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Analytical Methods

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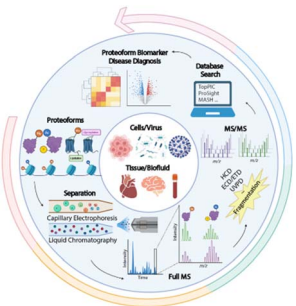
CRITICAL REVIEW

4664

Mass spectrometry-intensive top-down proteomics: an update on technology advancements and biomedical applications

Tian Xu, Qianjie Wang, Qianyi Wang and Liangliang Sun*

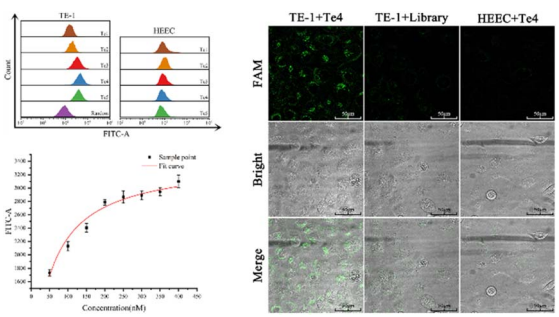


PAPERS

4683

Cell-SELEX and application research of a DNA aptamer against esophageal squamous cell carcinoma (ESCC) cell line TE-1

Baijiang Jin, Gaojian Yang, Zhukang Guo,* Zhu Chen, Yuan Liu, Song Li, Hui Chen, Yile Fang,* Yan Deng* and Nongyue He*



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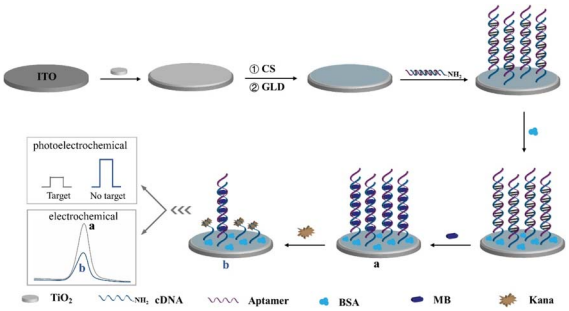
PAPERS

4691

A novel dual-model photoelectrochemical/electrochemical sensor based on Z-scheme TiO_2 disks/methylene blue for kanamycin detection

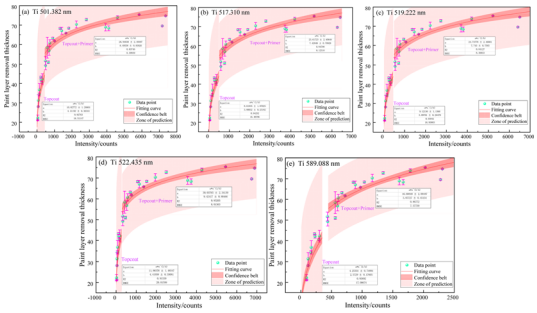
Wenchao Geng, Huimin Liu, Zhiyi Yan, Jiangying Ji, Fei Wang* and Ruiying Yang*



4700

Research on online monitoring of aircraft skin laser paint removal thickness using standard curve method and PCA-SVR based on LIBS

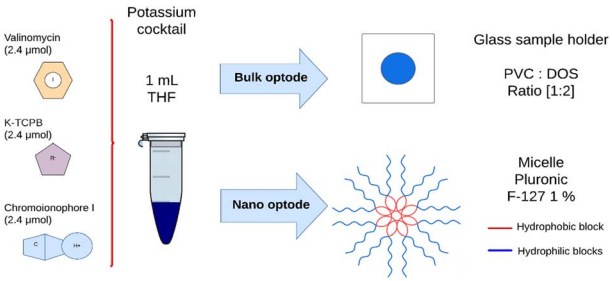
Wenfeng Yang,* Guo Li, Ziran Qian, Yu Cao, Dehui Lin, Shaolong Li, Xin Zheng, Dehua Zhu, Minyue Xie and Yikai Yang



4710

Comparative analysis of a bulk optode based on a valinomycin ionophore and a nano-optode in micelles with pluronic F-127 for the quantification of potassium in aqueous solutions

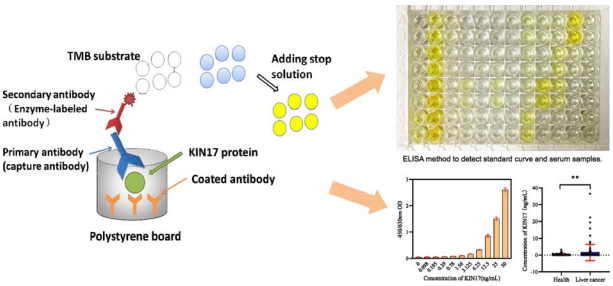
Miguel Villanueva, Jaime Vega-Chacón and Gino Picasso*



4724

Identification and quantification of serum KIN17 protein based on ELISA assay and exploring its clinical diagnostic value in liver cancer

Ruiqi Su, Lok Ting Chu, Zhenkai Chen, Xiaocong Lin, Minghui Peng, Xueran Huang, Xiangyan Xiao and Tao Zeng*



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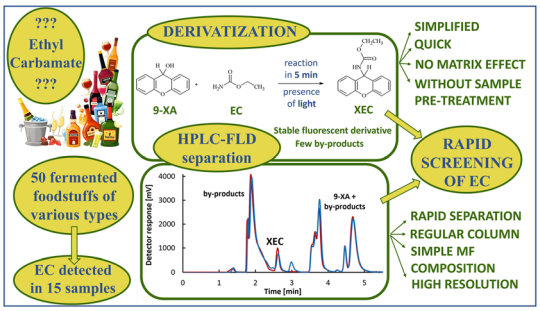
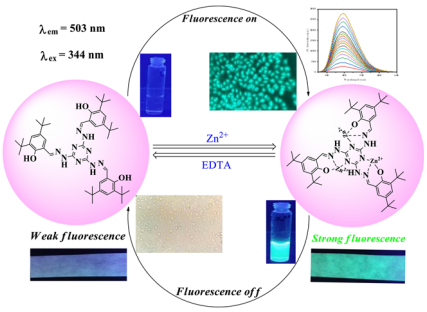


A rapid and improved method for the determination of ethyl carbamate in foodstuffs of different matrices

Veronika Šantrůčková, Jan Fischer and Jitka Klikarová*

4743



Tri-armed Schiff base fluorescent sensor for the rapid recognition of Zn(II): application in live cell imaging, test strips and TLC

Chethanakumar, Mahantesh B. Budri, Kalagouda B. Gudasi,* Ramesh S. Vadavi,* Mallikarjun K. Patil, Vijay M. Kumbar and Sanjeev R. Inamdar

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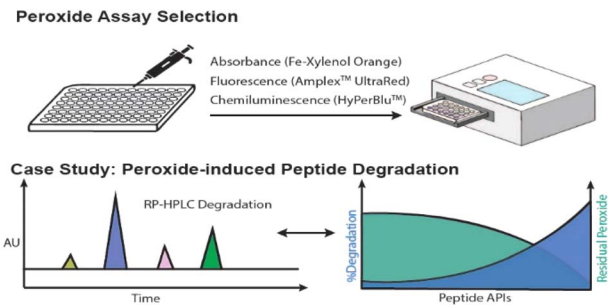

Comparative understanding of peroxide quantitation assays: a case study with peptide drug product degradation

Kingshuk Dutta,* Tao Zheng and Evan M. Hetrick

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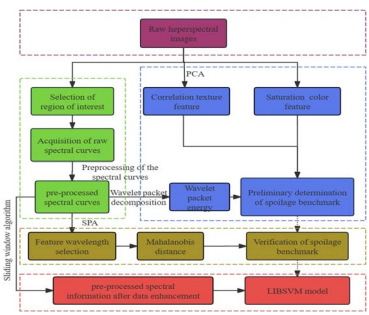

A LIBSVM quality assessment model for apple spoilage during storage based on hyperspectral data

Zhihao Wang, Yong Yin,* Huichun Yu and Yunxia Yuan

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PAPERS

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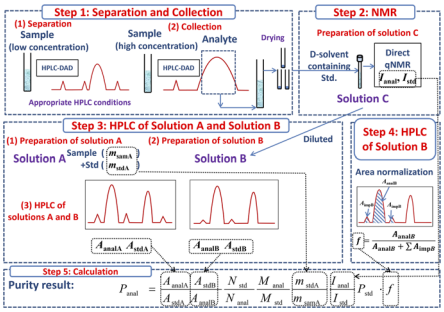
Post-collection purity correction for internal standard correction-high performance liquid chromatography-quantitative nuclear magnetic resonance

Xueyao Li, Wei Zhang,* Ting Huang, Ming Li, Fuhai Su, Huaxin Wu and Guangshi Tang*



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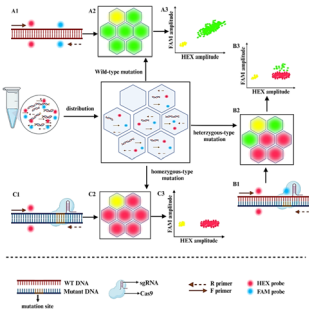
A platform for precise quantification of gene editing products based on microfluidic chip-based digital PCR

Jingzheng Chi, Lin Ding, Xiaofu Wang, Xiaoyun Chen, Cheng Peng* and Junfeng Xu*



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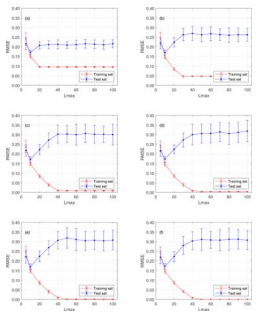
Quantitative analysis of spectral data based on stochastic configuration networks

Lixin Zhang, Zhensheng Huang* and Xiao Zhang



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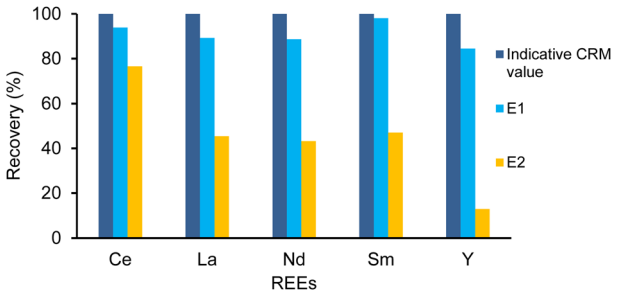
Validation of microwave acid digestion, diffusive gradients in thin-film preconcentration and inductively coupled plasma optical emission spectrometry methodology for the determination of REEs in natural zeolites

Marin Senila,* Erika Andrea Levei, Lacrimioara Senila and Oana Cadar



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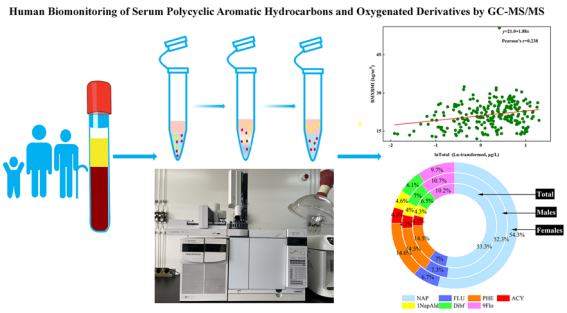
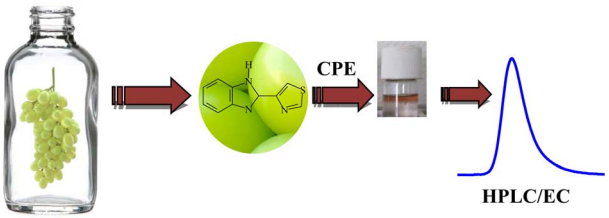


Human biomonitoring of serum polycyclic aromatic hydrocarbons and oxygenated derivatives by gas chromatography coupled with tandem mass spectrometry

Rong Yang, Chenwen Shi, Xiaojing Li, Pingsheng Gan, Xinhong Pan, Rongfei Peng* and Lei Tan*

4827



Cloud point method applied to the extraction and preconcentration of thiabendazole pesticide from whole grape juice samples and amperometric detection by HPLC

Vinícius E. Araújo, Gabriela C. Ribeiro, Kamila P. De Amorim and Leonardo S. Andrade*

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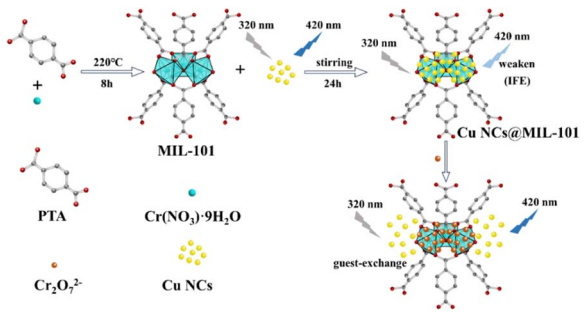

"Turn-on" fluorescence sensing for sensitively detecting Cr(VI) *via* a guest exchange process in Cu NCs@MIL-101 composites

Huijing Chen, Bo Peng, Ping Zhang, Ying Yang and Xue Hu*

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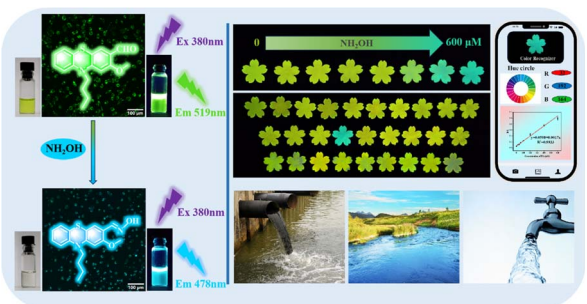

A phenothiazine-based ratiometric fluorescence probe for the detection of hydroxylamine in real water and living cells

Man Du, Haohua Jiang, Meimei Song, Yue Zhang,* Haijun Lv, Shuchun Zhao, Hongxia Du and Zhipeng Dong*

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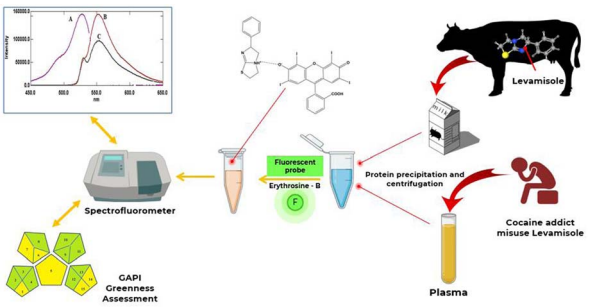
A green, fluorescent probe employing erythrosine-B for tracing the accidental administration of levamisole in milk and plasma samples

Samah Abo El Abass,* May E. K. Wahba and Mohammed E. Draz



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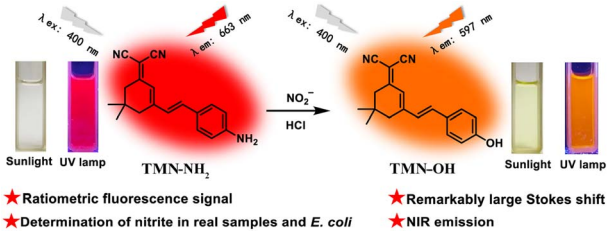
An efficient ratiometric fluorescence and colorimetric dual-mode probe for convenient determination of nitrite in real samples and *E. coli*

Yujie Wen, Cong Tang, Qing Shen, Shuqing Dong, Yaya Wang,* Yunchun Li and Shijun Shao*



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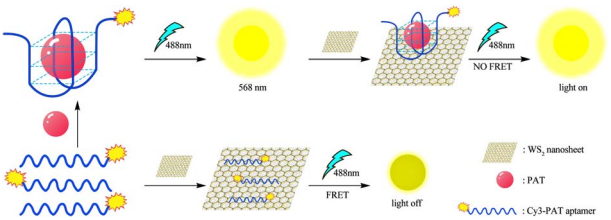
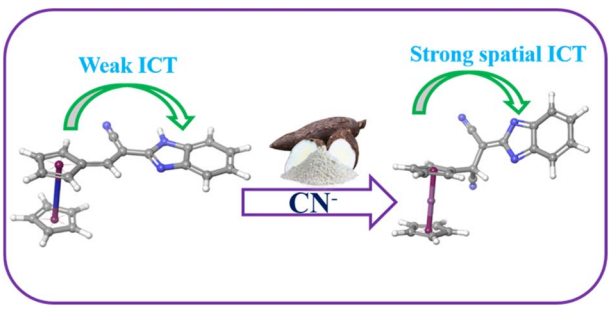
A fluorescence aptamer sensor utilizing WS_2 nanosheets for sensitive detection of patulin: enhanced specificity and wide applicability

Guoxin Qin, Huiling Li, Jie He, Haijun Wang, Yongxian Chen, Shuibing Lao, Liang Cheng, Weifan Lu, Lihong Luo, Li Tang, Renfu Mo, Yuning Wei* and Qifeng Zhou*



4880

A ferrocene-based chemo-dosimeter for colorimetric and electrochemical detection of cyanide and its estimation in cassava flour

V. Dharaniprabha, A. Kalavathi, K. Satheeshkumar and Kuppanagounder P. Elango*