Electronic Supplementary Material (ESI) for RSC Advances.

Supporting informations

Highly sensitive and selective detection of cadmium with a graphite carbon nitride nanosheets/Nafion electrode

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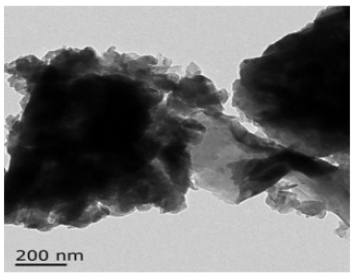

Figure S1. TEM image of bulk g-C_3N_4

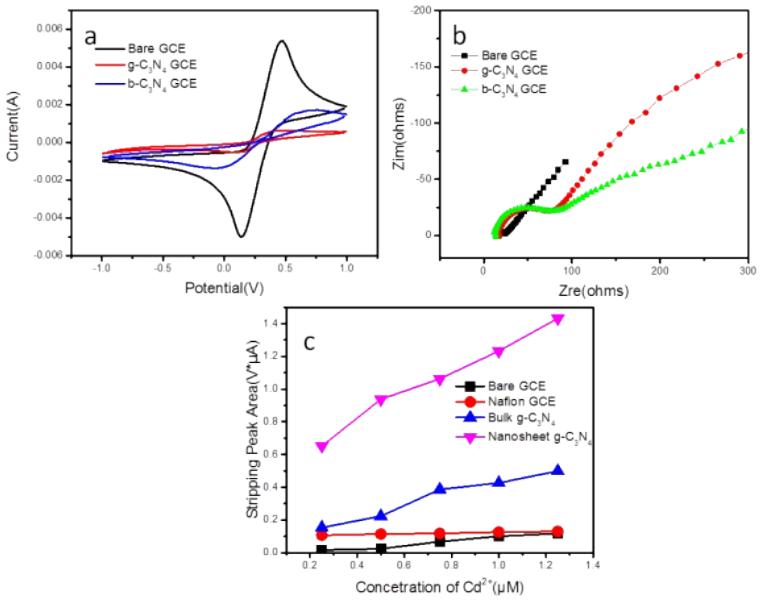

Figure S2. (a) cyclic voltammograms (CV) and (b) electrochemical impendance spectroscopy (EIS) of bare/GCE, g-C_3N_4 nanosheets/GCE, bulk g-C_3N_4/GCE in 50 mM electrolyte solution (pH 5.8). (c) The detection of Cd^{2+} on bare GCE, Nafion/GCE, bulk g-C_3N_4/GCE and nanosheets g-C_3N_4/GCE (the concentrations are 0.25, 0.5, 0.75, 1, and 1.25 μM.)

Table. S1. Comparison of analytical performance of g-C_3N_4 sensor with other published sensors for Cd^{2+}

Electrodes	Approaches	Linear range	Detection limitation	References
Acetylene black/CPE	ASV	58 nM to 2 μM	20 nM	[1]
Benzoic acid-modified GCE	SWASV	4.48 nM to 0.448 μM	0.116 μM	[2]
Ag Nanonuts/GCE	DPASV	4.48 nM to 0.08 μM	0.89 nM	[3]
Fe_3O_4/GCE	SWASV	-	0.056 nM	[4]
ILs/SBA/CPE	DPASV	0.6 μM to 30 μM	0.08 μM	[5]
SWNTs/Nafion/GCE	ASV	40 nM to 4 μM	4 nM	[6]
g-C_3N_4/Nafion/GCE	DPASV	1 nM to 100 μM	0.5 nM	This work

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