

*Supplementary material*

# **A Highly Sensitive Electrochemical Sensor for Cd<sup>2+</sup> Detection Based on Prussian Blue-PEDOT-Loaded Laser-Scribed Graphene-Modified Glassy Carbon Electrode**

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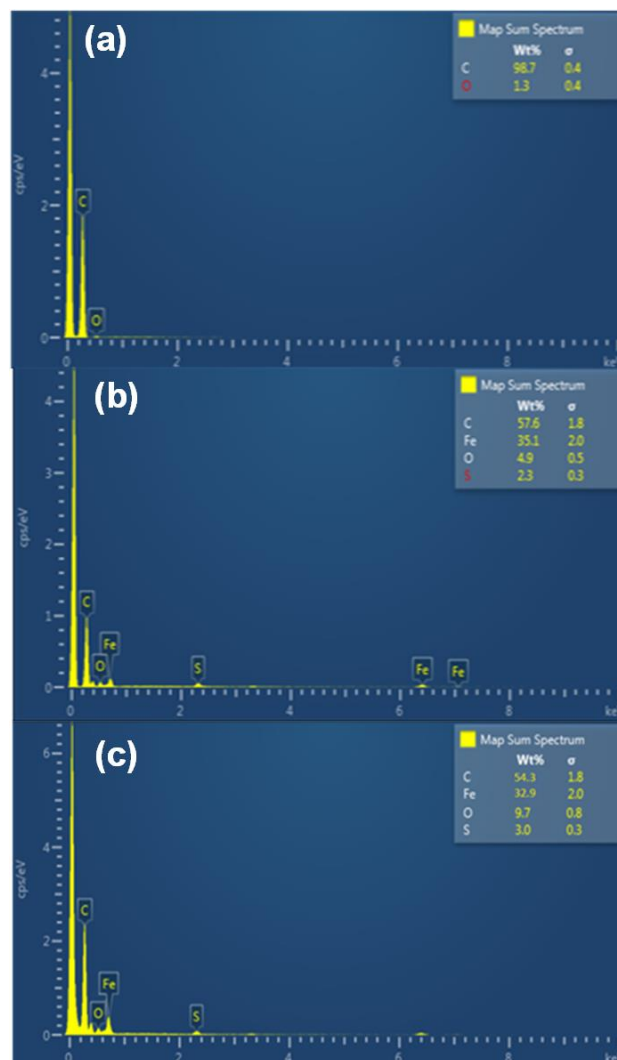


Figure S1. EDS spectrum of the nanocomposite (a) LSG, (b) PB-PEDOT, (c) LSG/PB-PEDOT.

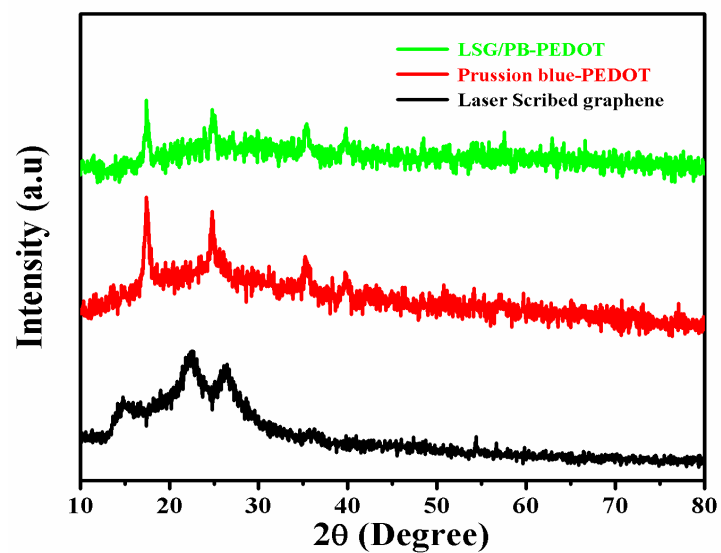
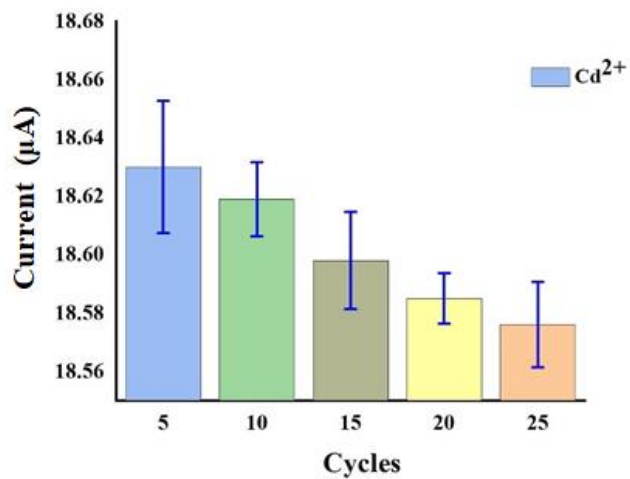


Figure S2. XRD spectrum of LSG, PB-PEDOT and LSG/PB-PEDOT.

**Table S1.** Electrochemical characteristic of different modified electrodes.

Electrode	E <sub>pa</sub> (mV)	E <sub>pc</sub> (mV)	ΔE <sub>p</sub> (mV)	I <sub>pa</sub> (A)	I <sub>pc</sub> (A)	ΔI <sub>p</sub> (A)
Bare GCE	0.239	0.207	0.032	11.88	-15.05	3.17
PB-PEDOT/GCE	0.313	0.182	0.131	130.73	-177.07	-46.34
LSG/GCE	0.296	0.193	0.103	238.48	-264.62	26.14
PB-PEDOT/LSG/GCE	0.358	0.123	0.235	560.15	-572.43	12.298



**Figure S3.** The DPV current response of PB-PEDOT/LSG/GCE at difference cycles in 0.1 M Acetate buffer solution (pH = 5.0) containing 500 μM Cd<sup>2+</sup>.