

Supplementary Information

Fabrication and catalytic application of tandem reactor module using Au nanoparticles-coated glass beads as packing materials

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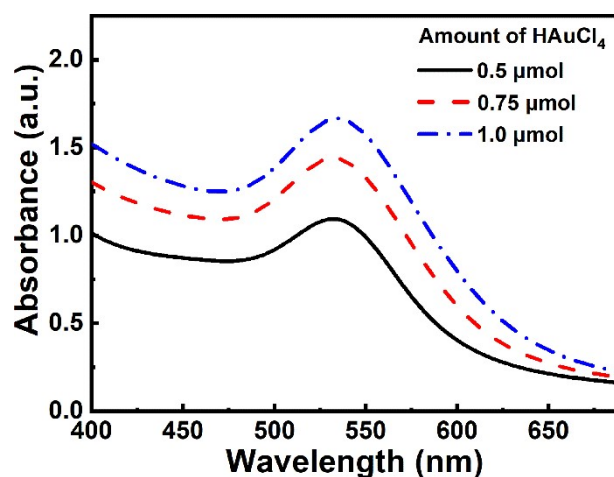


Fig. S1. UV-Vis absorbance spectra of Au NPs synthesized in 3.0 mL of AYR extract with different amount of HAuCl₄.

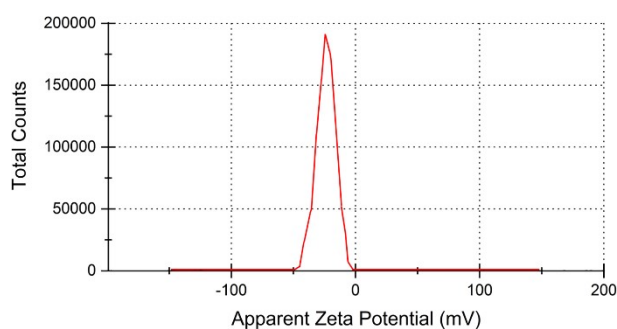


Fig. S2. Zeta potential distribution of Au NPs.

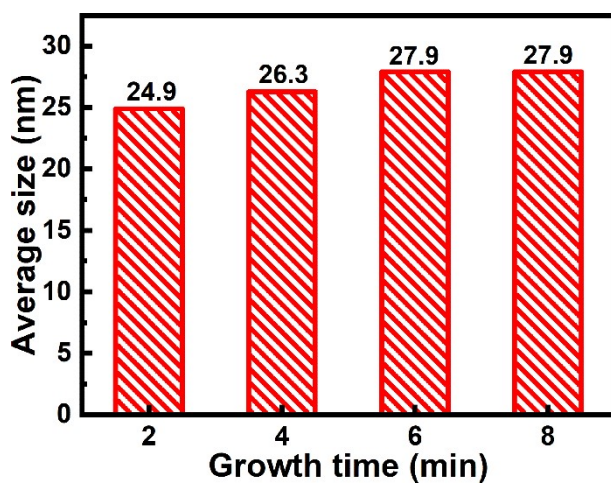


Fig. S3. Average sizes of Au NPs-coated glass beads prepared at different growth time (2~8 min).

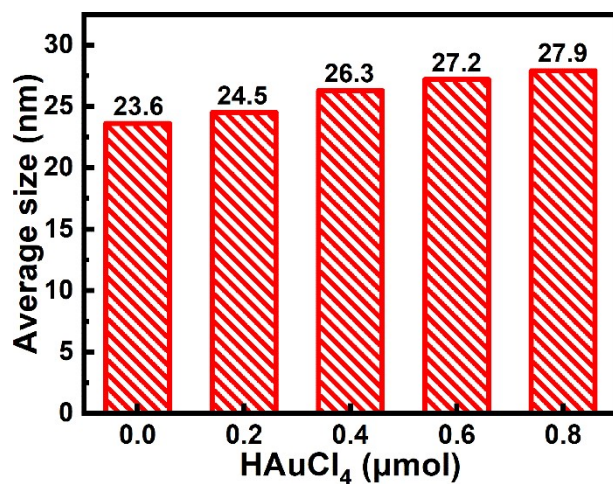


Fig. S4. Average sizes of Au NPs-coated glass beads prepared in the growth solution with different amount of HAuCl₄ (0~0.8 μmol).

Table S1 Concentration and loss of Au element in the growth solution.

Growth conditions		C_{Au1} ^a (ppm)	C_{Au2} ^b (ppm)	<i>Loss</i> ^c (%)
HAuCl ₄ (μmol)	Growth time (min)			
0.8	6	52.41	10.36	19.8
0.8	8	52.41	10.34	19.7
0.6	8	39.39	1.94	4.9

^a Concentration of Au element before the seeds growth.

^b Concentration of Au element after the seeds growth.

$$^c \text{Loss} = \frac{C_{Au2}}{C_{Au1}}$$