Accepted Manuscript

Facile fabrication of a non-enzymatic nanocomposite of heteropolyacids and CeO_2@Pt alloy nanoparticles doped reduced graphene oxide and its application towards the simultaneous determination of xanthine and uric acid

Di Zhu, Huiyuan Ma, Haijun Pang, Lichao Tan, Jia Jiao, Tao Chen

PII: S0013-4686(18)30232-9

DOI: 10.1016/j.electacta.2018.01.185

Reference: EA 31167

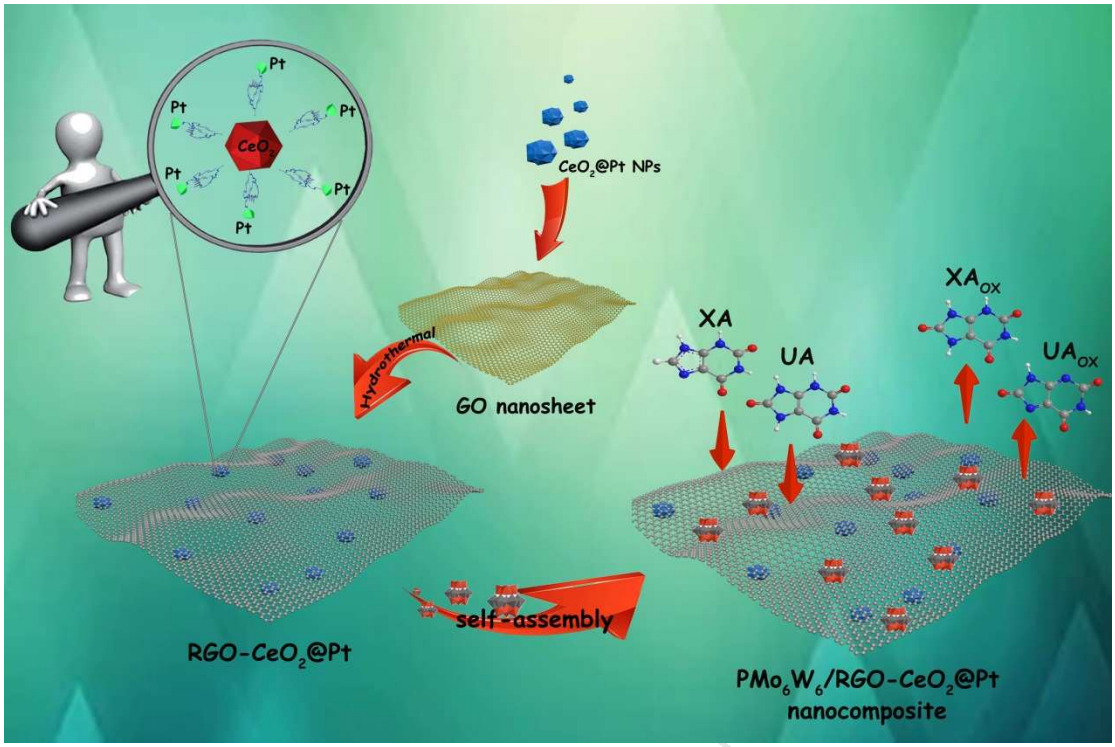
To appear in: *Electrochimica Acta*

Received Date: 7 November 2017

Revised Date: 8 January 2018

Accepted Date: 28 January 2018

Please cite this article as: D. Zhu, H. Ma, H. Pang, L. Tan, J. Jiao, T. Chen, Facile fabrication of a non-enzymatic nanocomposite of heteropolyacids and CeO_2@Pt alloy nanoparticles doped reduced graphene oxide and its application towards the simultaneous determination of xanthine and uric acid, *Electrochimica Acta* (2018), doi: 10.1016/j.electacta.2018.01.185.



A new nanocomposite was fabricated by combining 12-heteropolyacids (PMo_6W_6) and CeO_2 decorated by Pt nanoparticles and RGO. Enhanced electrocatalytic activity and sensing performance were achieved due to the synergistic effect of components in nanocomposite. The proposed PMo_6W_6/RGO-CeO_2@Pt is promising material for simultaneous or individual detection of xanthine and uric acid in practical application.