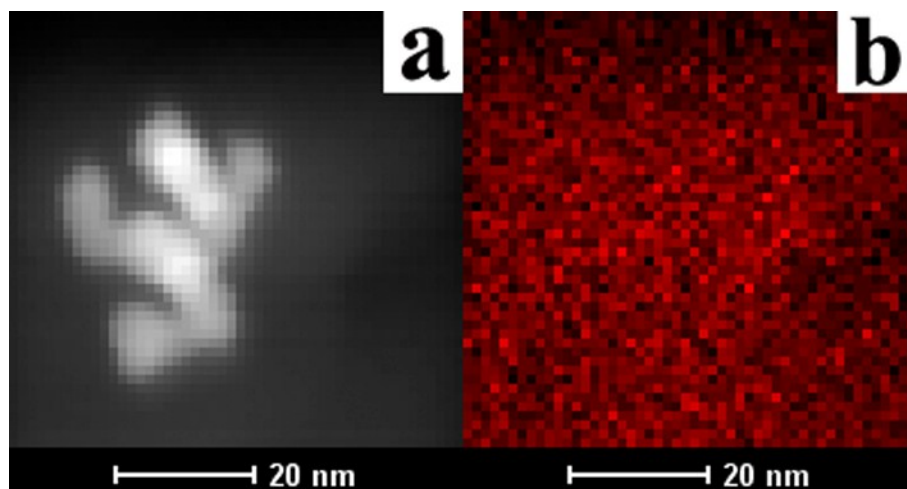


**Preparation of Pd<sub>x</sub>Au<sub>y</sub> bimetallic nanostructures with controllable morphologies supported on reduced graphene oxide nanosheets and wrapped in polypyrrole layer**

Tongjie Yao,<sup>a,b</sup> Quan Zuo,<sup>a</sup> Hao Wang,<sup>a</sup> Jie Wu,<sup>c</sup> Xiao Zhang,<sup>a,b</sup> Jianmin Sun<sup>\*a,b</sup> and

Tieyu Cui<sup>\*b</sup>

**Fig. S1** (a) HAADF-STEM image of rGO/Pd<sub>48</sub>Au<sub>52</sub>/PPy composites; (b) the corresponding elemental mapping of N.



**Fig. S2** (a) Survey spectra of original GO nanosheets and rGO/Pd<sub>48</sub>Au<sub>52</sub>/PPy composites; inset shows the core-level spectrum of Au 4f in rGO/Pd<sub>48</sub>Au<sub>52</sub>/PPy composites. (b) core-level spectrum of C 1s in GO nanosheets; (c) core-level spectrum of C 1s in rGO/Pd<sub>48</sub>Au<sub>52</sub>/PPy composites.

