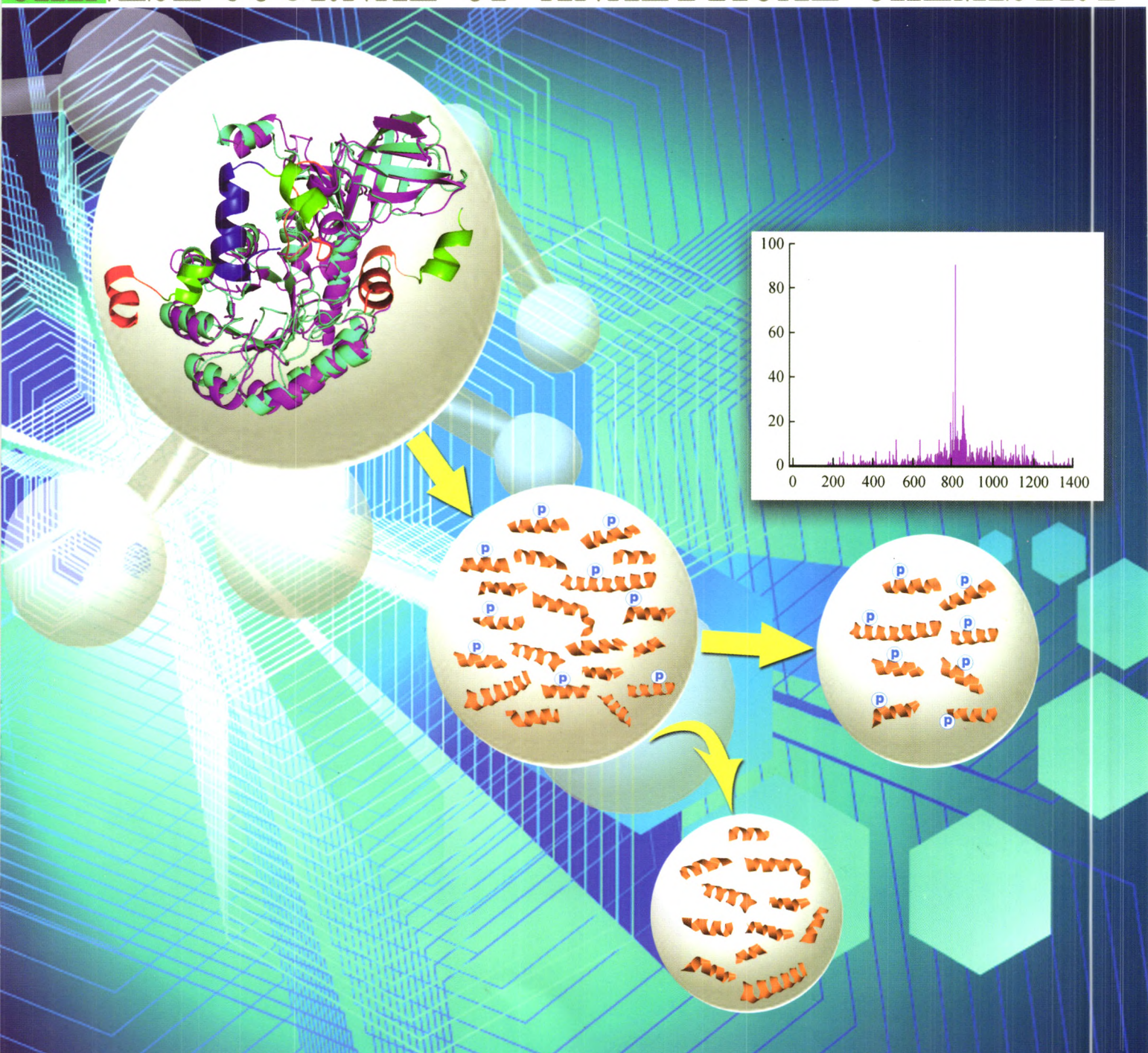


分析化学

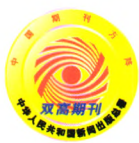
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科学出版社 出版



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第 41 卷 第 11 期 2013 年 11 月

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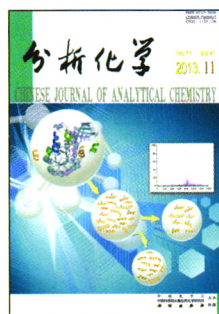
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(本期责任编辑:于桂红 编排:潘文革)

* 联系人

★ 该文章的英文电子版由 Elsevier 出版社在 ScienceDirect 上出版(<http://www.sciencedirect.com/science/journal/18722040>)



On the page 1653, Le et al developed a method to enrich phosphorylated peptides by titanium dioxide affinity chromatography, of which the phosphorylation sites were further analyzed by LC-MS/MS. By taking 14-3-3 ϵ protein over-expressed in HEK293 cells as an example, twelve phosphorylation modification sites within 14-3-3 ϵ protein were identified.

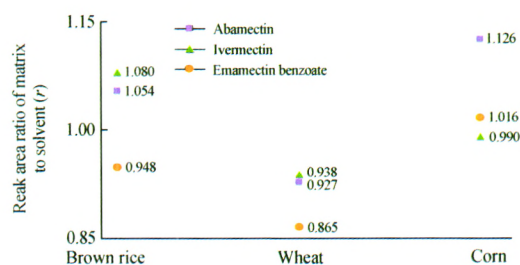
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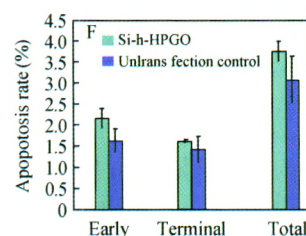
Determination of Abamectin Residues in Grain by Ultra Performance Liquid Chromatography-Tandem Mass Spectrometry

HE Hong-Mei, ZHAO Hua, ZHANG Chun-Rong, ZHU Ya-Hong, PING Li-Feng, WU Min, ZHANG Chang-Peng, CAI Xiao-Ming, LI Zhen*
Chinese J. Anal. Chem., 2013, 41(11): 1627-1632



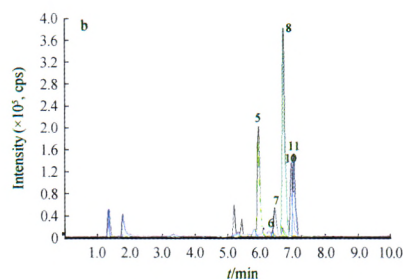
Difference Gel Electrophoresis Based Differential Proteomic Analysis of Hepatocellular Carcinoma Cell Lines with Different Metastasis Potential

DING Ying, YU Yan-Yan, SHEN Hua-Li*, YANG Peng-Yuan
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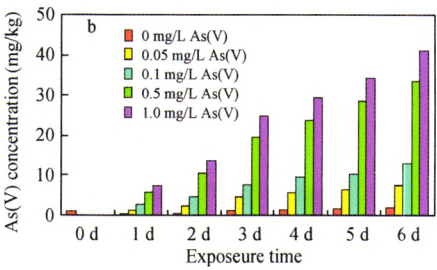
MOU Yan-Li, GUO De-Hua*, DING Zhuo-Ping*, YI Xiong-Hai
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Subcellular Distribution and Mechanism of Detoxifying Arsenic in *Porphyra Yezoensis*

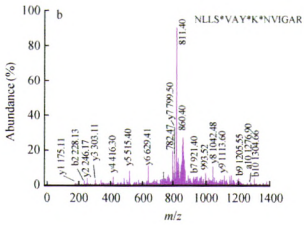
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★ **Mass Spectrometric Analysis of Phosphorylation Modification in 14-3-3 ϵ Protein**

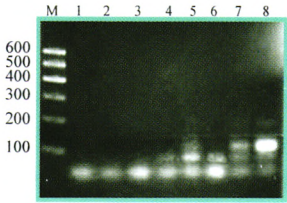
LI Zi-Jian, HE Xin, PAN Chen-Yu, LIU Ning*
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LIU Li-Juan, CHEN Yi, WANG Wei, CHEN Chao,
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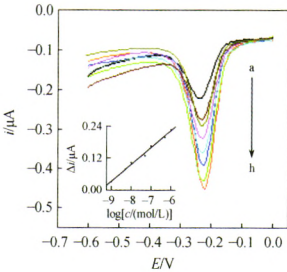
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LUO Xian-Wen, DU Fang-Jing, WU Ye,
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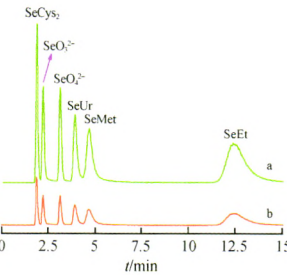
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WANG Xin*, XING Yuan-Na, CHEN Ze-Yong,
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XU Jiang, LI Zhi-Ming*, SHI Yan-Mei,
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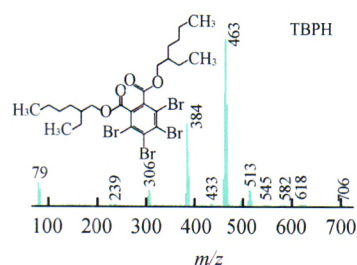
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Based on multi-collector inductively coupled plasma mass spectrometry (MC-ICP-MS), we developed a multiple ion counting method, and achieved the accurate analysis of ultra-trace uranium and americium. The $^{239}\text{Pu}/^{235}\text{U}$, $^{240}\text{Pu}/^{236}\text{U}$, $^{241}\text{Pu}/^{241}\text{Am}$ nuclide ratios were measured by isotope dilution mass spectrometry, plutonium material age was diagnosed by using the radioactive decay principle of plutonium isotopes.

Determination of Halogenated Flame Retardants in Willow Bark by Solid Phase Extraction-Gas Chromatography-Mass Spectrometry

HE Chang, JIN Jun^{*}, WU Hui, WANG Ying,
LI Guang-Yao, TIAN Yang

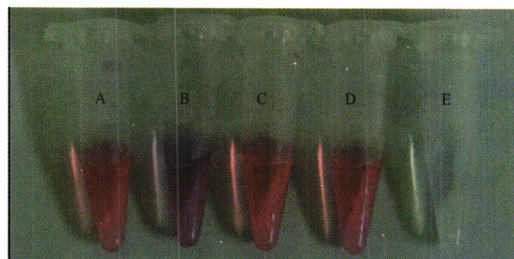
Chinese J. Anal. Chem., **2013**, 41(11): 1681–1687



Colorimetric Detection of Reducing Sugar Based on Gold Nanoparticles via Click-reaction

LI Yan-Ping, JIANG Ling, ZHANG Tao,
TIAN Dan-Bi, HUANG He^{*}

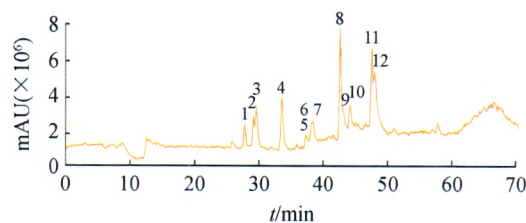
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Screening and Structures Characterization of α -Glucosidase Inhibitors from Total Saponins of Ginseng Stems and Leaves by Ultrafiltration LC-MSⁿ

HE Zhong-Mei, WANG Xiao-Hui, LI Guo-Feng,
SUN Jia-Ming, YANG He, GAO Yu-Gang,
ZHANG Lian-Xue^{*}

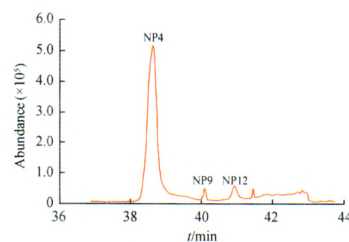
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Determination of 12 Isomers of p -Nonylphenol in Groundwater by Gas Chromatography-Mass Spectrometry

WANG Shi-Yu, LIU Fei^{*}, LIU Yu-Long,
CHEN Liang

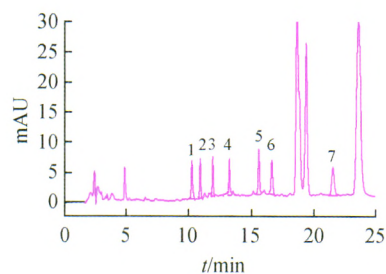
Chinese J. Anal. Chem., **2013**, 41(11): 1699–1703



Simultaneous Determination of 7 Insulinotropic Agents in Jiangtang Tea by Solid Phase Extraction-High Performance Liquid Chromatography

ZHOU Chun-Yan, XI Cun-Xian, TANG Bo-Bin,
CHENG Dong-Dong, ZHANG Lei, PENG Tao,
WANG Guo-Min, CHEN Zhi-Qiong^{*}

Chinese J. Anal. Chem., **2013**, 41(11): 1704–1708



Determination of Acidic Organic Compounds in Water by Solid Phase Membrane Extraction-Membrane Ultrasonic Assisted Extraction Method

ZHANG Li, ZHANG Chen-Ling, GUI Jian-Ye, ZHANG Yong-Tao, TIAN Lai-Sheng, ZHAO Guo-Xing, ZHANG Xiang-Yang, LI Xiao-Ya *

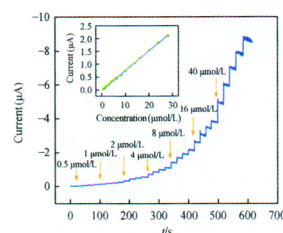
Chinese J. Anal. Chem., **2013**, 41(11): 1709–1713

A method was established based on that the aromatic acids and phenolic acids in water were extracted by solid phase membrane, derivatized under ultrasonic technology, and detected by negative chemical ionization mass spectrometry.

Preparation of AuCo Alloy Particles-Graphene Composite Film Modified Electrode and Its Application in Determination of Sulfite

XU Fang, HU Ling, ZHAO Fa-Qiong, ZENG Bai-Zhao *

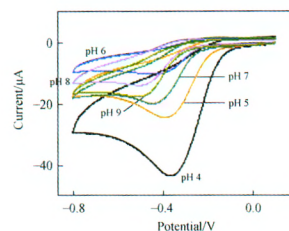
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★ **Hydrogen Peroxide Biosensor Based on Direct Electrochemistry of Hemin in Egg-Phosphatidylcholine Films**

MA Sheng-Hua, WANG Xue-Jing, HAN Xiao-Jun *

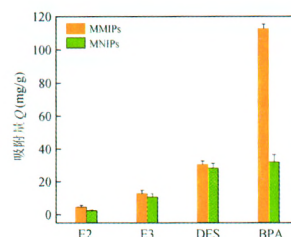
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★ **Preparation and Application of Core-Shell Magnetic Imprinted Nanoparticles for Bisphenol A**

ZHU Li-Li, CAO Yu-Hua *, CAO Guang-Qun

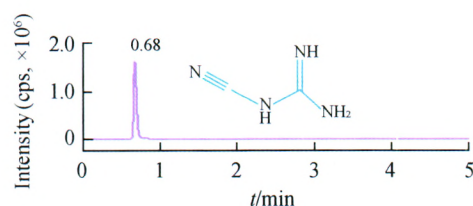
Chinese J. Anal. Chem., **2013**, 41(11): 1724–1728



Determination of Dicyandiamide in Milk Powders Using Ultra Performance Liquid Chromatography Tandem Mass Spectrometry

FENG Feng, JIANG Ping-Ping, LI Na-Si, ZHOU Hong-Bin, CHU Xiao-Gang *

Chinese J. Anal. Chem., **2013**, 41(11): 1729–1733

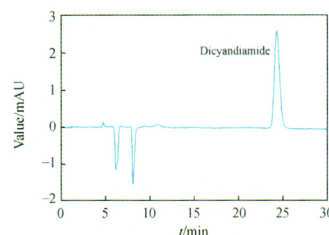


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Determination of Dicyandiamide in Milk Powder by Ion Exclusion Chromatography

CHEN Mei-Lan *, PAN Guang-Wen, DAI Kun, ZENG Xue-Ling, YE Ming-Li

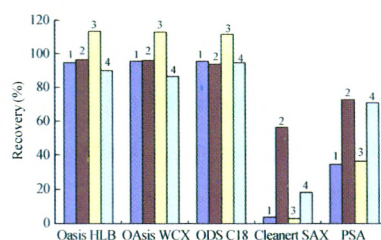
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ZHONG Dong-Lian, DING Ming, TANG Fu-Bin*,
MO Run-Hong, TENG Ying

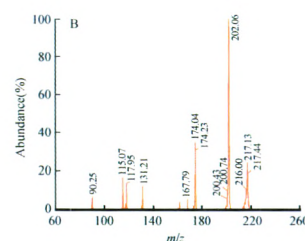
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GUO Long, LIU Xiao-Hua, LI Ying-Dong,
FENG Shi-Lan*

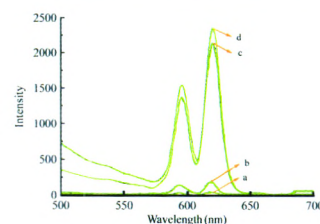
Chinese J. Anal. Chem., 2013, 41(11): 1744–1748



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XIE Wen-Bing, CHANG Yu, ZHANG Yong-Li,
ZHOU Shi-Hong, WANG Jin-Long, PAN Li-Hua*

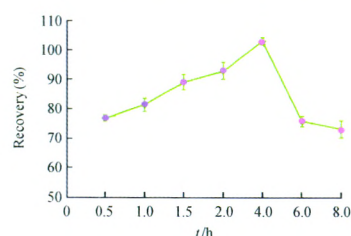
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Determination of Methylmercury in Soil Samples with Online Purge and Trap Gas Chromatography-Atomic Fluorescence Spectrometry

GU Yu-Xiao, MENG Mei, SHAO Jun-Juan,
SHI Jian-Bo*, HE Bin, JIANG Gui-Bin

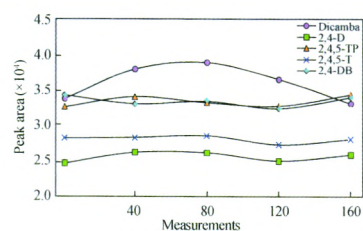
Chinese J. Anal. Chem., 2013, 41(11): 1754–1757



Determination of Phenoxy-acid Herbicides in Water with Solid Phase Microextraction Fiber Coated with Single-walled Carbon Nanotubes

LIN Hong-Li, MA Xiao-Xia, LI Quan-Long,
GUAN Xiong*

Chinese J. Anal. Chem., 2013, 41(11): 1758–1761



Review and Progress

★ Application of Dendrimer in Analytical Chemistry

FU Cong, LI Jian-Ping*

Chinese J. Anal. Chem., 2013, 41(11): 1762–1772

Dendrimers are a new type of macromolecules that could be synthesized by deliberate design and repeated procedures. They have hyperbranched structure, a lot of space inside and multiple functional groups on the surface of the nanosphere. As for now, there have been many reports about the applications of dendrimers. This review primarily focuses on their applications in analytical chemistry, and introduce several applications published recently.

★ **Application of Gas Chromatography-Mass Spectrometry for Identification of Organic Compounds in Cultural Relics**

WU Chen, WANG Li-Qin*, YANG Lu,
MA Zhen-Zhen

Chinese J. Anal. Chem., **2013**, 41(11): 1773–1779

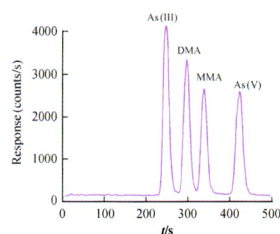
This paper mainly summarized the GC-MS analytical technology for the characterization of protein, lipid and polysaccharide in artworks, including the sample pretreatment, GC-MS instrumental conditions and their identification models. Additionally, some prospect of the development in this field was discussed.

Summary Accounts

Speciation Analysis of Arsenic in Groundwater by Capillary Electrophoresis-Inductively Coupled Plasma Mass Spectrometry

HAN Mei, ZHAO Guo-Xing, LI Shu-Zhen,
SUN Zhen-Hua, LI Yi, JIA Na*

Chinese J. Anal. Chem., **2013**, 41(11): 1780–1781



Determination of Si, Fe, Mn, Mg in Sponge Titanium Dissolved in HF Acid by Inductively Coupled Plasma Atomic Emission Spectrometry

YU Chao*, JIANG Zeng-Hui, WANG Yong-Xi,
YU Sheng-Jie

Chinese J. Anal. Chem., **2013**, 41(11): 1782–1783

An analytical method using inductively coupled plasma atomic emission spectroscopy (ICP-AES) for the rapid and accurate determination of Si, Fe, Mn, Mg in sponge titanium was investigated. Samples were decomposed with HF and HNO₃. The instrument equipped with a nebulizer and a torch made from HF resisting material was used for the direct determination, which made the pretreatment more convenient and with less interference.

Determination of Small Molecular Soluble Protein Binding Copper in Tissue by Graphite Furnace Atomic Absorption Spectrometry after Ultrasonic-Dialysis

ZHANG Yuan, HAN Ming, LIN Zhe-Xuan,
LI Hui, LI Wei-Qiu, LAI Mei-Chao,
LUO Wen-Hong*

Chinese J. Anal. Chem., **2013**, 41(11): 1784–1785

A dialysis-GFAAS method was established for the determination of small molecular soluble protein binding copper (DiaCu) in tissue. The method was applied to determine the DiaCu in endotoxemia SD rats induced by lipopolysaccharide (LPS), and it was found that the DiaCu concentration decreased in inflammatory tissue.

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