

Supporting information

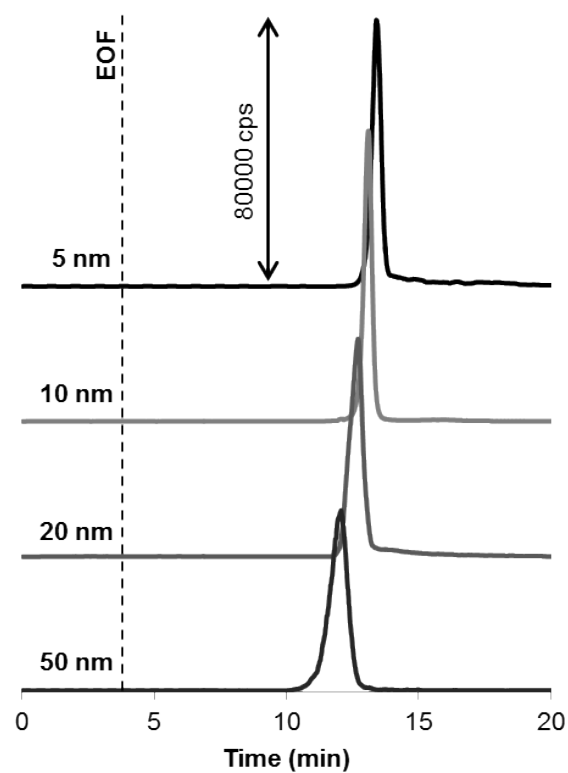


Fig. S-1 Representative electropherograms for gold nanoparticles of varying size ($9.5 \text{ mg L}^{-1} \text{ Au}$) obtained with CE-ICP-MS. See Table 1 and Experimental section for conditions.

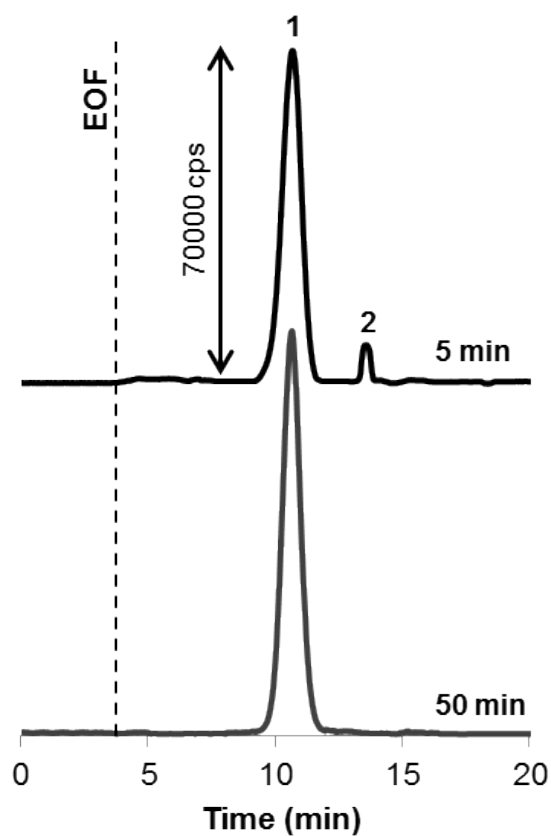


Fig. S-2 CE-ICP-MS electropherograms of 5-nm gold particles interacting with albumin under simulated physiological conditions (10 mM phosphate buffer, pH 7.4, 100 mM NaCl). Sample: 9.5 mg L⁻¹ gold nanoparticles, 19 mg L⁻¹ albumin. Peak assignment: 1 – albumin conjugate; 2 – gold nanoparticles. EOF = electroosmotic flow. See Table 1 and Experimental section for CE-ICP-MS conditions.

Table S-1 Binding of gold nanoparticles to transferrin

Nanoparticle concentration (mg L ⁻¹ Au)	19	38
	Relative peak area (%) ^a	
Size (nm)	Apo-transferrin	Holo-transferrin
5	ND ^b	ND
10	1.9±0.2	ND
20	5.1±0.2	1.7±0.1
50	7.6±0.3	3.9±0.2

^a Calculated on the basis of measurements made after 30-min incubation; $n = 3$.

^b Not detected.