

Supporting Information for

**Optimization of graphene oxide-modified carbon-fiber microelectrode for dopamine
detection**

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Supplemental Data

ΔE_p Comparison

ΔE_p was measured by calculating the difference of voltage position of oxidation peak and reduction peak in the cyclic voltammogram.

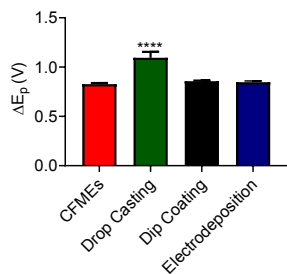


Figure S1. Average ΔE_p by different coating method. (n=4–6, error bars represent SEM, one-way ANOVA with Bonferroni post-test compared to the control (red bars) ****p<0.0001)

Drop Casting Optimization

0.1 mg/mL, 0.2 mg/mL, and 0.3 mg/mL GO solutions were prepared in the same way as mentioned in 2.2. However, 0.3 mg/mL by drop casting overloaded the amplifier of the device detection which could not be used in FSCV test.

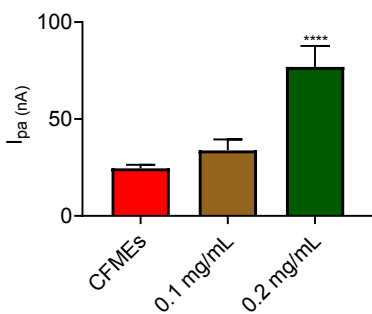


Figure S2. Average anodic peak current by drop casting in different concentration. (2 drops, 20 μ L per drop) (n=4–6, error bars represent SEM, one-way ANOVA with Bonferroni post-test compared to the control (red bars) ****p<0.0001)