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Graphical Abstracts/Chin Chem Lett 26 (2015) iii-viii

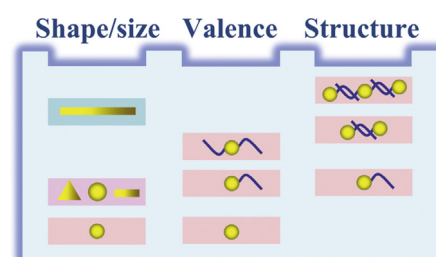
Special column “symposium on analytical chemistry (CJK) 2014”: Reviews

Gel electrophoresis as a nanoseparation tool serving DNA nanotechnology

Hui-Qiao Wang^{a,b}, Zhao-Xiang Deng^a^aCollege of Chemistry and Pharmaceutical Engineering, Nanyang Normal University, Nanyang 473061, China^bDepartment of Chemistry, University of Science and Technology of China, Hefei 230026, China

Agarose gel electrophoresis, a technique originally invented for biomolecule research, has found many innovative applications in DNA nanotechnology towards shape, size, valence, and nanostructured product separations.

Chinese Chemical Letters 26 (2015) 1435



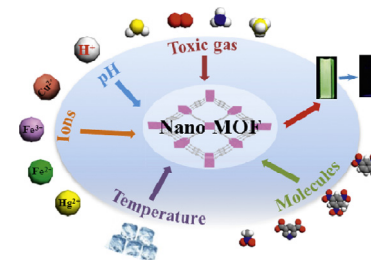
Luminescent nanoscale metal–organic frameworks for chemical sensing

Xiao-Yan Ren, Le-Hui Lu

State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, China

Nanoscale metal–organic frameworks are a versatile type of luminescent sensors for the detection of ions, organic molecules, toxic gas, pH value, temperature, and so on.

Chinese Chemical Letters 26 (2015) 1439



Special column “symposium on analytical chemistry (CJK) 2014”: Original articles

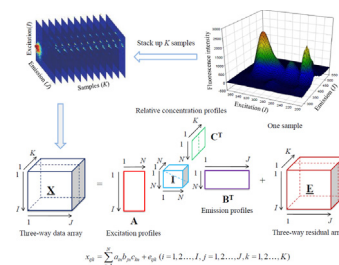
Simultaneous determination of naphazoline and pyridoxine in eye drops using excitation–emission matrix fluorescence coupled with second-order calibration method based on alternating trilinear decomposition algorithm

Hui Xia, Hai-Long Wu, Hui-Wen Gu, Xiao-Li Yin, Huan Fang, Ru-Qin Yu

State Key Laboratory of Chemo/Biosensing and Chemometrics, College of Chemistry and Chemical Engineering, Hunan University, Changsha 410082, China

A novel method is developed for the direct determination of naphazoline hydrochloride (NAP) and pyridoxine hydrochloride (VB6) in commercial eye drops using excitation–emission matrix fluorescence coupled with second-order calibration method based on alternating trilinear decomposition algorithm.

Chinese Chemical Letters 26 (2015) 1446



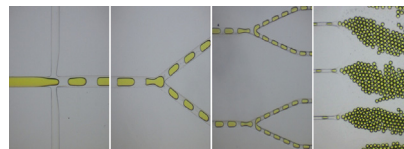
A single-cell encapsulation method based on a microfluidic multi-step droplet splitting system

Chun-Guang Yang, Ru-Yi Pan, Zhang-Run Xu

Research Center for Analytical Sciences, Northeastern University, Shenyang 110819, China

We developed a simple microfluidic droplet splitting system to encapsulate single cells in the droplets with an encapsulation efficiency of 31% and a droplet generation frequency of 1021 Hz.

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Determination of carbendazim in tea using surface enhanced Raman spectroscopy

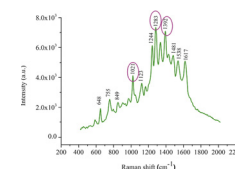
Chun-Hua Ma^a, Jing Zhang^a, Yong-Cong Hong^a, Yi-Ru Wang^b, Xi Chen^b

^aCollege of Tea and Food Science/Collaborative Innovation Center of Chinese Oolong Tea Industry, Wuyi University, Wuyishan 354300, China

^bDepartment of Chemistry and The MOE Key Laboratory of Spectrochemical Analysis & Instrumentation, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen 361005, China

Surface-enhanced Raman scattering (SERS) is applied to detect the concentration of carbendazim (CBZ) in tea leaves.

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Isolation of hemoglobin with metal-organic frameworks Y(BTC)(H₂O)₆

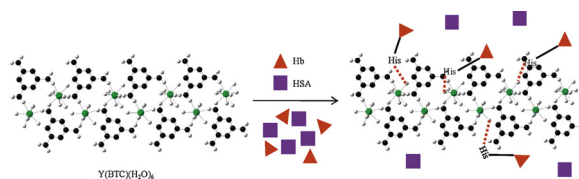
Yang Shu^{a,b}, Ying Meng^a, Ming-Li Chen^a, Jian-Hua Wang^a

^aResearch Center for Analytical Sciences, College of Sciences, Northeastern University, Box 332, Shenyang 110819, China

^bInstitute of Biological Technology, College of Life and Health Sciences, Northeastern University, Shenyang 110169, China

The metal-organic frameworks, Y(BTC)(H₂O)₆, exhibits favorable adsorption toward hemoglobin that is attributed to the coordination interactions between the metal cations and the histidine residues in proteins.

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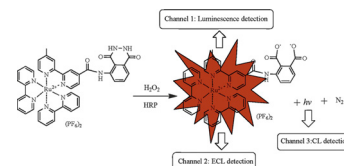
Development of a triple channel detection probe for hydrogen peroxide

Wen-Zhu Zhang, Zhong-Bo Du, Bo Song, Zhi-Qiang Ye, Jing-Li Yuan

State Key Laboratory of Fine Chemicals, School of Chemistry, Dalian University of Technology, Dalian 116024, China

A novel complex, [Ru(bpy)₂(luminol-bpy)]²⁺, can monitor H₂O₂ by three sensing channels including photoluminescence (PL), chemiluminescence (CL) and electrochemiluminescence (ECL).

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