Supplementary Materials

Construction and Application of Graphene Oxide-Bovine Serum Albumin Modified Extended Gate Field Effect Transistor Chiral Sensor

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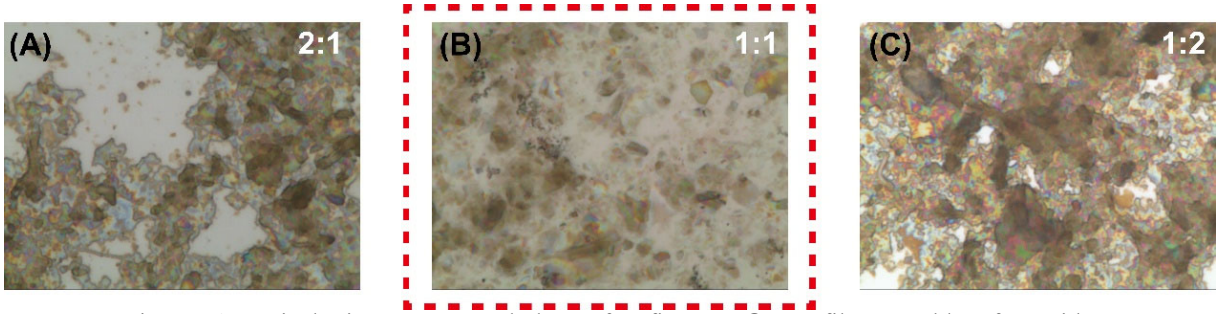

Figure S1. Optical microscope morphology of Nafion–GO@BSA film on gold surface with doping ratio of 2:1 (A),1:1 (B) and 1:2 (C) (same volume).

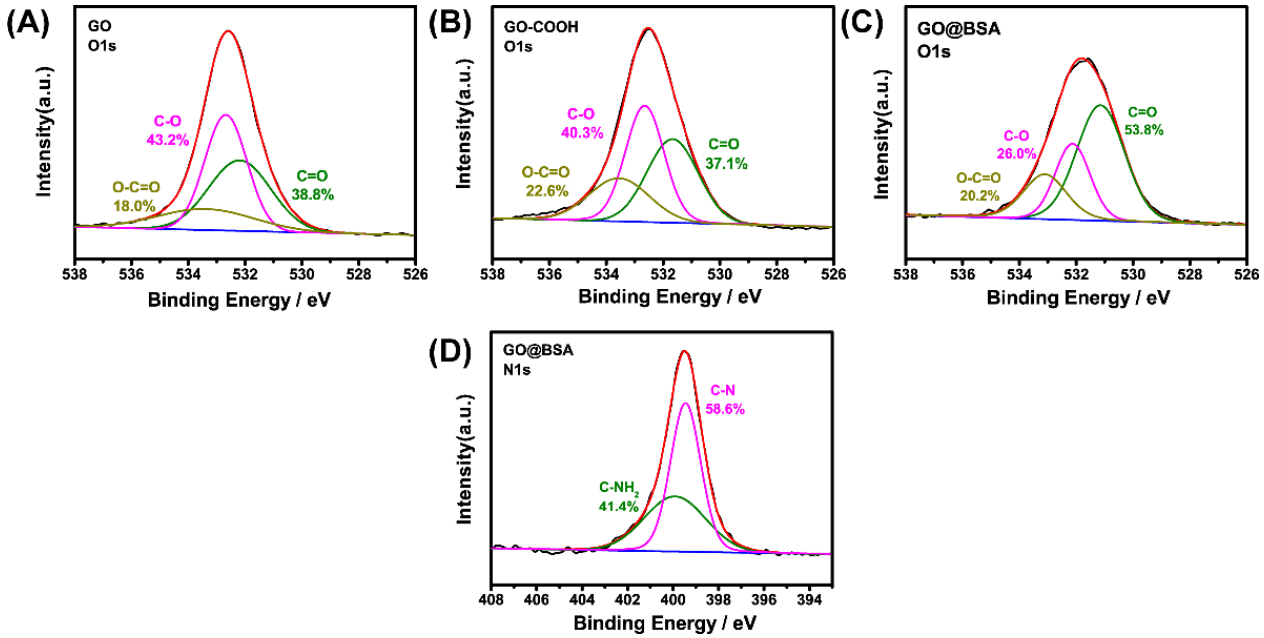

Figure S2. O1s region of the XPS spectra of (A) GO, (B) GO–COOH, (C) GO@BSA and N1s region of (D) GO@BSA

Table S1. Summary table of peak separation results of O and N elements of each substance.

	O			N	
	C=O	C–O	O=C–O	C–N	C–NH_2
GO	38.8%	43.2%	18.0%	–	–
GO–COOH	37.1%	40.3%	22.6%	–	–
GO@BSA	53.8%	26.0%	20.2%	58.6%	41.4%

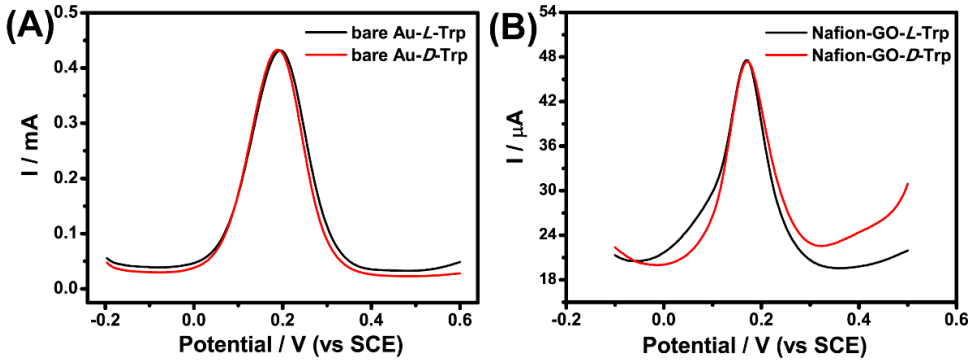

Figure S3. Differential pulse voltammograms of 5 mM *L*- and *D*-Trp combined with bare gold electrode (A) and Nafion–GO-EG (B) in 0.1 M KCl containing 5 mM $[Fe(CN)_6]^{3-/4-}$ of pH 7.

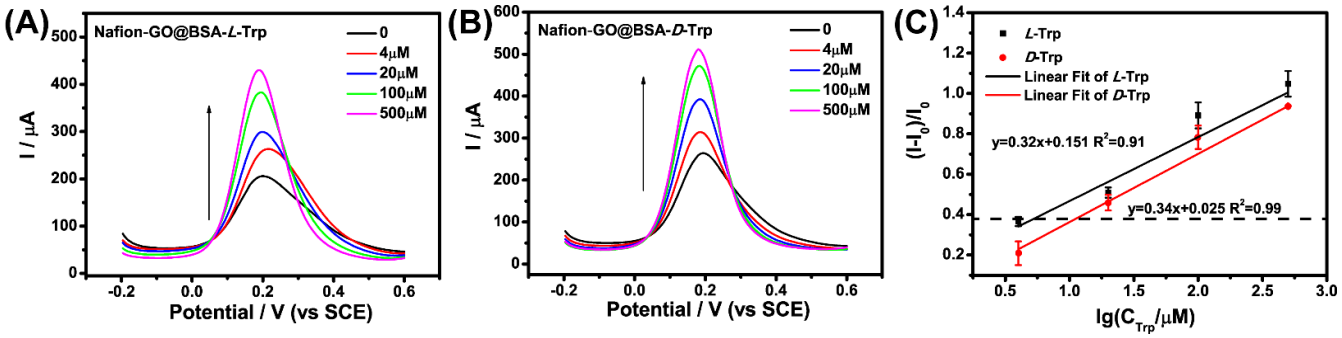

Figure S4. Differential pulse voltammograms of *L*-Trp (A) or *D*-Trp (B) in the range of 4 μM ~ 500 μM and calibration plot of peak current versus logarithmic concentration of Trp isomers (C).

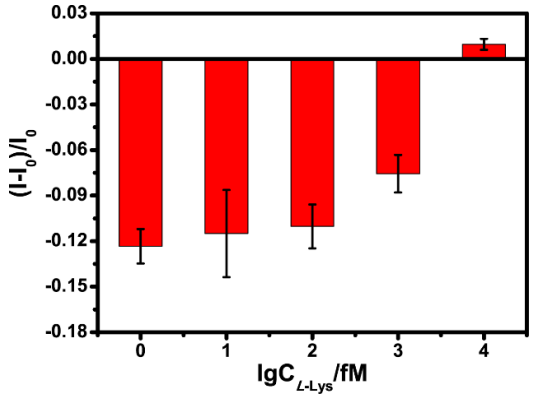

Figure S5. Non-real time detection of *L*-Lys by Nafion–GO@BSA-EG-MOSFET.