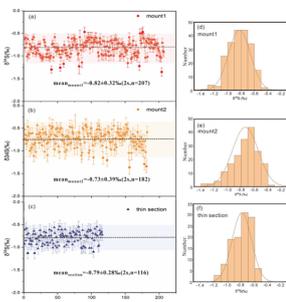
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## Evaluation of two methods allowing the full preparation in a single day of silicate rocks in view of radiogenic isotope (Nd, Sr, and Pb) analyses

Christian Pin and Abdelmouhcine Gannoun\*

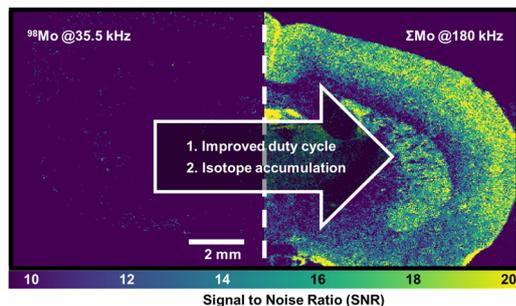
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## A potential stibnite reference material for sulfur isotope determination by LA-MC-ICP-MS

Zhi-hui Dai,\* Shan-ling Fu,\* Yue-fu Liu, Yu-miao Meng, Zhi-an Bao, Ke-jun Hou and Ting-guang Lan

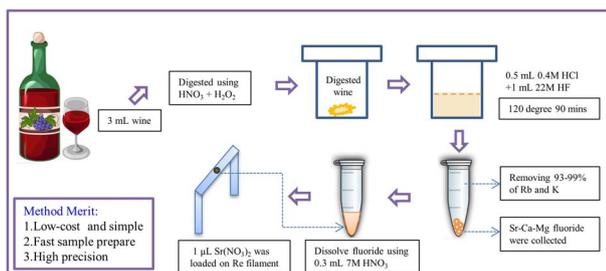
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T. E. Lockwood, R. Gonzalez de Vega, Z. Du, L. Schlatt, X. Xu and D. Clases\*

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## A low-cost and high precision determination method of $^{87}\text{Sr}/^{86}\text{Sr}$ ratios for red wine using thermal ionization mass spectrometry without column separation

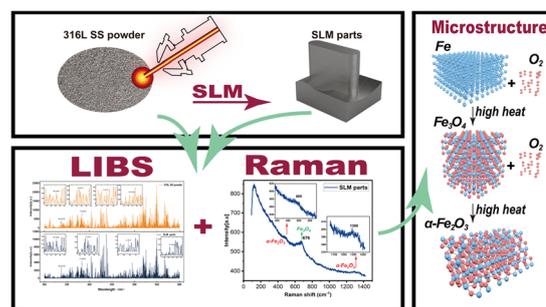
Chao-Feng Li,\* Xuan-Ce Wang, Zhu-Yin Chu and Peng Peng



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## The mechanism of sample composition variation in the selective laser melting process based on the laser-induced breakdown spectroscopy and Raman system detection

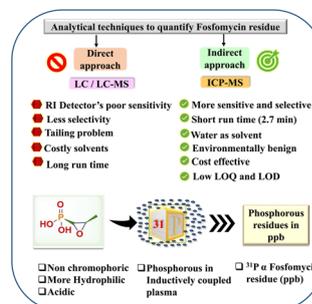
Jingjun Lin, Yao Li, Xiaomei Lin\* and Changjin Che\*



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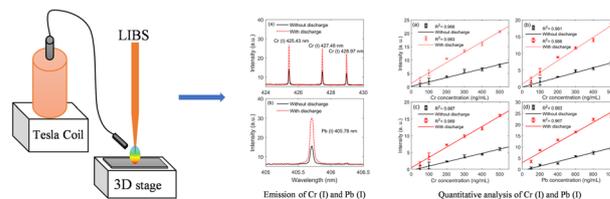
Anirban Roy Chowdhury,\* Sujal Shah, Rahul Y. Kapse, Tushar Mehta and Amit Mukharya



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## Sensitivity improvement of laser-induced breakdown spectroscopy to detect heavy metals in water by Tesla coil discharge

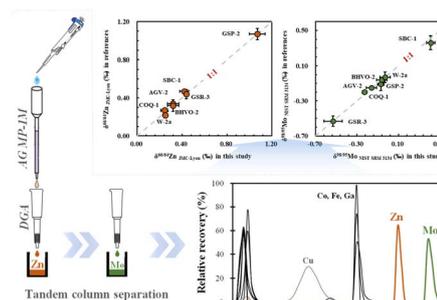
Qiuyun Wang, Anmin Chen\* and Xun Gao\*



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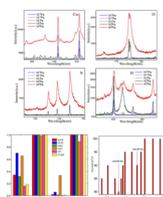
## A fast double-stack column chemical separation of Zn and Mo from geological samples for isotopic analysis by MC-ICP-MS

Yan Han, Lian Zhou, Minghui Shi, Yating Hu, Ge Zhang, Xin Hou and Lanping Feng\*





On-line vacuum degree monitoring of vacuum circuit breaker based on laser-induced breakdown spectroscopy combined with random forest algorithm



## On-line vacuum degree monitoring of vacuum circuit breakers based on laser-induced breakdown spectroscopy combined with random forest algorithm

Feilong Zhang, Huan Yuan,\* Aijun Yang,\* Xiaohua Wang, Jifeng Chu, Dingxin Liu and Mingzhe Rong

