

### IN THIS ISSUE

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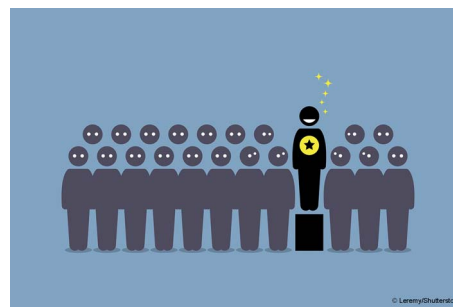
#### Cover

See Nouredine Melikechi *et al.*, pp. 1961–1970. Image reproduced by permission of Nouredine Melikechi from *J. Anal. At. Spectrom.*, 2024, 39, 1961.

### EDITORIAL

1960

#### Outstanding Reviewers for *Journal of Analytical Atomic Spectrometry* in 2023

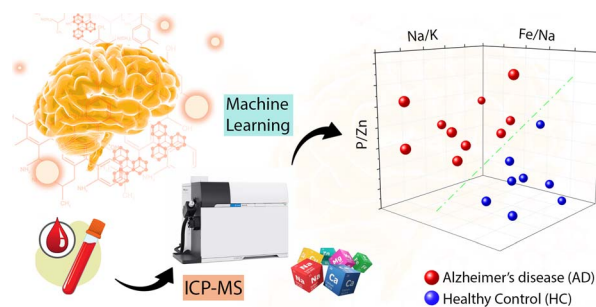


### PAPERS

1961

#### Label free, machine learning informed plasma-based elemental biomarkers of Alzheimer's disease

Ali Safi, Nouredine Melikechi,\* Kemal Efe Eseller, Richard M. Gaschnig and Weiming Xia



# RSC Applied Polymers

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OPEN  
ACCESS

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both natural and synthetic

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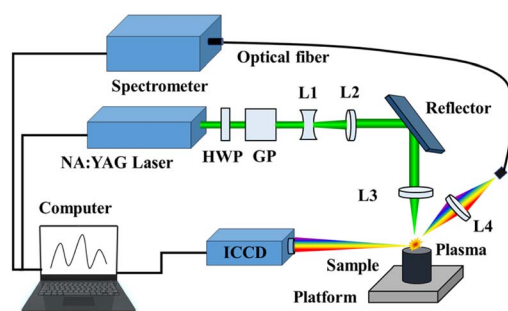
[rsc.li/RSCApplPolym](http://rsc.li/RSCApplPolym)

Fundamental questions  
Elemental answers

1971

### Spectral stability improvement in laser-induced breakdown spectroscopy based on an image auxiliary data preprocessing method

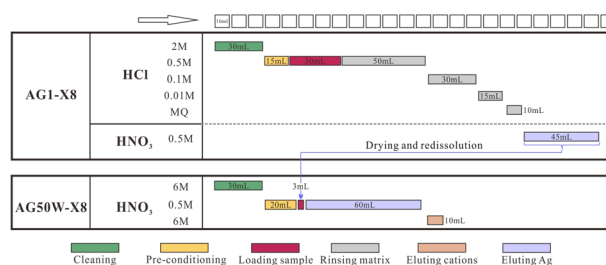
Guanghui Chen, Peichao Zheng,\* Jinmei Wang, Biao Li, Xufeng Liu, Zhi Yang, Zhicheng Sun, Hongwu Tian, Daming Dong and Lianbo Guo



1980

### Accurate determination of stable silver isotopes in zinc-rich samples through effective separation of silver and zinc

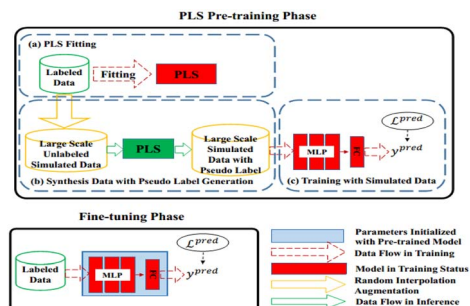
Haotian Gong, Youqiang Qi,\* Tingguang Lan,\* Haifeng Fan, Youwei Chen, Ting Zhou and Ruizhong Hu



1990

### NIRS-XRF fusion spectroscopy for coal calorific value prediction using data deficient learning

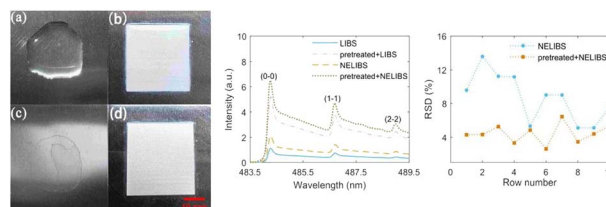
Xianjing Jie, Aiyong Yang, Qingru Cui, Baobei Xu,\* Yilu Guo and Shiliang Pu



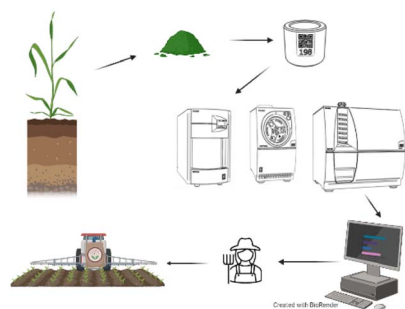
2002

### Emission and stability improvement of AlO molecular bands in NELIBS using laser pretreatment

Qiuyun Wang, Fangjian Zhang, Xueyan Han, Xun Gao,\* Weijun Chen, Kewei Huan, Ying Cui, Ya Liu, Wei Liang and Anmin Chen\*



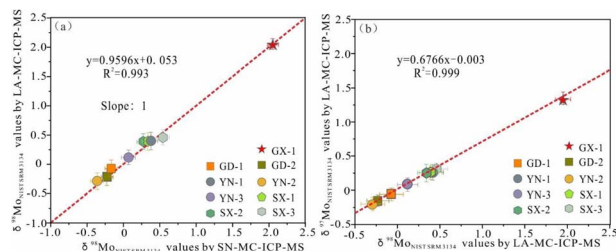
2008



### A novel LIBS method for quantitative and high-throughput analysis of macro- and micronutrients in plants

Frederikke Neergaard Mikkelsen, Daniel Adén, Thomas Nikolajsen and Kristian Holst Laursen\*

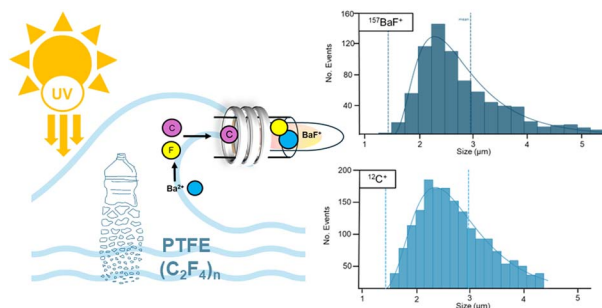
2021



### *In situ* precise determination of stable Mo isotope ratios in molybdenite by femtosecond LA-MC-ICP-MS

Jing Tian, Zhian Bao, Kaiyun Chen, Chunlei Zong, Yan Zhang, Deyi Peng and Honglin Yuan\*

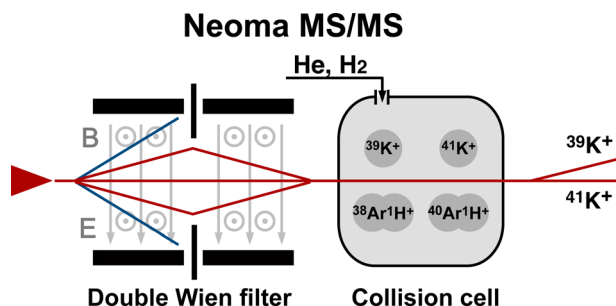
2030



### Studying the degradation of bulk PTFE into microparticles *via* SP ICP-MS: a systematically developed method for the detection of F-containing particles

Raquel Gonzalez de Vega,\* Thebny Thaise Moro, Bernhard Grüner, Tatiane de Andrade Maranhão, Maximilian J. Huber, Natalia P. Ivleva, Etienne Skrzypek, Jörg Feldmann and David Clases\*

2038



### High precision analysis of potassium stable isotopes using the collision/reaction cell Neoma MC-ICPMS/MS

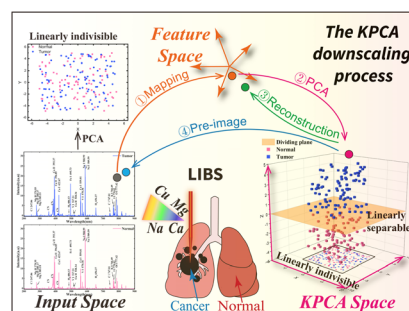
Nicole X. Nie,\* Rosa Grigoryan and Francois L. H. Tissot



2049

## Precise and rapid diagnosis of lung cancer: leveraging laser-induced breakdown spectroscopy with optimized kernel methods in machine learning

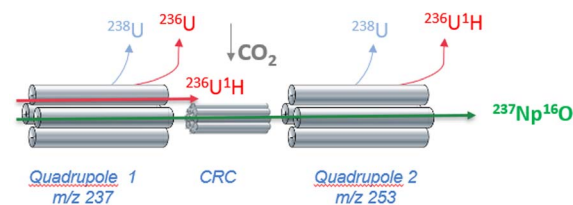
Jingjun Lin, Yao Li, Xiaomei Lin\* and Changjin Che\*



2058

## Direct determination of $^{237}\text{Np}$ in nuclear effluent by ICP-MS/MS

A. Habibi,\* D. Dias Varela, I. Baconet, D. Haloche, H. Jaegler, C. Augeray and M. Morin

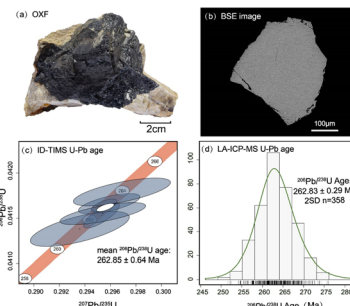


$\text{CO}_2$  20% + mass shift (NpO) measurement  $\rightarrow$   $^{236}\text{U}^1\text{H}$  interference removed and Pu/Np fractionation avoided

2066

## OXF: a new natural reference material for use in LA-ICP-MS U–Pb columbite–tantalite geochronology

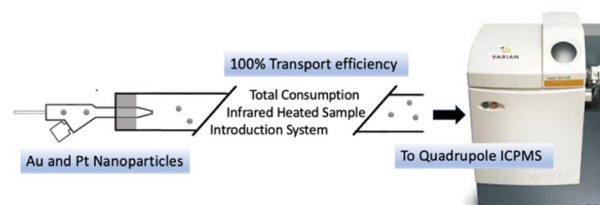
Liyuan Qing, Tao Luo, Zhaochu Hu,\* Yang Li, Jiarun Tu, Liangliang Zhang, Wen Zhang and Keqing Zong



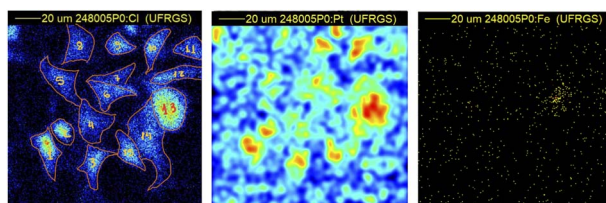
2078

## Towards the best total consumption infrared-heated sample introduction system for nanoparticle coupled plasma mass spectrometry

Zichao Zhou, Mirah J. Burgener, John Burgener and Diane Beauchemin\*



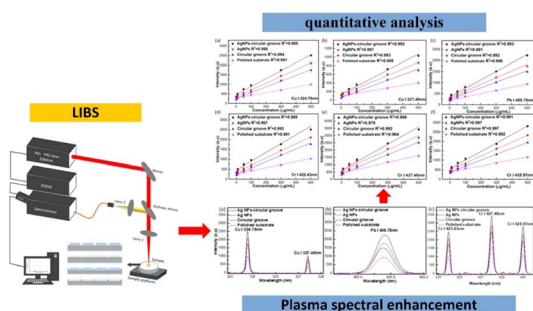
2087



### Micro-PIXE reveals cisplatin uptake followed by Fe accumulation in U87 cells

Henrique Fonteles,\* T. S. Klippel, Julia Marcolin, Deiverti Bauer, Daphne Torgo, Laura Boose, Karine Begnini, Eduardo Filippi-Chiela, Guido Lenz, Johnny Ferraz Dias and Pedro Luis Grande

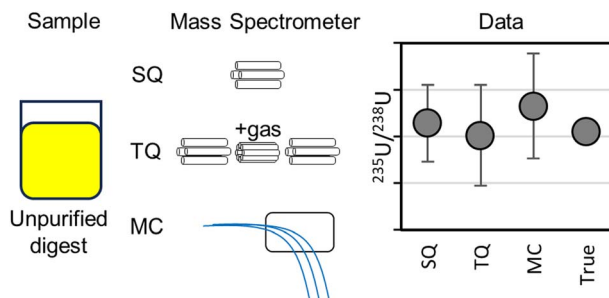
2097



### High-sensitivity determination of heavy metal elements in water with circular grooves and nanoparticle-enhanced LIBS

Lin Yuan, Qiuyun Wang, Hailong Yu, Peng Lang, Han Li, Xun Gao\* and Jingquan Lin

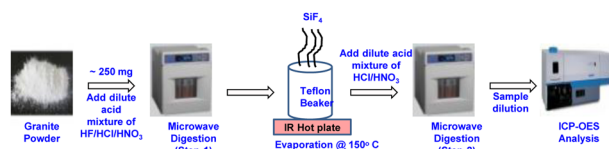
2106



### Uranium isotopic analysis in unpurified solutions by ICP-MS

Sean R. Scott,\* Kirby P. Hobbs, Amanda D. French, Isaac J. Arnquist, Sonia Alcantar Anguiano, Daniel L. Sullivan and Staci M. Herman

2116



### Development of a simple and efficient two-step microwave-assisted digestion method for the determination of REEs, HFSEs and other elements in granite samples by ICP-OES

Chandrasekaran Krishnan, Venkata Balarama Krishna Mullapudi,\* Venkateswarlu Gumma, Johnson George and Beena Sunilkumar



2129

## Determining high-precision Sr–Nd isotopic ratios of certified reference materials using thermal ionization mass spectrometry

Ravi Shankar,\* Drona S. Sarma, Aurovinda Panda, Arathi G. Panicker and Sminto Augustine

