

Supporting Information

Fluorescence enhancement of gold nanoclusters via Zn doping for biomedical applications

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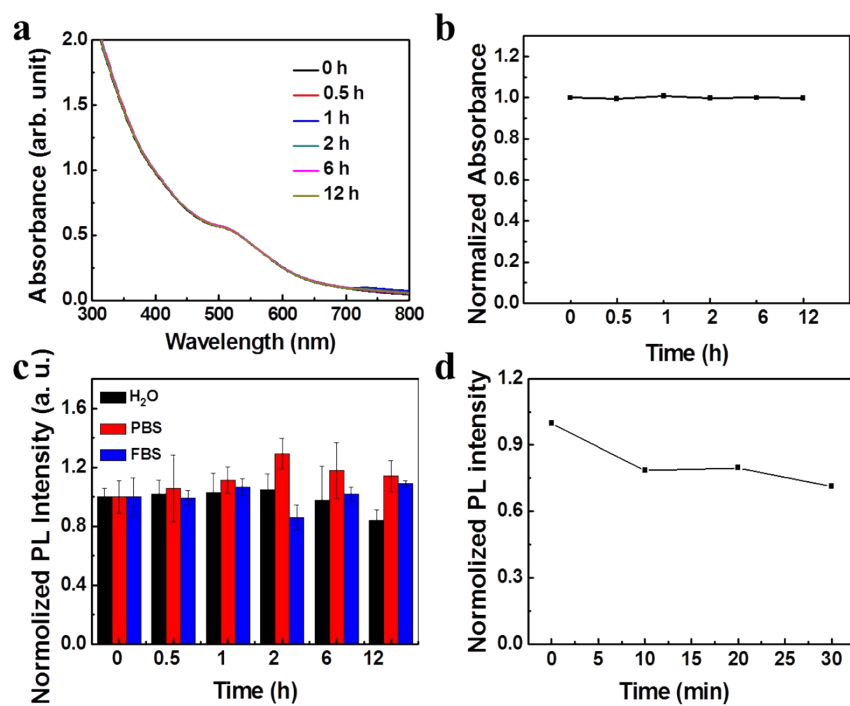


Figure S1 (a) Time-dependent absorption spectrum. (b) Time-dependent normalized absorbance intensity at 525 nm. (c) Photostability of AuZn alloy NCs in H₂O, FBS, and PBS. (d) Photobleaching investigation of AuZn alloy NCs under 30 minutes of continuous laser exposure.

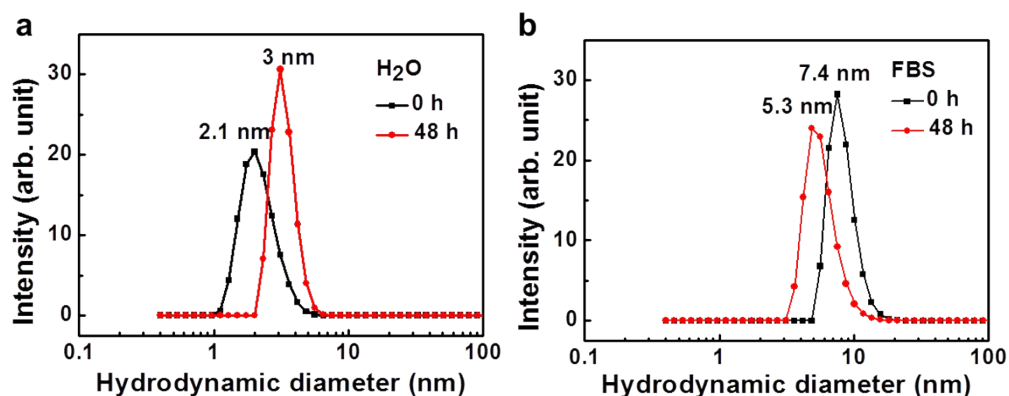


Figure S2 Hydrodynamic size of AuZn alloy NCs in H₂O (a) and FBS (b) measured by DLS at different time point of 0h and 48h.

Table S1 Zeta potential and hydrodynamic size of the Zn-doped Au NCs in H₂O and FBS after 0 and 48 h.

	0 h		48 h	
	Zeta potential	Hydrodynamic size	Zeta potential	Hydrodynamic size
H ₂ O	-18.6 mV	2.1 nm	-16.4 mV	3 nm
FBS	-9.4 mV	7.4 nm	-9.44 mV	5.3 nm

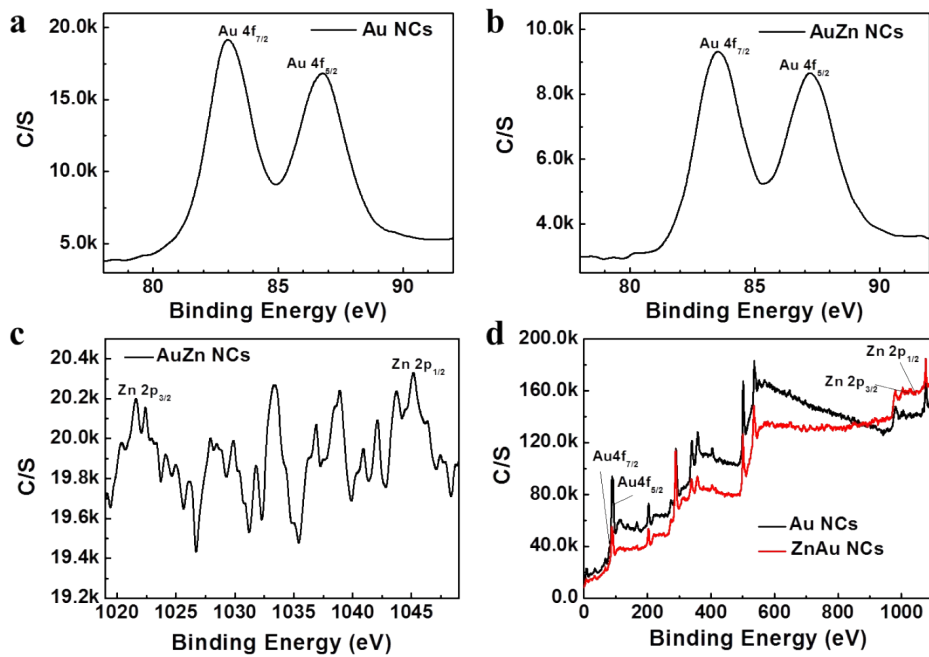


Figure S3. XPS spectra showing the binding energy. Binding energy of Au 4f of (a) Au NCs and (b) AuZn alloy NCs. (c) Binding energy of Zn 2p of AuZn alloy NCs. (d) XPS spectra of Au NCs (red line) and AuZn alloy NCs (black line).