Electronic Supplementary Information for

Selectivity Enhancement of Amperometric Nitric Oxide Detection via Shape-Controlled Electrodeposition of Platinum Nanostructures

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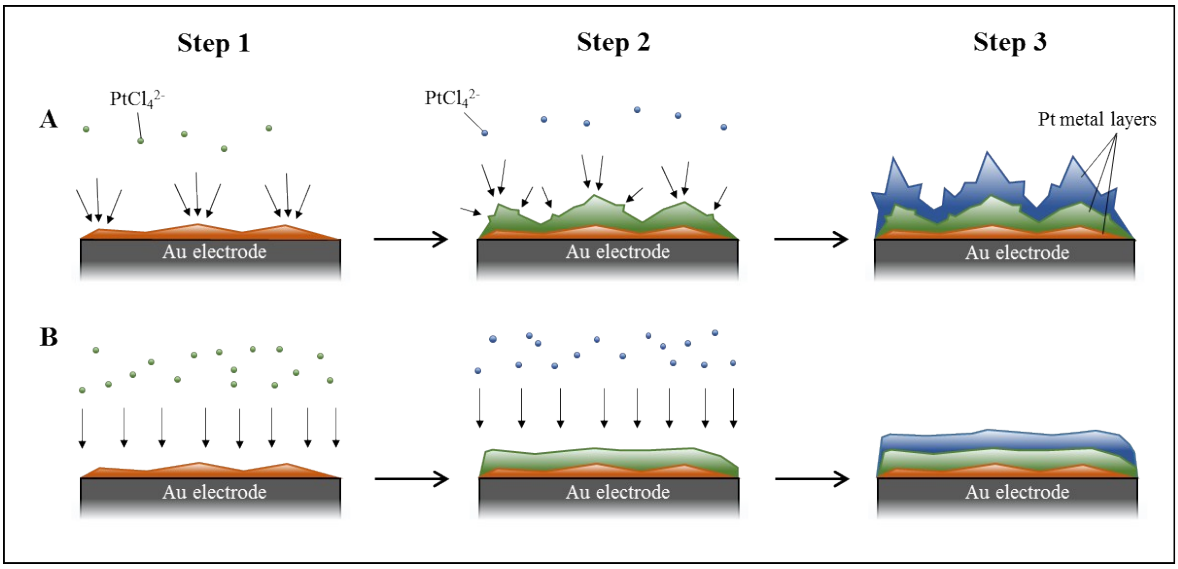

Scheme S1 Illustration of feasible electrodeposition processes on an Au substrate electrode with relatively (A) lower and (B) higher concentrations of $PtCl_4^{2-}$.

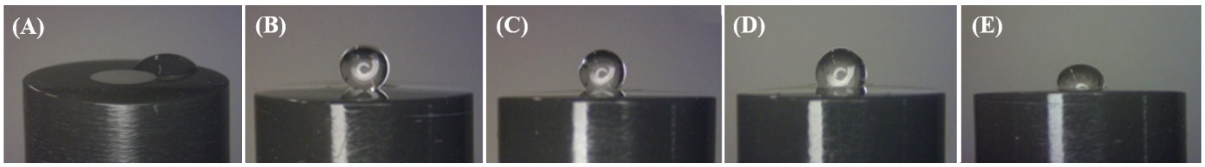

Fig. S1 Water droplets (1 μL) loaded on the Pt surfaces electrodeposited with (A) 5 mM K_2PtCl_4, (B) 15 mM K_2PtCl_4, (C) 40 mM K_2PtCl_4, (D) 75 mM K_2PtCl_4 and (E) 75 mM H_2PtCl_6.

Table S1 Statistical significances of the differences in the electrode sensitivities to NO (Figure 3B). *$p < 0.05$; **$p < 0.01$ (paired *t*-test, $n = 5$). In paired t-test, p-value less than 0.05 represents that the mean difference between the paired observations is significantly different from 0.

5 mM $PtCl_4^{2-}$	-				
15 mM $PtCl_4^{2-}$	*	-			
40 mM $PtCl_4^{2-}$	*	**	-		
75 mM $PtCl_4^{2-}$	**	**	.	-	
75 mM $PtCl_6^{2-}$	**	**	**	*	-
	5 mM $PtCl_4^{2-}$	**15 mM $PtCl_4^{2-}$**	**40 mM $PtCl_4^{2-}$**	**75 mM $PtCl_4^{2-}$**	**75 mM $PtCl_6^{2-}$**

Table S2 Selectivity coefficients ($\log K_{NO,i}^{Amp} = \log\left(\frac{Current\ sensitivity\ to\ i}{Current\ sensitivity\ to\ NO}\right)$, i = interfering species) to NO against acetaminophen (AP, 5 μM), L-ascorbic acid (AA, 5 μM), nitrite (NO_2^-, 5 μM) and hydrogen peroxide (H_2O_2, 5 μM) for Pt electrodes variously deposited and a flat bare Pt disk electrode (2 mm in diameter).

	AP	AA	NO_2^-	H_2O_2
5 mM $PtCl_4^{2-}$	**−1.879**	**−1.815**	**−2.641**	**−1.770**
15 mM $PtCl_4^{2-}$	−1.822	−1.801	−2.594	−1.541
40 mM $PtCl_4^{2-}$	−1.483	−1.548	−2.208	−1.274
75 mM $PtCl_4^{2-}$	−1.191	−1.208	−2.093	−1.067
75 mM $PtCl_6^{2-}$	−0.6451	−0.6208	−1.412	−0.487
Flat bare Pt	−0.3779	−0.4878	−1.406	−0.446

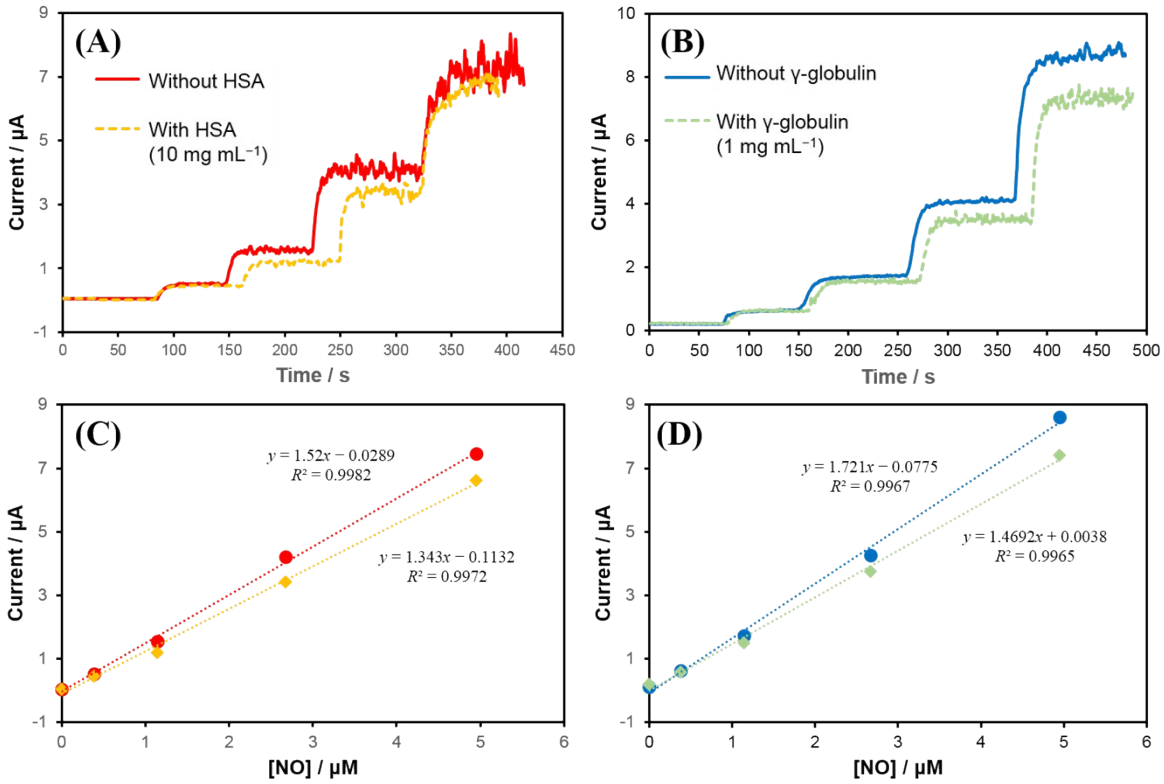

Fig. S2 Typical dynamic response curves to successive NO concentration changes obtained at a Pt electrode deposited with 5 mM $PtCl_4^{2-}$ with and without (A) human serum albumin (HSA, 10 mg mL^{-1}) and (B) γ-globulin. (C) and (D) are the calibration curves corresponding to (A) and (B), respectively.