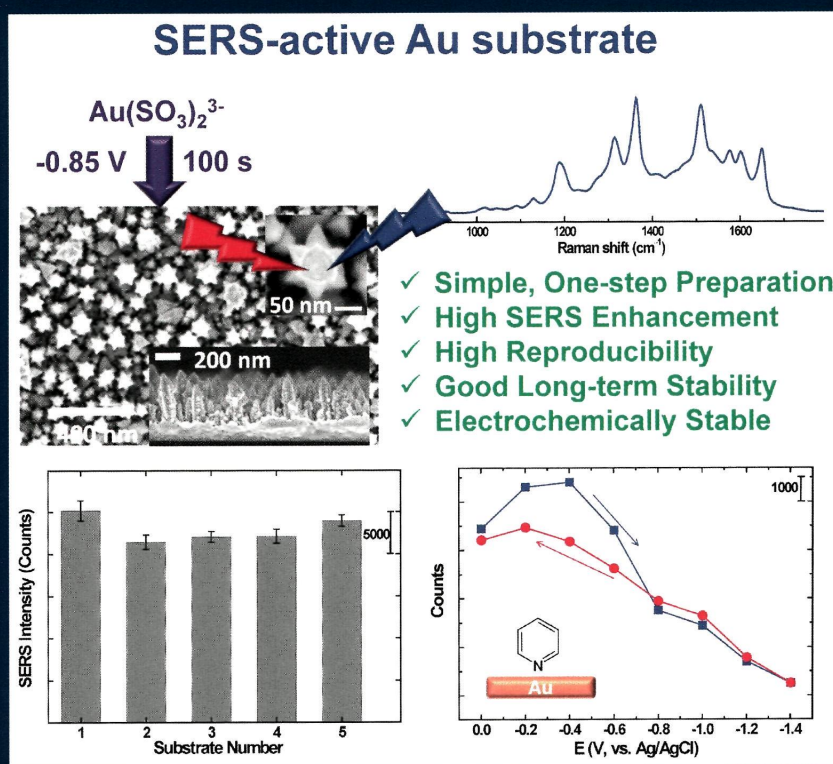


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Featured Article

Highly reproducible surface-enhanced Raman scattering-active Au nanostructures prepared by simple electrodeposition: Origin of surface-enhanced Raman scattering activity and applications as electrochemical substrates

Suhee Choi, Miri Ahn and Jongwon Kim

(Published on pp. 1–7 of this issue)

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Editorial Board

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Featured article

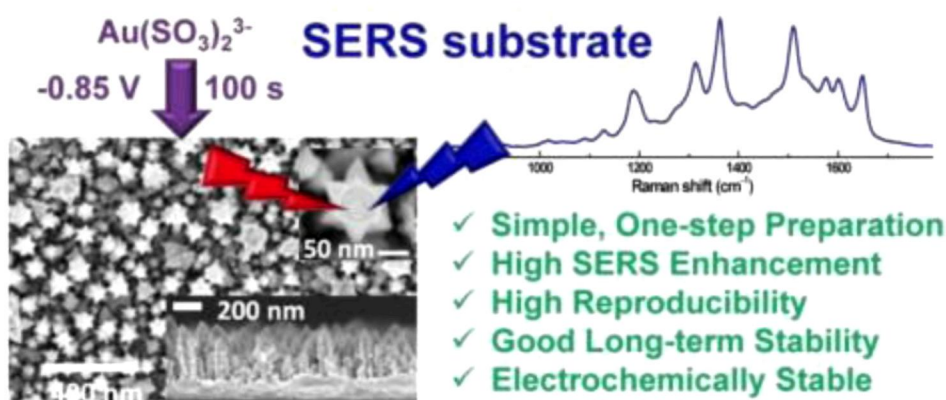
Highly reproducible surface-enhanced Raman scattering-active Au nanostructures prepared by simple electrodeposition: Origin of surface-enhanced Raman scattering activity and applications as electrochemical substrates

Original Research Article

Pages 1-7

Suhee Choi, Miri Ahn, Jongwon Kim

Graphical abstract



Atomic Spectrometry

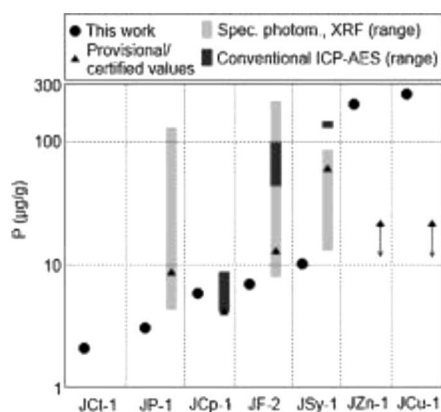
Accurate determination of trace amounts of phosphorus in geological samples by inductively coupled plasma atomic emission spectrometry with ion-exchange separation

Original Research Article

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Kazuya Asoh, Mitsuru Ebihara

Graphical abstract



Chemometrics

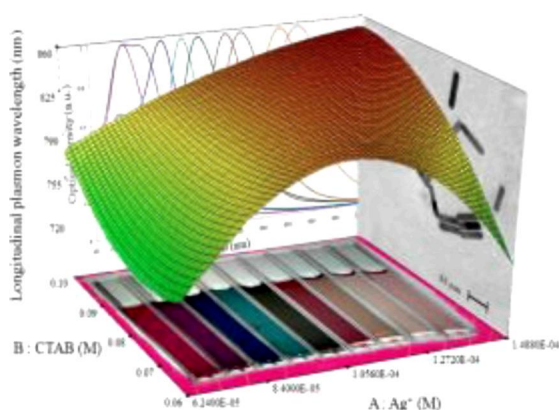
Thorough tuning of the aspect ratio of gold nanorods using response surface methodology

Original Research Article

Pages 14-21

M. Reza Hormozi-Nezhad, Hossein Robotjazi, Mehdi Jalali-Heravi

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Electrochemistry

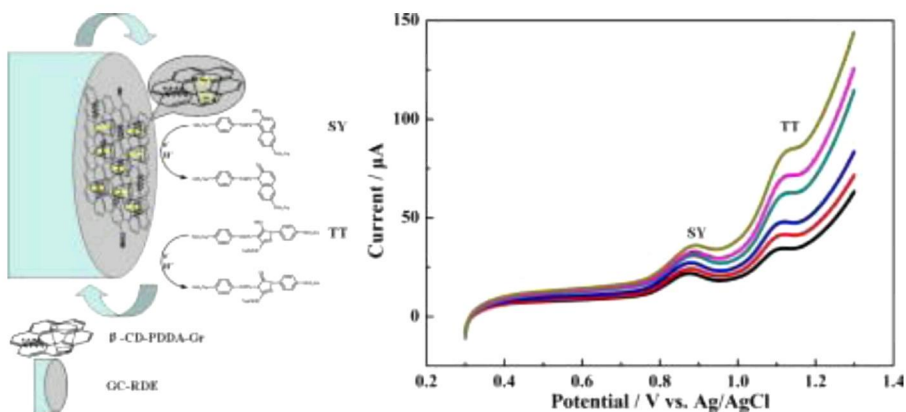
Fabrication of β -cyclodextrin-coated poly (diallyldimethylammonium chloride)-functionalized graphene composite film modified glassy carbon-rotating disk electrode and its application for simultaneous electrochemical determination colorants of sunset yellow and tartrazine

Original Research Article

Pages 22-34

Xiaoliang Ye, Yongling Du, Daban Lu, Chunming Wang

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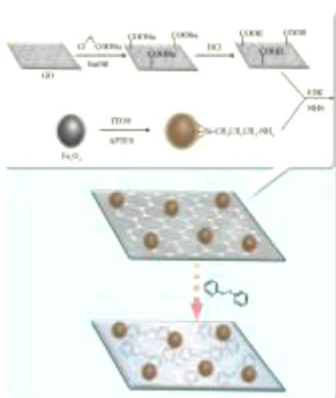
Improved potentiometric response of solid-contact lanthanum (III) selective electrode

Original Research Article

Pages 35-40

Xiujuan Yuan, Yaqin Chai, Ruo Yuan, Qiang Zhao

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Molecular Spectrometry

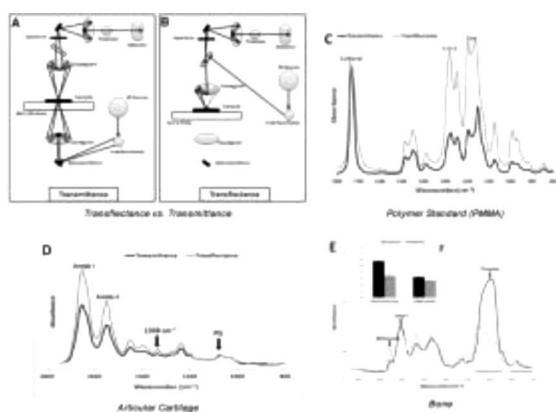
Differences in infrared spectroscopic data of connective tissues in transfectance and transmittance modes

Original Research Article

Pages 41-49

Arash Hanifi, Cushla McGoverin, Ya-Ting Ou, Fayez Safadi, Richard G. Spencer, Nancy Pleshko

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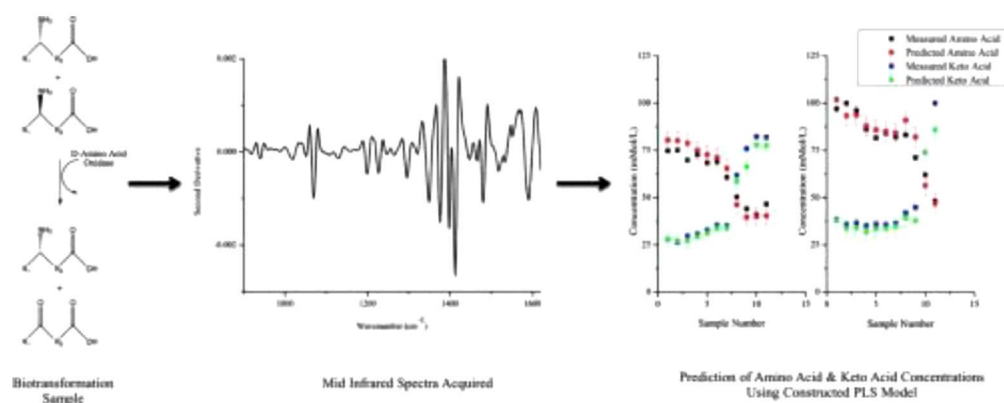
Investigating the feasibility of mid infrared spectroscopy for monitoring an industrial de-racemization biotransformation process

Original Research Article

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P. Gardner, S.A. Arnold, F. Brown, R. Carr, A. Nordon, L.M. Harvey, B. McNeil

Graphical abstract



Sensors and Bioselective Reagents

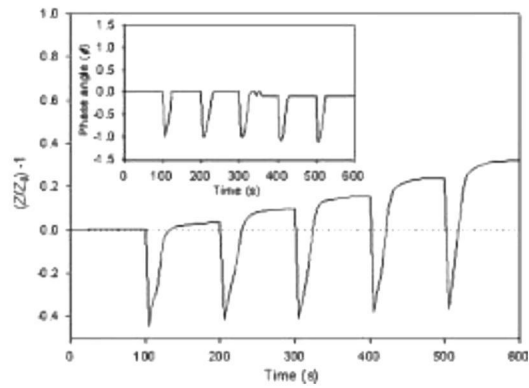
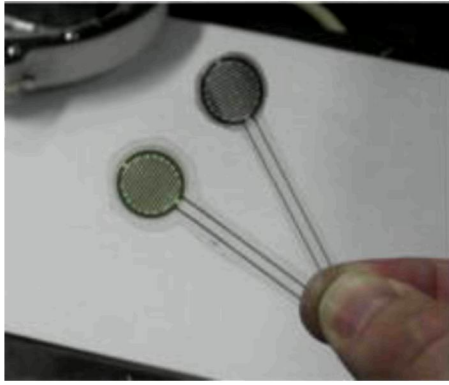
Direct measurement of ammonia in simulated human breath using an inkjet-printed polyaniline nanoparticle sensor

Original Research Article

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Troy Hibbard, Karl Crowley, Anthony J. Killard

Graphical abstract



Microfluidic bead-based multienzyme-nanoparticle amplification for detection of circulating tumor cells in the blood using quantum dots labels

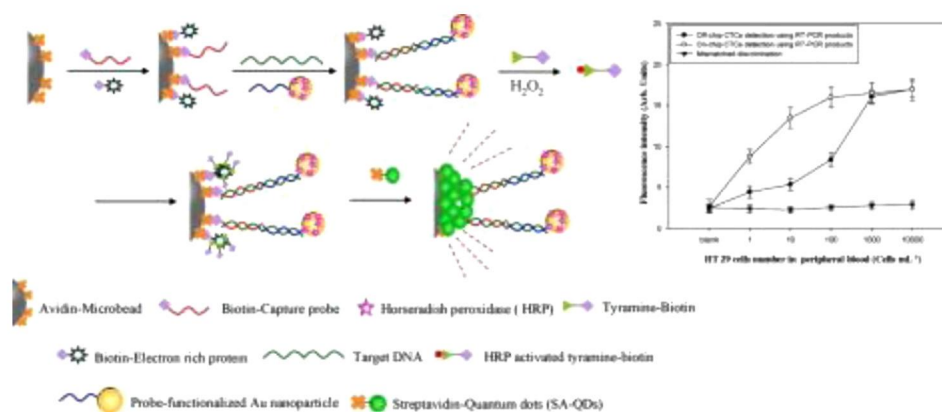
Original Research Article

Pages 64-71

He Zhang, Xin Fu, Jiayi Hu, Zhenjun Zhu

Graphical abstract

A microfluidic beads-based nucleic acid sensor for sensitive detection of circulating tumor cells (CTCs) in the blood using multienzyme-nanoparticle amplification and quantum dots labels was developed. The chip-based CTCs analysis could detect reverse transcription-polymerase chain reaction (RT-PCR) products of tumor cell as low as 1 tumor cell (e.g. CEA expressing cell) in 1 mL blood sample. This microfluidic beads-based nucleic acid sensor is a promising platform for disease-related nucleic acid molecules at the lowest level at their earliest incidence.



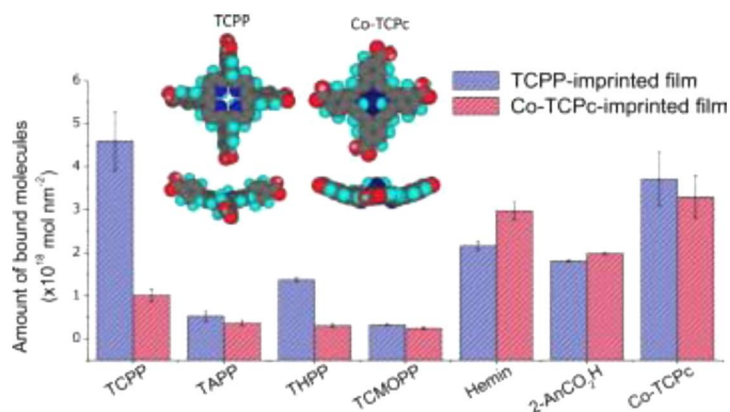
Self-assembly and imprinting of macrocyclic molecules in layer-by-layered TiO₂ ultrathin films

Original Research Article

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Kazuma Araki, Do-Hyeon Yang, Tao Wang, Roman Selyanchyn, Seung-Woo Lee, Toyoki Kunitake

Graphical abstract



Separation Methods

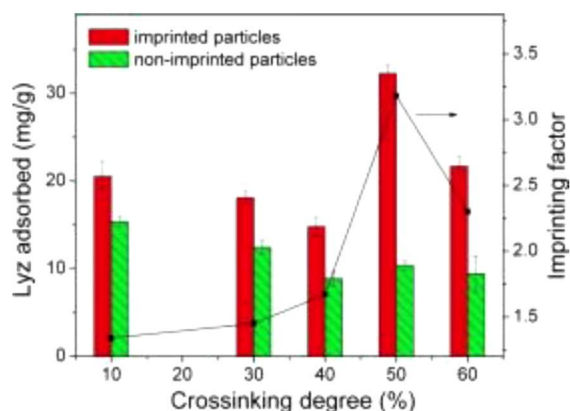
Silica nanoparticle supported molecularly imprinted polymer layers with varied degrees of crosslinking for lysozyme recognition

Original Research Article

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Huachang Chen, Dongying Yuan, Yiya Li, Mingjie Dong, Zhihua Chai, Juan Kong, Guoqi Fu

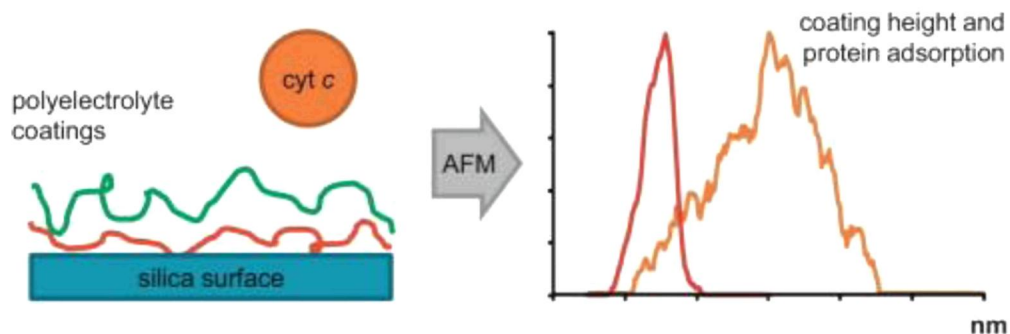
Graphical abstract



Thickness and morphology of polyelectrolyte coatings on silica surfaces before and after protein exposure studied by atomic force microscopy

Original Research Article

Graphical abstract



Metal organic framework–organic polymer monolith stationary phases for capillary electrochromatography and nano-liquid chromatography

Original Research Article

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Hsi-Ya Huang, Cheng-Lan Lin, Cheng-You Wu, Yi-Jie Cheng, Chia-Her Lin

Graphical abstract

