

Bimetallic gold nanorods with enhanced biocorona formation for doxorubicin loading and sustained release

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Supplementary Information

¹Both the authors have equal contribution

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Table S1 Mean hydrodynamic diameter (nm) of monometallic and bimetallic AuNRs with/without protein adsorption for drug loading at 24 h.

Samples	Mean hydrodynamic diameter (nm)	
	Control	With dox (120 μ M)
AuNRs–HSA	128.55 \pm 1.36	587.48 \pm 2.18
AuNRs–Transferrin	125.23 \pm 3.02	475.92 \pm 2.22
AuNRs@Pd–HSA	187.31 \pm 2.15	932.55 \pm 3.58
AuNRs@Pd–Transferrin	174.56 \pm 1.54	883.67 \pm 4.49
AuNRs@Cu–HSA	160.11 \pm 1.65	852.43 \pm 3.48
AuNRs@Cu–Transferrin	162.56 \pm 2.14	789.84 \pm 5.27

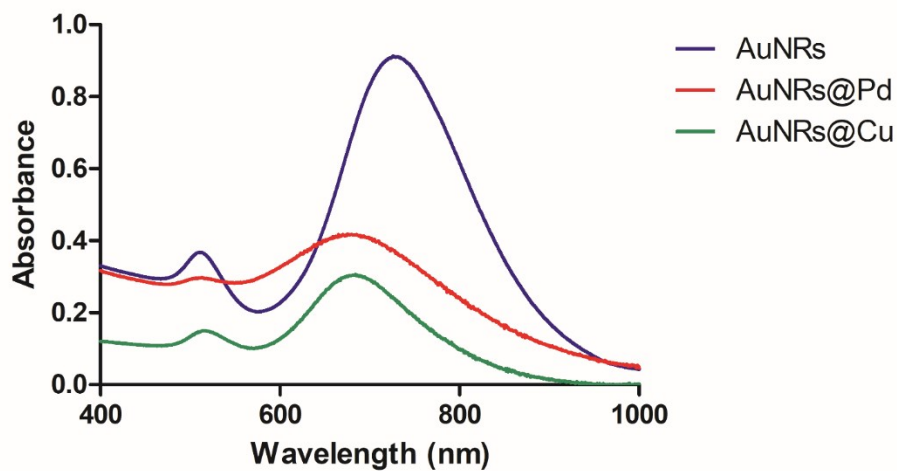


Fig. S1 UV–visible graphs of monometallic AuNRs and bimetallic AuNRs.

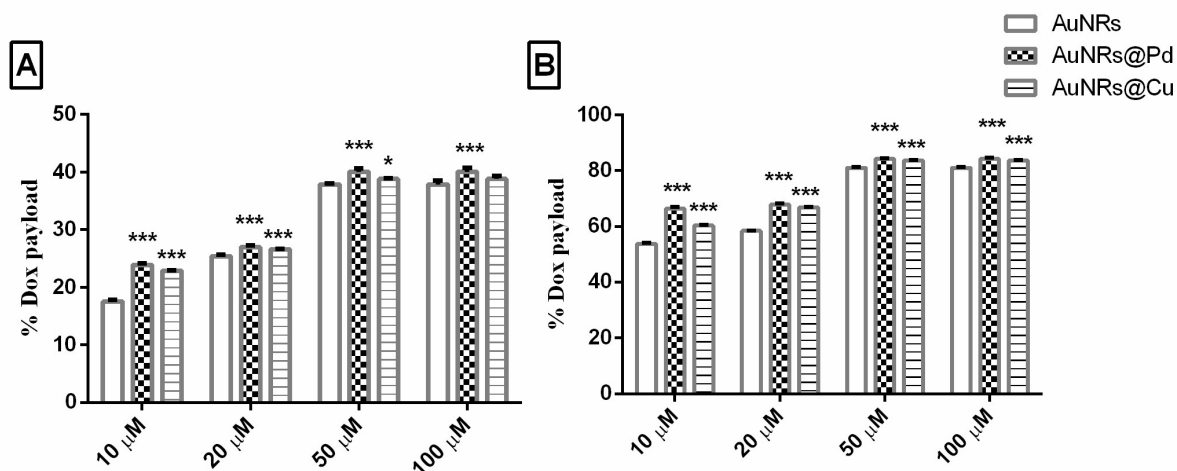


Fig. S2 Doxorubicin payload % on coronated nanoparticles for different initial dox concentrations: (A) 10, (B) 20, (C) 50, and (D) 100 μM . ***, **, and * are the statistical significance for encapsulation efficiency % assessed for bimetallic AuNRs in comparison to the respective monometallic form (i.e. $p = 0.001, 0.01, 0.05$, respectively).

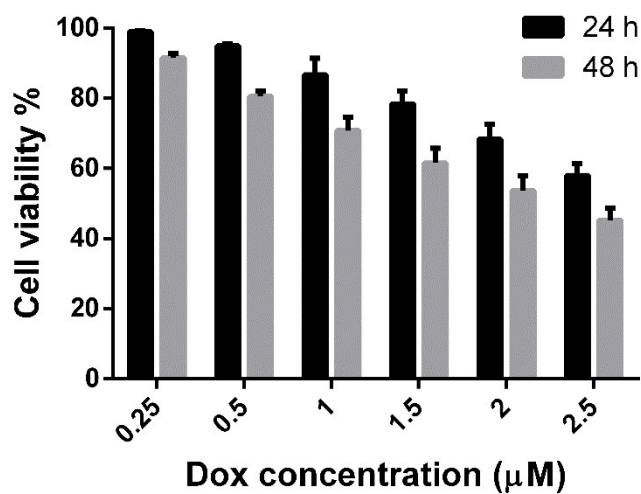


Fig. S3 Cell viability % for different concentrations of free doxorubicin (0.25, 0.5, 1, 1.5, 2, and 2.5 μM) for 24 and 48 h.