

## Supplementary Information

### Self-Assembly of Au Nanoparticles on Graphene Sheets as Catalyst with Controlled Grafting Density and High Reusability

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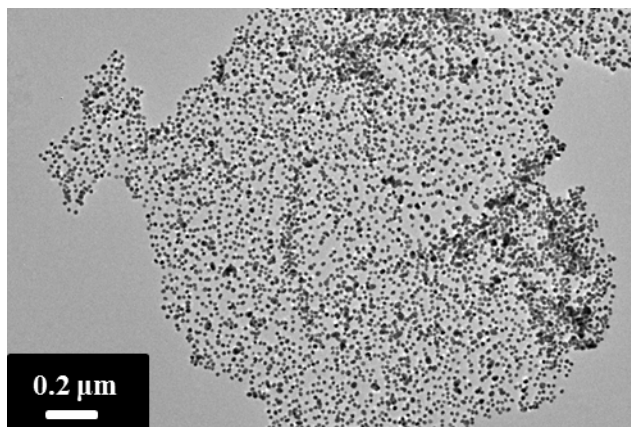


Figure S1. TEM image of GO-3N/Au after 8 successive reactions.

Table S1. Comparison of Au nanoparticles on various supports for the reduction of 4-NP.

Catalyst support	Catalyst (mg)	Au Particle size (nm)	Molar ratio NaBH <sub>4</sub> :4-NP	Degradation time (min)	TOF (h <sup>-1</sup> )	References
GO-Fe <sub>3</sub> O <sub>4</sub>	0.02	3~7	200:3	1.7	484	[1]
PNIPAP-b-P4VP <sup>a</sup>	0.4	3.3	167:5	30	16	[2]
Graphene hydrogel	0.1	15	200:1	12	12	[3]
GO	0.1	2.4	50:1	25	54	[4]
Fe <sub>3</sub> O <sub>4</sub>	2	11	40:1	10	1.2	[5]
GO	0.02	10	40:1	12	35	This work

<sup>a</sup> poly(N-isopropylacrylamide)-b-poly(4-vinyl pyridine)

## Reference

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