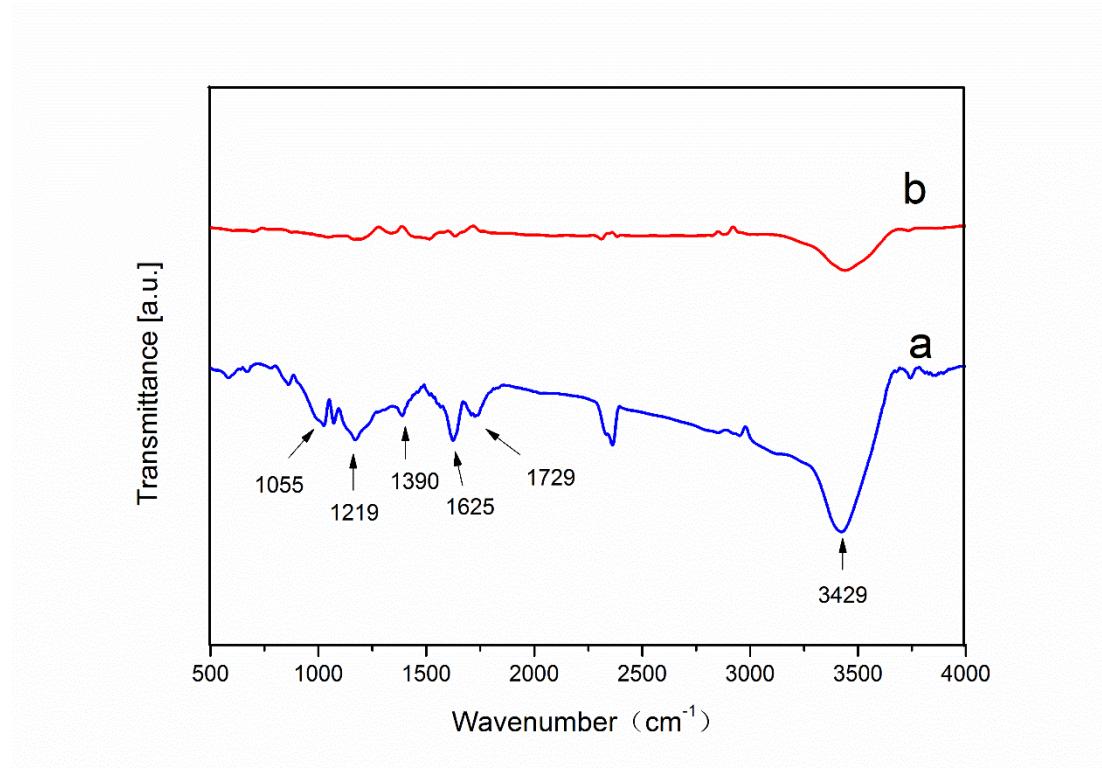


## Supplementary

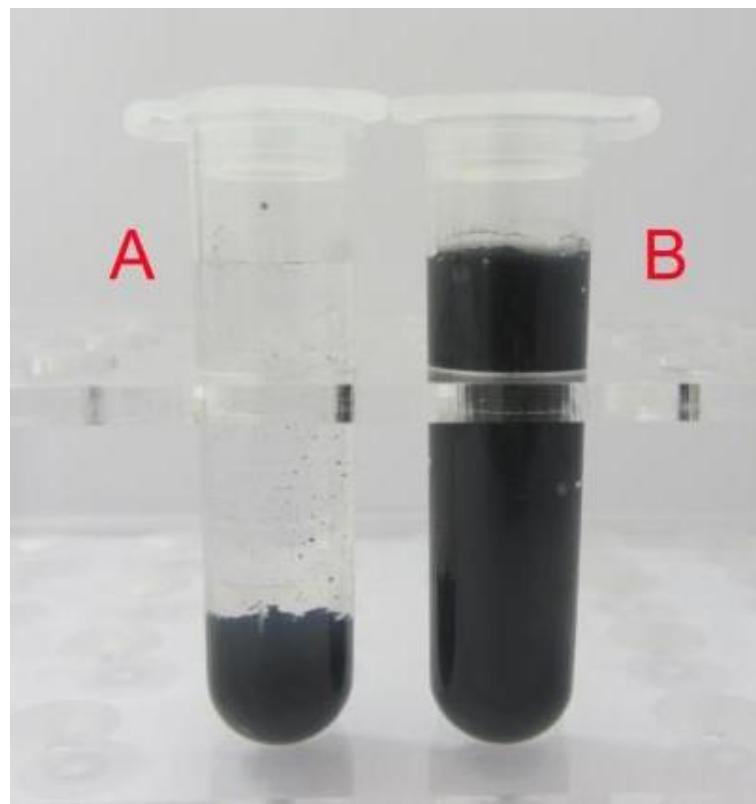
# Facile Synthesis of $\beta$ -Lactoglobulin-Functionalized Reduced Graphene Oxide and Trimetallic PtAuPd Nanocomposite for Electrochemical Sensing

Bingkai Han<sup>1</sup>, Meixin Pan<sup>1</sup>, Jiexin Zhou<sup>1</sup>, Yingying Wang<sup>1</sup>, Zihua Wang<sup>1</sup>, Jun Jiao<sup>1</sup>, Cong Zhang<sup>2,\*</sup> and Qiang Chen<sup>1,\*</sup>

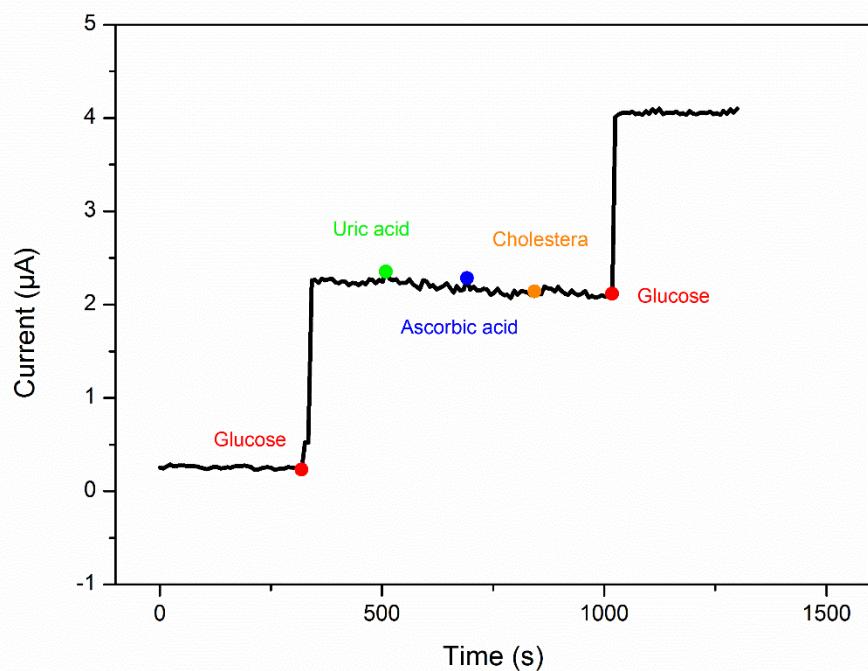
- <sup>1</sup> The Key Laboratory of Bioactive Materials Ministry of Education, College of Life Science, Nankai University, Weijin Road No. 94, Tianjin 300071, China; hanbingkai@mail.nankai.edu.cn (B.H.); 2120171090@mail.nankai.edu.cn (M.P.); zhoujiexin@mail.nankai.edu.cn (J.Z.); wangyingying@mail.nankai.edu.cn (Y.W.); zihuawang@mail.nankai.edu.cn (Z.W.); jyotika0201@gmail.com (J.J.)
- <sup>2</sup> Department of Chemistry, School of Sciences, Hebei University of Science and Technology, Shijiazhuang 050018, China
- \* Correspondences: congzhang@hebust.edu.cn (C.Z.); qiangchen@nankai.edu.cn (Q.C.); Tel.: +86-022-2350-6122 (Q.C.)



**Figure S1.** FT-IR patterns of GO (a) and BLG-PtAuPd-RGO (b).



**Figure S2.** Synthetic composite materials with BLG (**B**) and without BLG (**A**) in a static position at indoor temperature for 48 hours.



**Figure S3.** Amperometric response of GOD-BLG-PtAuPd-RGO/GC electrodes in 0.1 M PBS (PH 7.0) solution mixture at operating voltage of 600 mV with 0.5 mM glucose or other substance: uric acid (0.8 mM), ascorbic acid (0.6 mM) and cholesterol (0.6 mM).