Electronic Supplementary Material (ESI) for CrystEngComm.

Electronic Supplementary Information

One-pot synthesis of noble metal nanoparticles with a core–shell construction

Pengfei Hou,[1,2] Hui Liu,[1] Jianling Li[2,*] and Jun Yang[1,*]

[1] State Key Laboratory of Multiphase Complex Systems, Institute of Process Engineering, Chinese Academy of Sciences, Beijing 100190, China. Fax: 86-10-8254 4915; Tel: 86-10-8254 4915; E-mail: jyang@ipe.ac.cn

[2] State Key Laboratory of Advanced Metallurgy, University of Science and Technology of Beijing, 30 College Road, Beijing 100083, China. Fax: 86-10-6233 2651; Tel: 86-10-6233 2651; E-mail: lijianling@ustb.edu.cn

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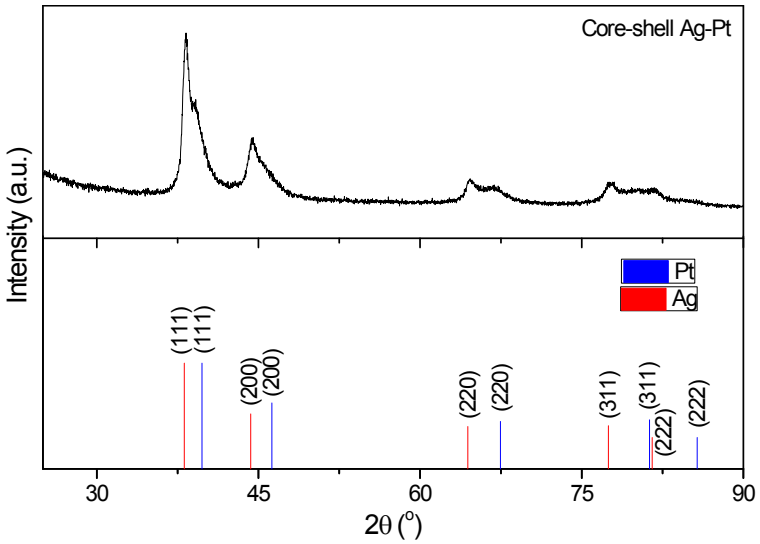

Fig. S1 XRD pattern of the core–shell Ag–Pt nanoparticles synthesized in an one-pot approach. The references are JCPDS 893722 for Ag and JCPDS 882343 for Pt, respectively.

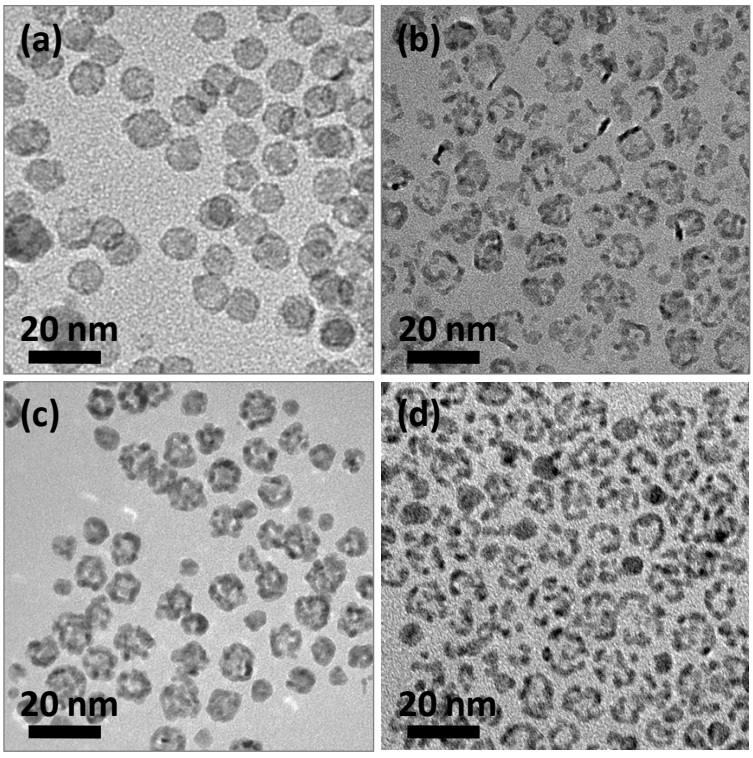

Fig. S2 TEM images of Ru (a), Rh (b), Os (c), and Ir (d) nanoparticles with hollow interiors prepared by reacting core-shell Ag-Ru, Ag-Rh, Ag-Os, and Ag-Ir nanoparticles with saturated Na_2S aqueous solution.

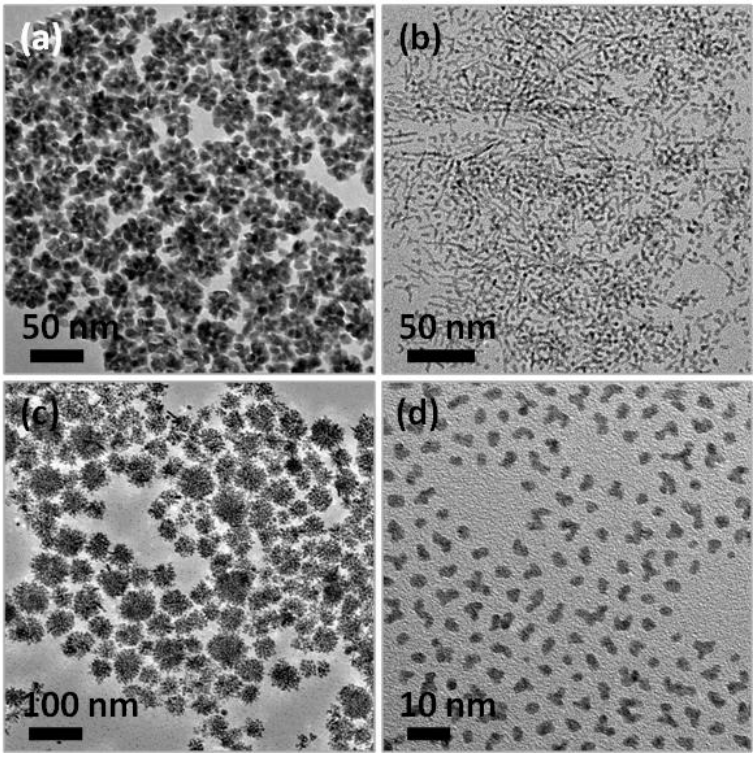

Fig. S3 TEM images of dendritic Pt (a), wire-like Ru (b), dendritic Rh (c), and worm-like Ir (d) nanoparticles synthesized by solely reducing the corresponding metal precursors in oleylamine.

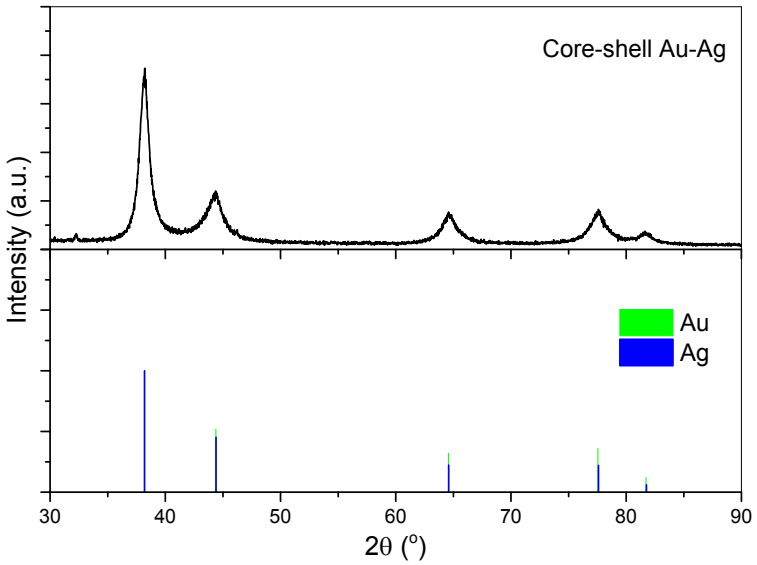

Fig. S4 XRD pattern of the core–shell Au–Ag nanoparticles synthesized in an one-pot approach. The references are JCPDS 893697 for Au and JCPDS 893722 for Ag, respectively.

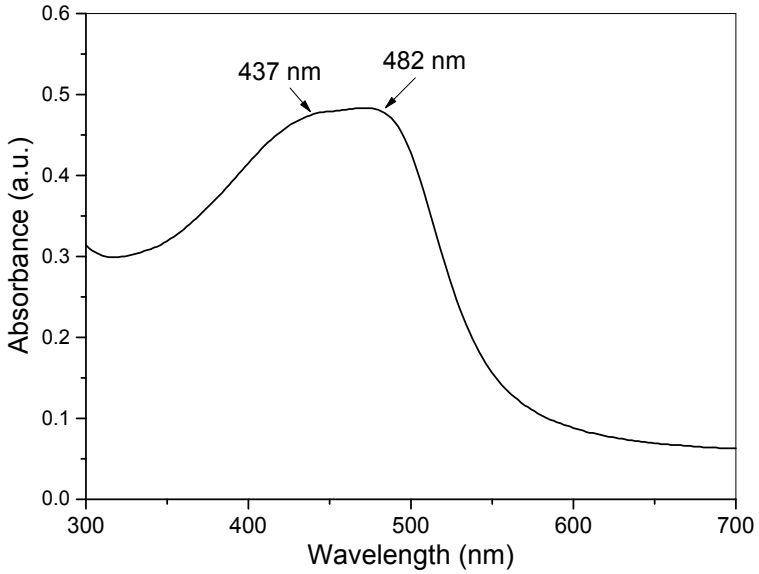

Fig. S5 UV-visible spectrum of core–shell Au–Ag nanoparticles synthesized in oleylamine at elevated temperature by an one-pot approach.

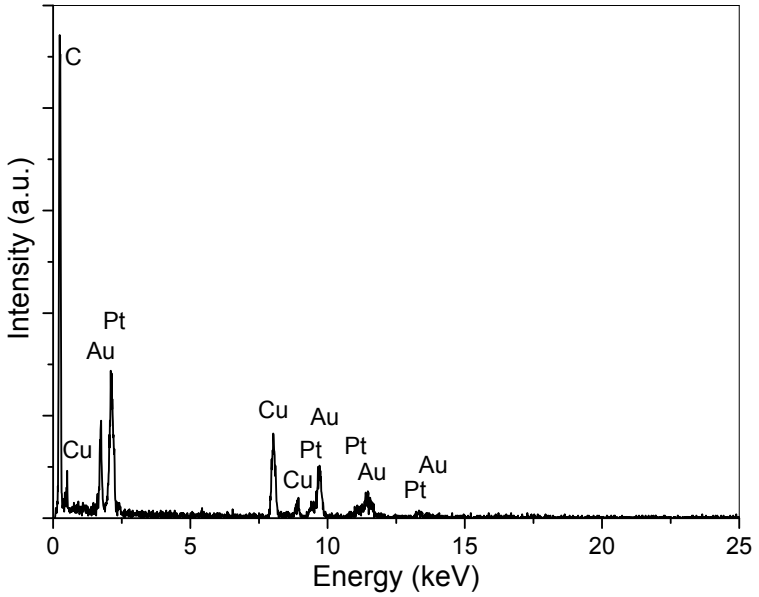

Fig. S6 EDX analysis of the tri-metallic Au–Ag–Pt nanoparticles after treatment with saturated Na_2S solution.

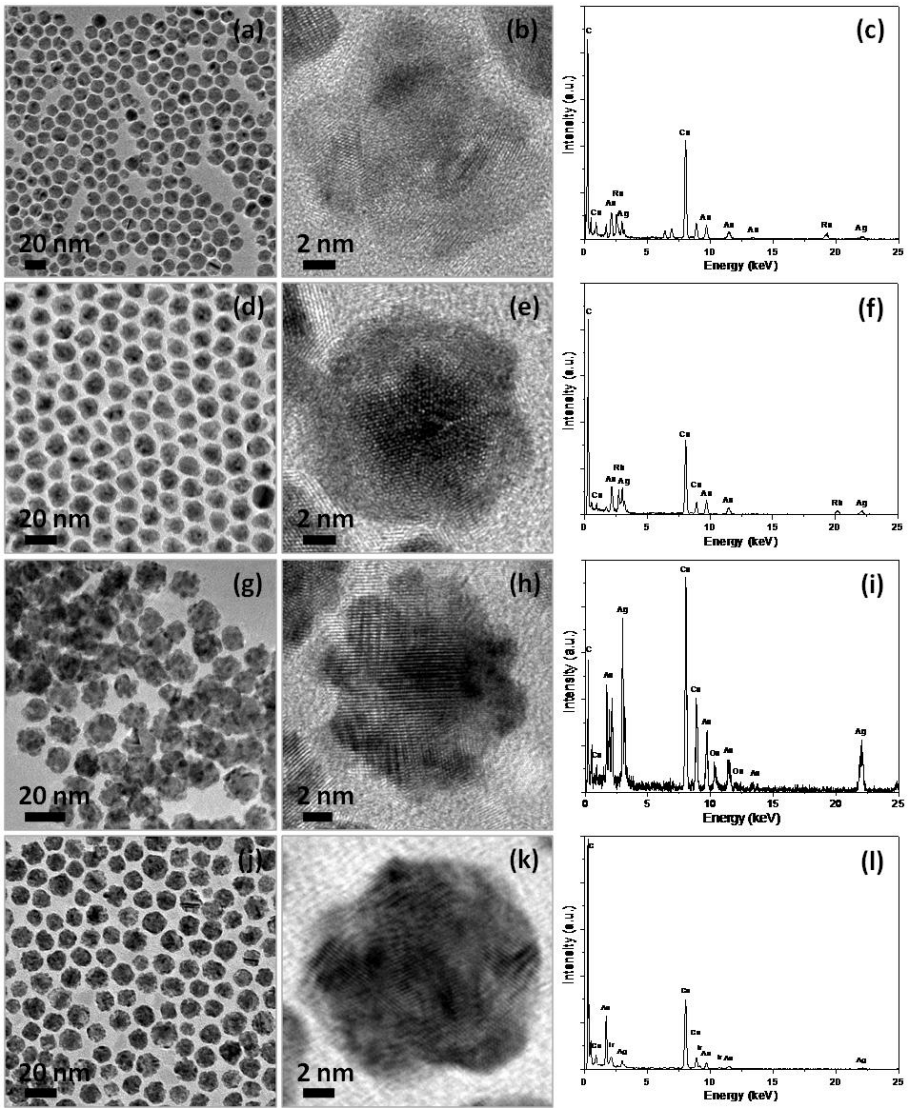

Fig. S7 TEM images (a,d,g,j), HRTEM images (b,e,h,k), and EDX analyses (c,f,i,l) of core–shell–shell Au–Ag–Ru (a,b,c), Au–Ag–Rh (d,e,f), Au–Ag–Os (g,h,i), and Au–Ag–Ir (j,k,l) nanoparticles synthesized in oleylamine at elevated temperature by an one-pot approach.