Detection of Dopamine on a Poly(metanilic acid) Decorated Two-dimensional Gold Cavity Array Electrode

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Figure S1 Gold seeds produced on the surface of ITO electrodes with the first pulse in (a) 10 mA·cm\(^{-2}\) and (b) 50 mA·cm\(^{-2}\) current density.

Figure S2 Typical UV-vis reflection spectra of the flat Au and gold cavity array substrates.
Figure S3 CV obtained at the GCA electrode in 0.1M PBS (pH 7.0) containing 50 μM DA. Scan rate: 50 mV/s.

Figure S4 CV evolutions at the GCA electrode in 0.5 mM DA for 5 times of consecutive scanning. Scan rate: 50 mV/s.
Figure S5 CVs for the oxidation of 0.5 mM DA (blue dash), 1 mM UA (red short dash) at the GCA electrode, and a mixture of 50 μM DA + 1 mM UA (black solid) at the poly(metanilic acid) modified GCA electrode. Scan rate: 50 mV/s.
Figure S6 SWVs of the modified GCA electrode in 0.1 M PBS (pH 7.0) solution containing 25 μM DA and increasing concentrations of AA (0.05, 0.1, 0.2, 0.3, 0.4, and 0.5 mM), SWV (black short dash) and CV (red dot) of 2 mM AA at the modified GCA electrode.