

Evolution From Small Sized Au Nanoparticles to Hollow Pt/Au

Nanostructures with Pt Nanorods and Mechanistic Study

Ying Ma, Li Xu, Bo Jiang, Wei Chen, Chao Zou, Lijie Zhang,* Yun Yang,* Shaoming Huang*

Nanomaterials and Chemistry Key Laboratory, Wenzhou University,
Wenzhou, Zhejiang 325027, P. R. China

E-mail: (YY) bachier@163.com; (L.J.Z) ljzhang@wzu.edu.cn; (S.M.H) smhuang@wzu.edu.cn.

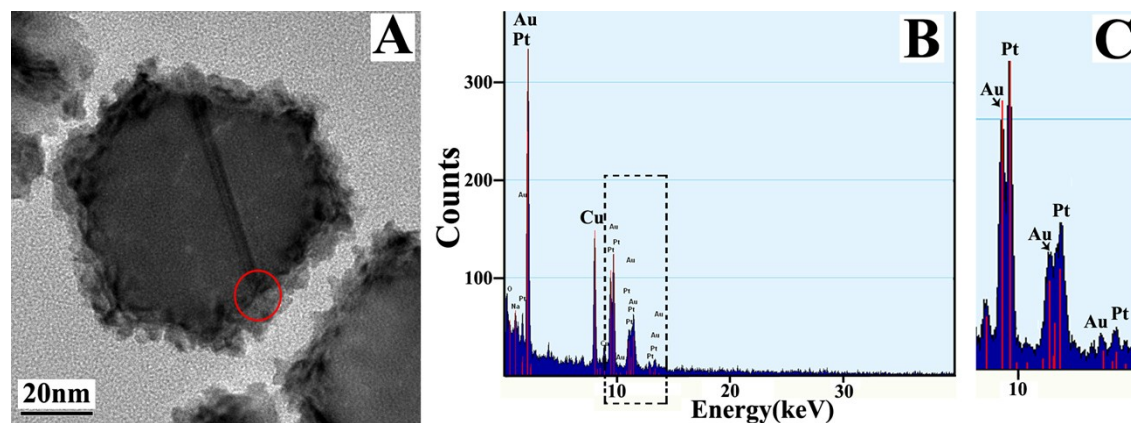


Fig. S1 (A) TEM image of products prepared using a standard synthesis which had been proceeded for 1h. (B) EDS pattern recorded on the position marked by the red circle in Fig. S1A. (C) Enlarged image of area marked by the dotted box in Fig. S1B.

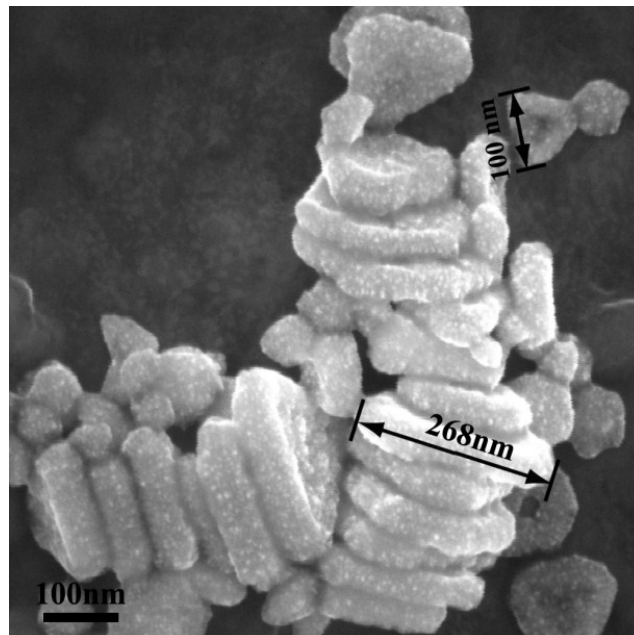


Fig. S2. SEM image of products demonstrates that the sizes are monodispersed.

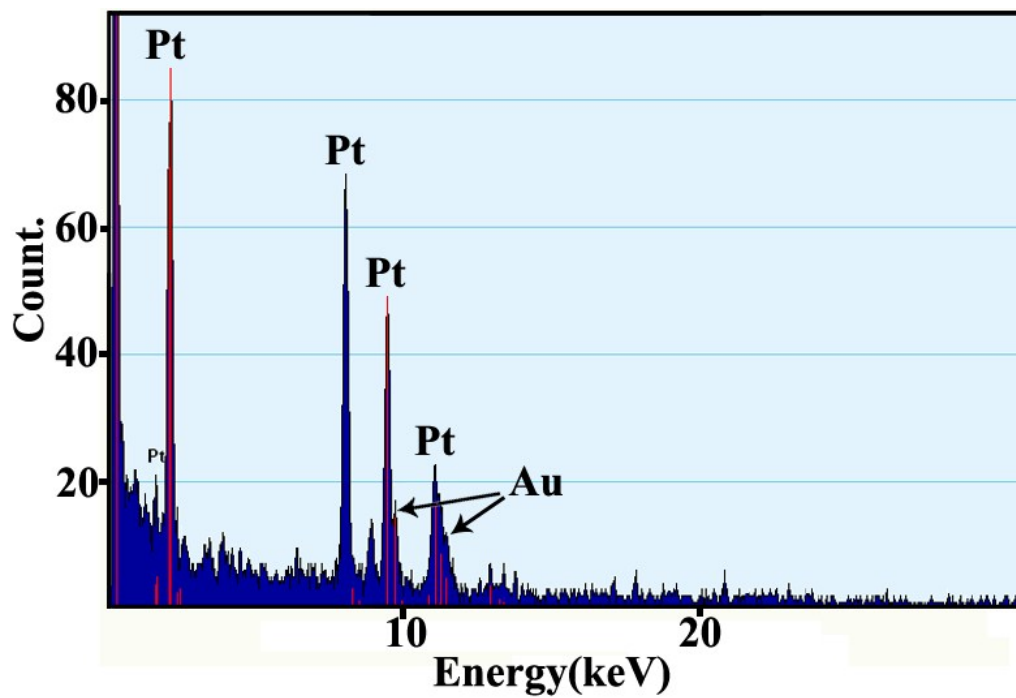


Fig. S3. EDS pattern of products prepared using a standard synthesis.

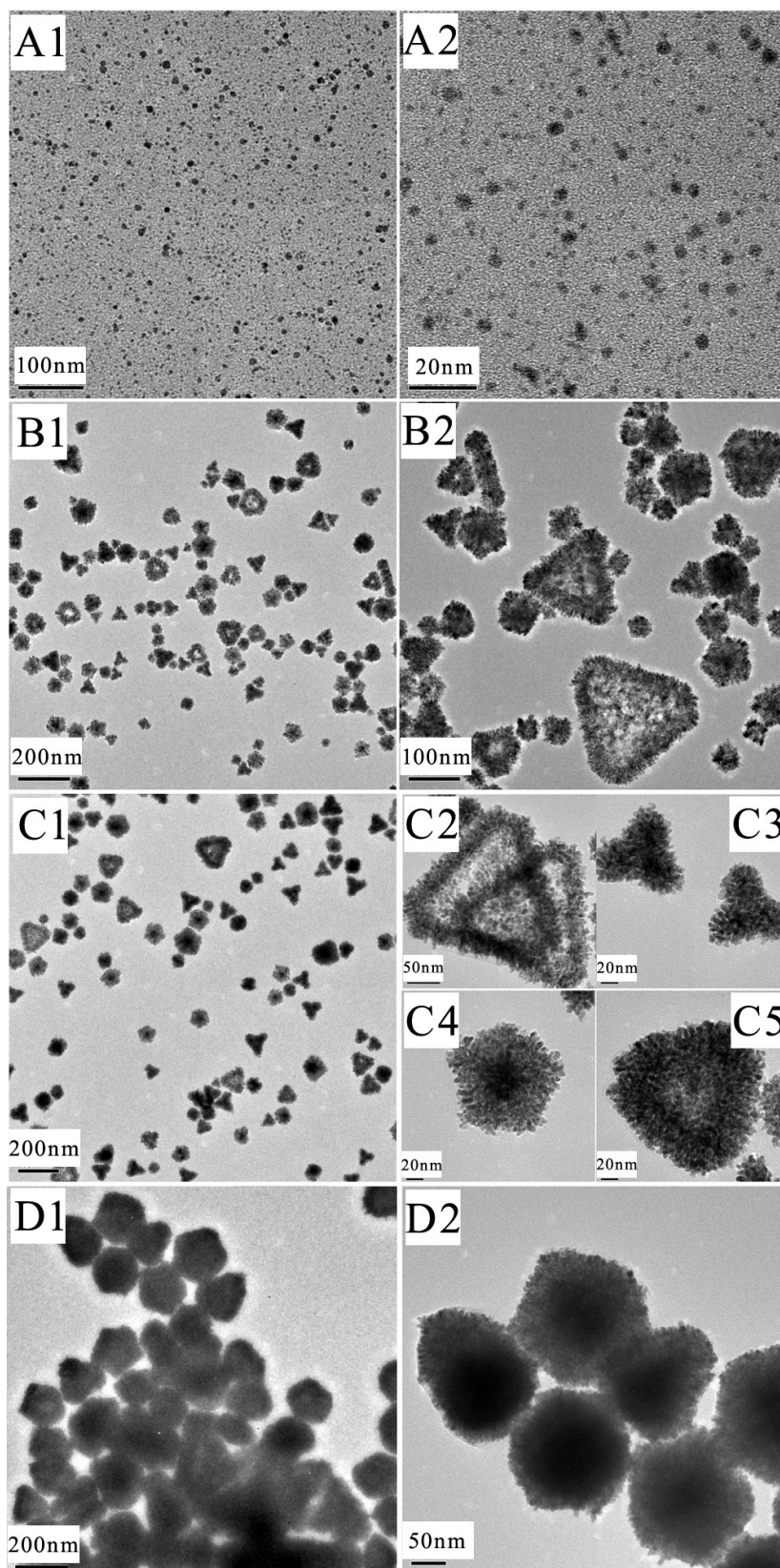


Fig. S4 The TEM images of nanoparticles from different amount of KI: (A1-A2) 0 mg; (B1-B2) 20mg; (C1-C2) 40mg; (D1-D2) 160mg. The NPs were prepared by using 80mg KI are shown in Fig 4 B.

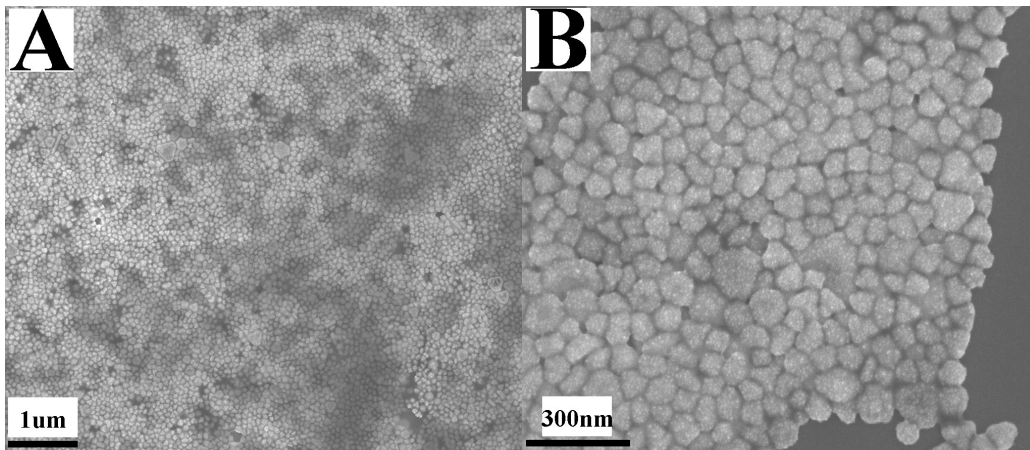


Fig. S3 The SEM images of nanoparticles from 150 mg PVP.

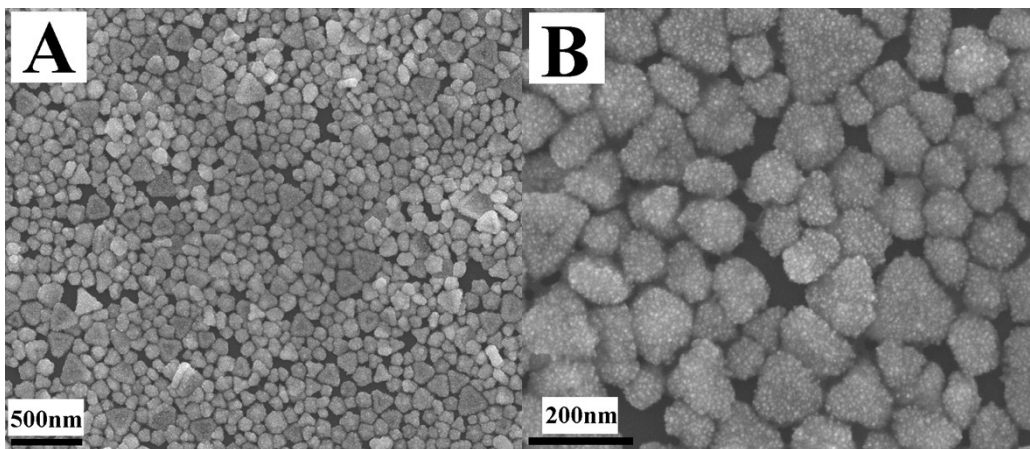


Fig. S5 The SEM images of nanoparticles from 400 mg PVP.

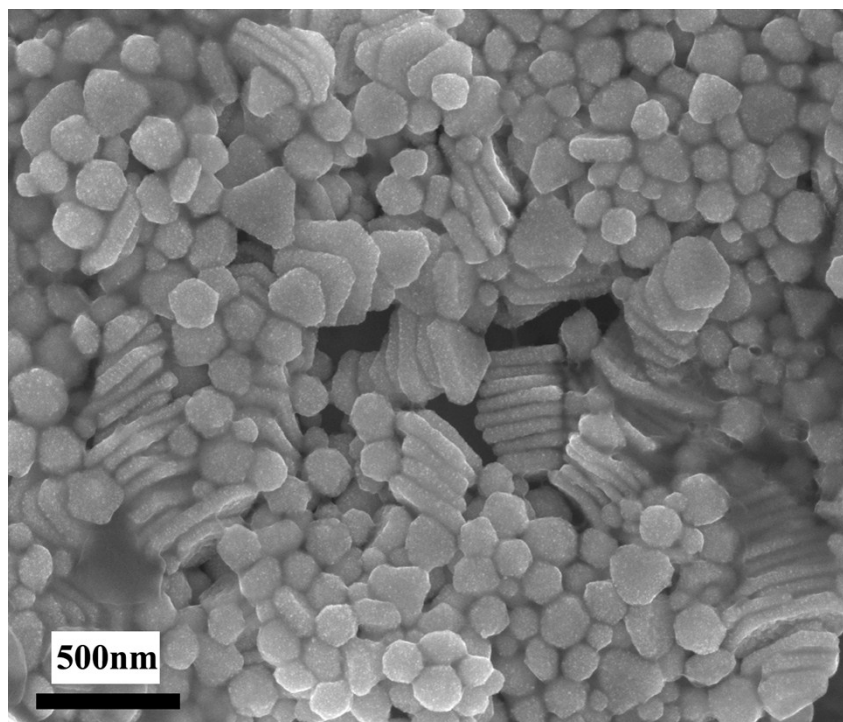


Fig. S6 SEM image of products prepared using a standard synthesis except for that the molar ratio between Pt and Au was 3.

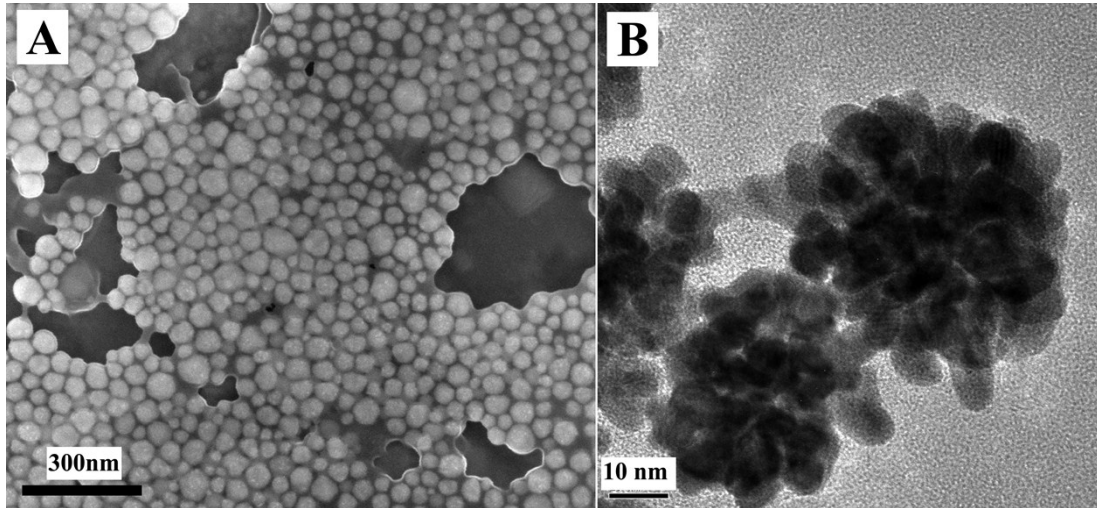


Fig. S7 SEM and TEM images of products prepared using a standard synthesis except for that the molar ratio between Pt and Au was 5.