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See William B. Veloso, Thiago R. L. C. Paixão *et al.*, pp. 3900–3909.

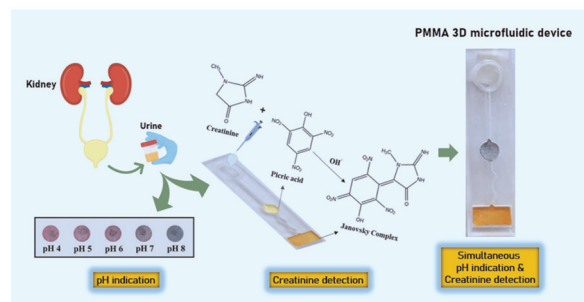
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COMMUNICATIONS

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Additive-manufactured paper–PMMA hybrid microfluidic chip for simultaneous monitoring of creatinine and pH in artificial urine

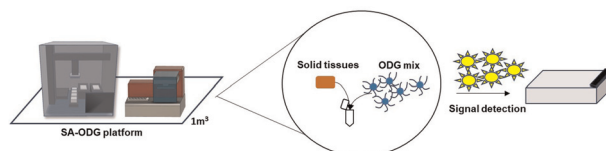
Asim Syed Sheeraz, Edoth Aiswarya, B. N. Kumara, J. Sonia, Relisha Viyona Rodrigues, Nazmin Sheikh, Sachin Vidyasagar, Rachana A. Kunder, Selvakumar Elangovan, Priti Sundar Mohanty* and K. Sudhakara Prasad*



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SA-ODG platform: a semi-automated and PCR-free method to analyse microRNAs in solid tissues

S. Detassis, F. Precazzini, I. Brentari, R. Ruffilli, C. Ress, A. Maglione, S. Pernagallo* and M. A. Denti*



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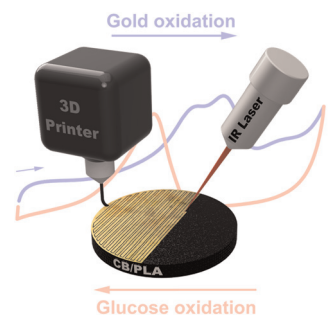


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Gold film deposition by infrared laser photothermal treatment on 3D-printed electrodes: electrochemical performance enhancement and application

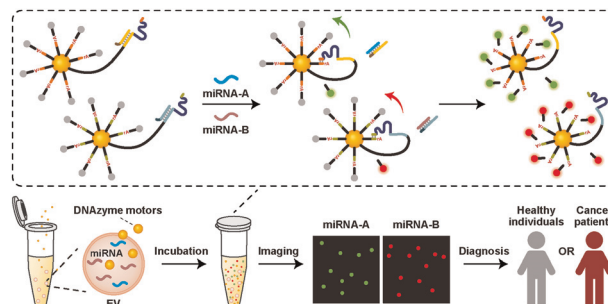
William B. Veloso,* Gabriel N. Meloni, Iana V. S. Arantes, Lauro A. Pradela-Filho, Rodrigo A. A. Muñoz and Thiago R. L. C. Paixão*



3910

An extracellular vesicle microRNA-initiated 3D DNAzyme motor for colorectal cancer diagnosis

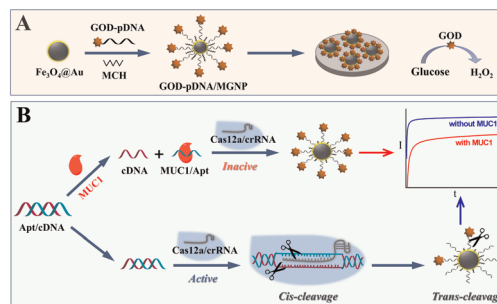
Qian Fan, Xu-Hong Sun, Na Wu, Yuan-He Wang,* Jian-Hua Wang and Ting Yang*



3920

An electrochemical method based on CRISPR-Cas12a and enzymatic reaction for the highly sensitive detection of tumor marker MUC1 mucin

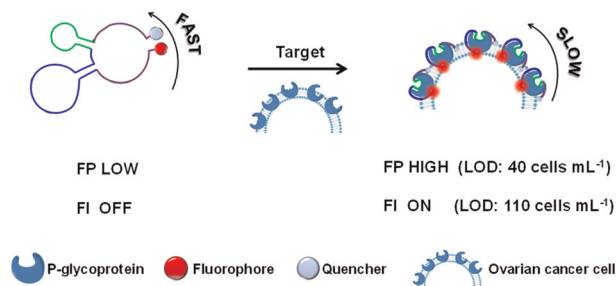
Zhenhuan Jin, Wei Xiao, Lin Shen, Xiaoxue Shi and Jianping Li*



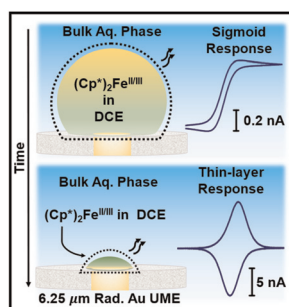
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Qualifying P-glycoprotein in drug-resistant ovarian cancer cells: a dual-mode aptamer probe approach

Chaobin Pang, Heng Xu, Jichao Xu, Lei Zhang, Jinhua Wang* and Su Jing*



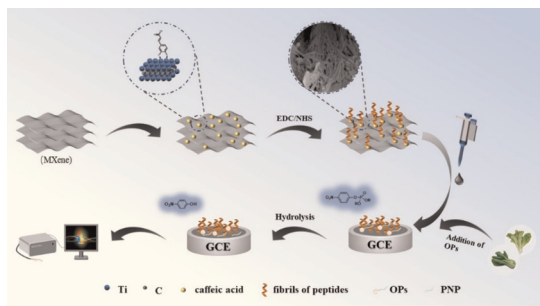
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Understanding dynamic voltammetry in a dissolving microdroplet

Ashutosh Rana, Christophe Renault* and Jeffrey E. Dick*

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Degradation and detection of organophosphorus pesticides based on peptides and MXene-peptide composite materials

Qiuying Wang, Ruiqing Jiu, Yunyao Wang, Zongda Li, Jianan Chen, Haochi Liu, Jifeng Liu* and Jia Cao

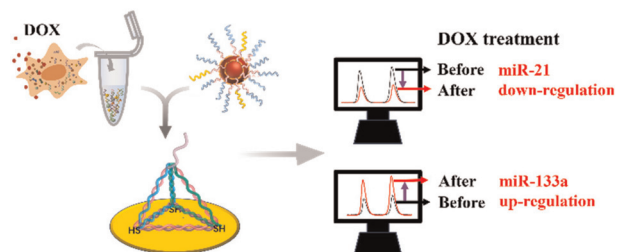
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Facile, green and scalable synthesis of single-layer manganese dioxide nanosheets and its application for GSH and cTnI colorimetric detection

Yao Xiao, TaoMei Peng, YuXiao Luo, Lei Jiao, TaiXing Huang and He Li*

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Evaluating early apoptosis-related cellular MiRNAs with an ultrasensitive electrochemiluminescence nanoplatform

Haiying Cai, Peiting Dong, Xiuping Li, Lulu Wang and Tao Li*

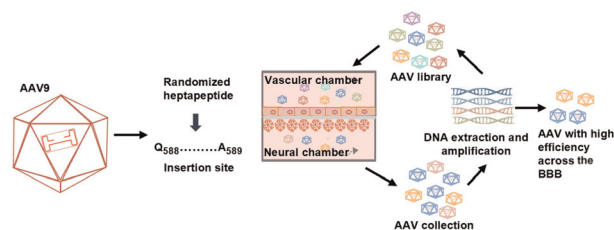


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Identification of new AAV vectors with enhanced blood–brain barrier penetration efficiency via organ-on-a-chip

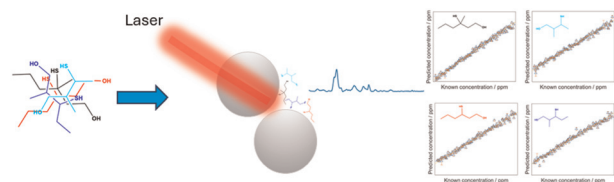
Mengmeng Li, Yujian Zhong, Mingyang Zhu, Chunjin Pang, Lu Xiao, Ye Bu, Huapeng Li, Yong Diao, Chaoyong Yang and Dan Liu*



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Using surface-enhanced Raman scattering for simultaneous multiplex detection and quantification of thiols associated to axillary malodour

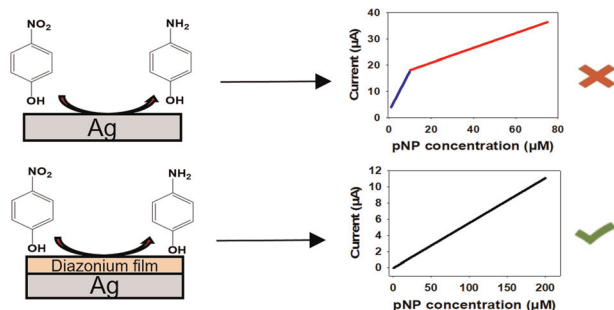
Amy Colleran, Cassio Lima, Yun Xu, Allen Millichope, Stephanie Murray and Royston Goodacre*



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A diazonium-functionalized silver electrode for the sensitive amperometric detection of *p*-nitrophenol in water over a wide range of concentrations

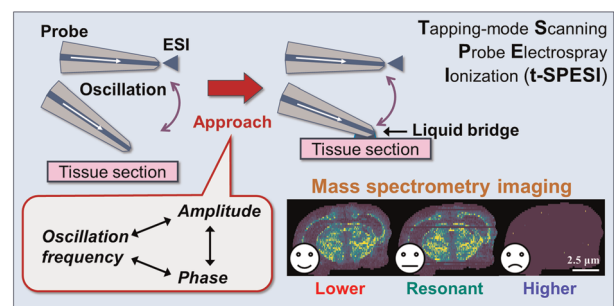
Christelle Virolle, David Evrard and Olivier Reynes*



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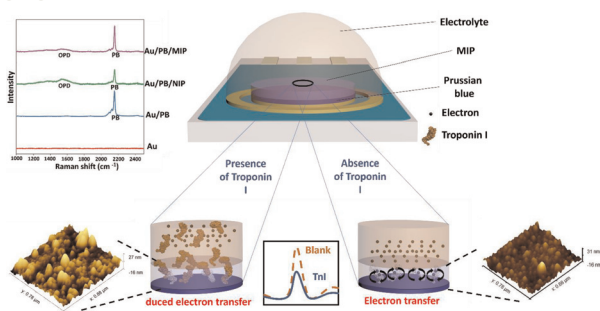
Probe oscillation control in tapping-mode scanning probe electrospray ionization for stabilization of mass spectrometry imaging

Mengze Sun, Yoichi Otsuka,* Maki Okada, Shuichi Shimma and Michisato Toyoda



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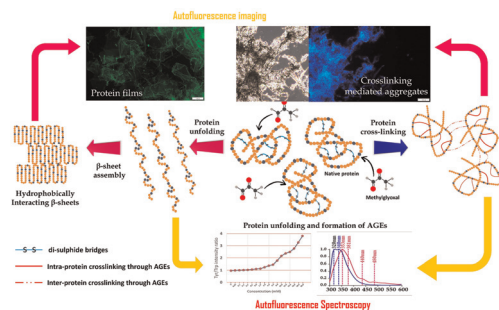
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A reagentless molecularly imprinted polymer-based electrochemical biosensor for single-step detection of troponin I in biofluids

Mahmoud Ayman Saleh, Arash Khorrami Jahromi, Hamed Shieh, Roozbeh Siavash Moakhar, Carolina del Real Mata and Sara Mahshid*

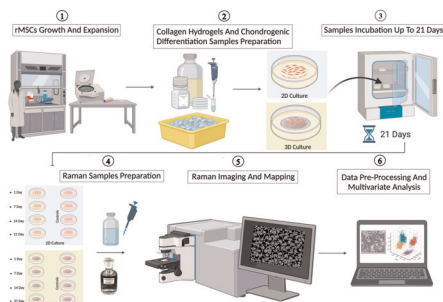
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Label-free visualization of unfolding and crosslinking mediated protein aggregation in nonenzymatically glycated proteins

Darshan Chikkanayakanahalli Mukunda, Shaik Basha, Meagan Gail D'Souza, Subhash Chandra, K. Ameera, Weena Stanley, Nirmal Mazumder and Krishna Kishore Mahato*

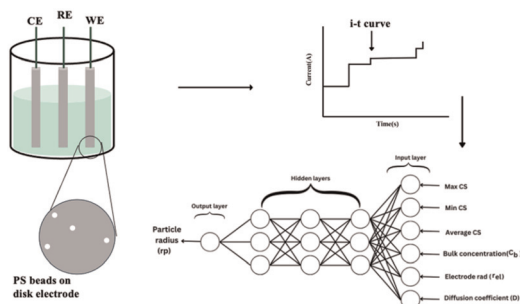
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A comparative analysis of stem cell differentiation on 2D and 3D substrates using Raman microspectroscopy

F. Ravera,* E. Efeoglu and H. J. Byrne

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Polymer bead size revealed *via* neural network analysis of single-entity electrochemical data

Gabriel Gemadzie, Baosen Zhang and Aliaksei Boika*

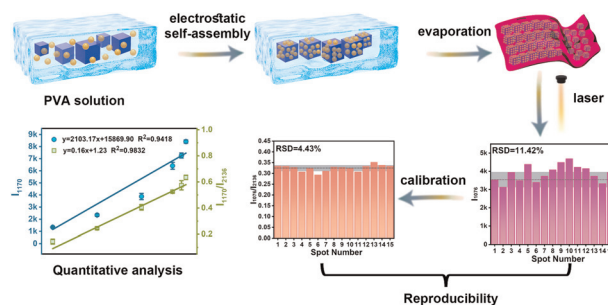


PAPERS

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A self-calibrating flexible SERS substrate incorporating PB@Au assemblies for reliable and reproducible detection

Jie Zhou, Huiting Wang, Yaxian Chen, Dongxue Lin, Ling Zhang, Zhiqiang Xing, Qian Zhang* and Jiarui Xia*



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Capillary force-driven reverse-Tesla valve structure for microfluidic bioassays

Cheng Nie, Hyorim Jeong, Kyung-A. Hyun, Sunyoung Park and Hyo-Il Jung*

