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Authors: Yajiao Liu, Jingjing Bao, Lei Zhang, Chen Chao, Jianjun Guo, Yuchuan Cheng, Yuejin Zhu, Gaojie Xu



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Ultrasensitive SERS Detection of Propranolol Based on Sandwich Nanostructure of Molecular Imprinting Polymers

Yajiao Liu ^{a, b}, Jingjing Bao ^a, Lei Zhang ^a, Chen Chao ^a, Jianjun Guo ^a, Yuchuan Cheng^{*a}, Yuejin Zhu ^b, and Gaojie Xu ^a

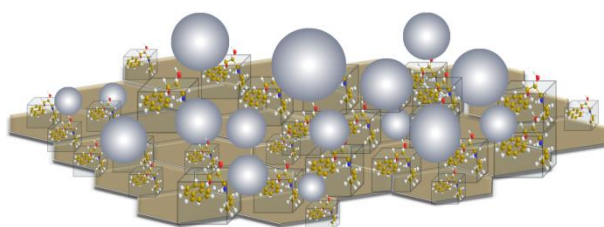
^a Zhejiang Key Laboratory of Additive Manufacturing Materials, Ningbo Institute of Materials Technology & Engineering, Chinese Academy of Sciences, Ningbo 315201, P. R. China

^b Department of Microelectronic Science and Engineering, Faculty of Science, Ningbo University, Ningbo 315211, P. R. China.

*E-mail: yccheng@nimte.ac.cn

Graphical Abstract

A novel sandwich nanostructure, consisting of graphene oxide/molecular imprinting polymers, target propranolol, and silver nanoparticles, exhibits excellent selectivity and sensitivity in complex system



Highlights

- The novel sandwich nanostructure sensor was composed of graphene oxide/molecular imprinting polymers, target molecules, and silver nanoparticles
- The macroporous graphene oxide/molecular imprinting polymers layer not only enriched PRO molecules and Ag NPs, but also provided the secondary scattering light to produce the additional Raman signal
- The nanostructure exhibited excellent sensitivity for propranolol, which makes the limit of detection as low as 10^{-11} mol/L

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