

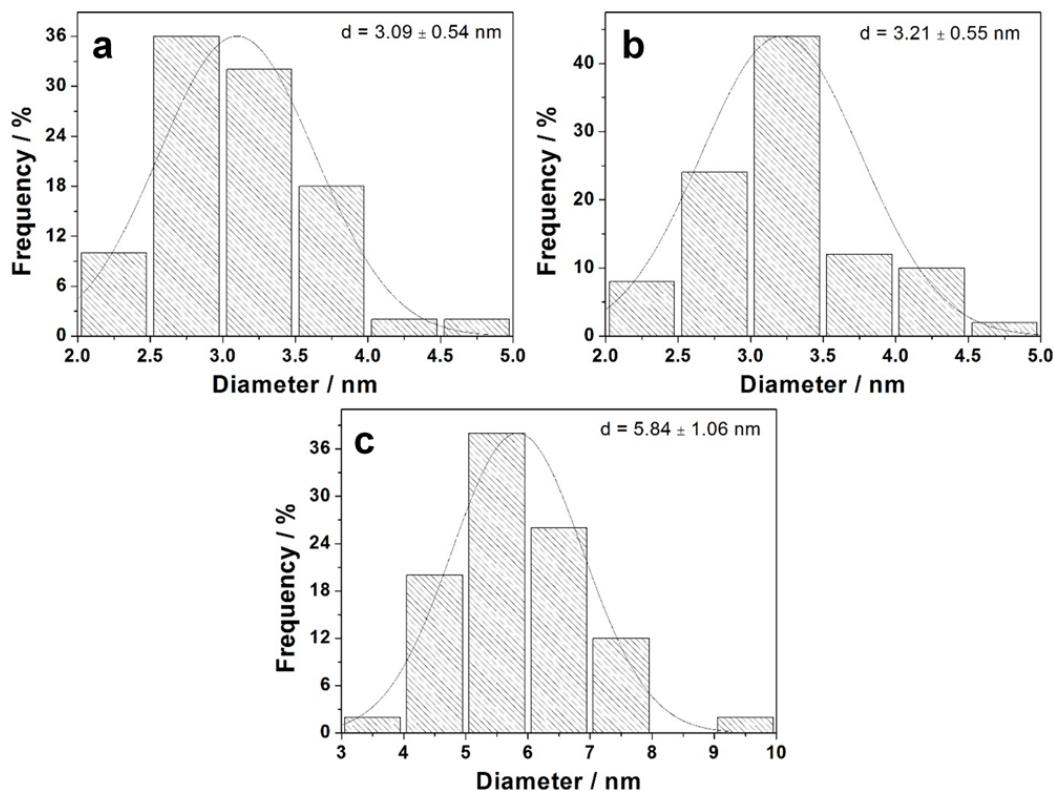
## Electronic Supplementary Information

### Facile synthesis of PVP-assisted PtRu/RGO nanocomposites with high electrocatalytic performance for methanol oxidation

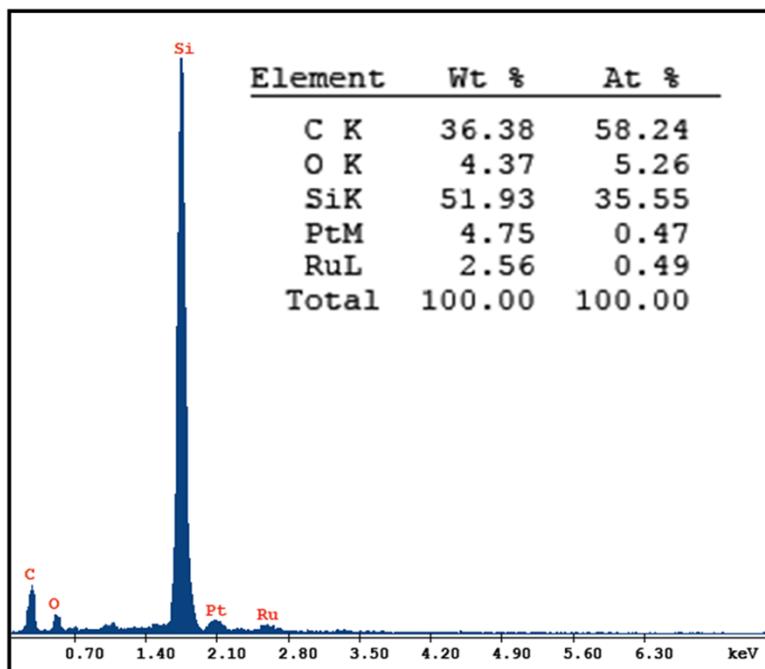
Duan Bin,<sup>a</sup> Fangfang Ren,<sup>a</sup> Huiwen Wang,<sup>a</sup> Ke Zhang,<sup>a</sup> Beibei Yang,<sup>a</sup> Chunyang Zhai,<sup>a</sup> Mingshan Zhu,<sup>b,\*</sup> Ping Yang<sup>a</sup> and Yukou Du<sup>a,\*</sup>

*a* College of Chemistry, Chemical Engineering and Materials Science, Soochow University, Suzhou 215123, P. R. China. E-mail: [duyk@suda.edu.cn](mailto:duyk@suda.edu.cn)

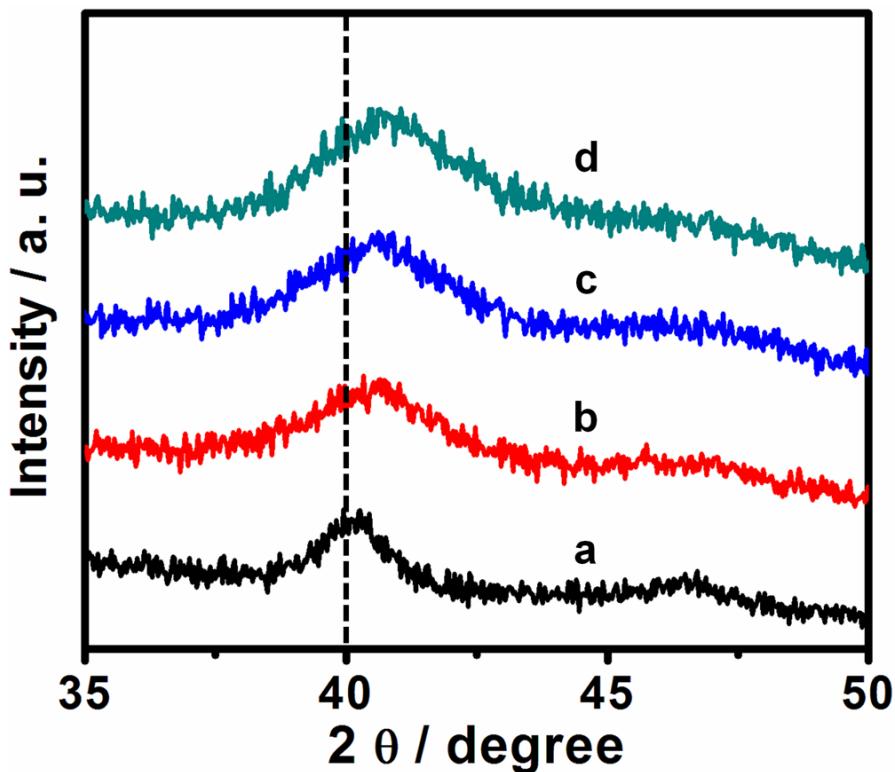
*b* Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, P. R. China. E-mail: [zhums@iccas.ac.cn](mailto:zhums@iccas.ac.cn)



**Fig. S1** The corresponding particle-size distribution histograms of PtRu/RGO/PVP (a), PtRu/PVP (b) and PtRu/RGO (c) nanostructures.



**Fig. S2** EDX spectrum of the PtRu/RGO/PVP nanostructure. The quantitative elemental analysis result for the above sample is also listed.



**Fig. S3** The enlarge XRD patterns of Pt/RGO/PVP (a), PtRu (2:1)/RGO/PVP (b), PtRu (1:1)/RGO/PVP (c) and PtRu (1:2)/RGO/PVP (d) nanostructures.