Supplementary Materials:

Acetylcholinesterase biosensor based on electrochemically inducing 3D graphene oxide network/multi-walled carbon nanotubes composites for detection of pesticides

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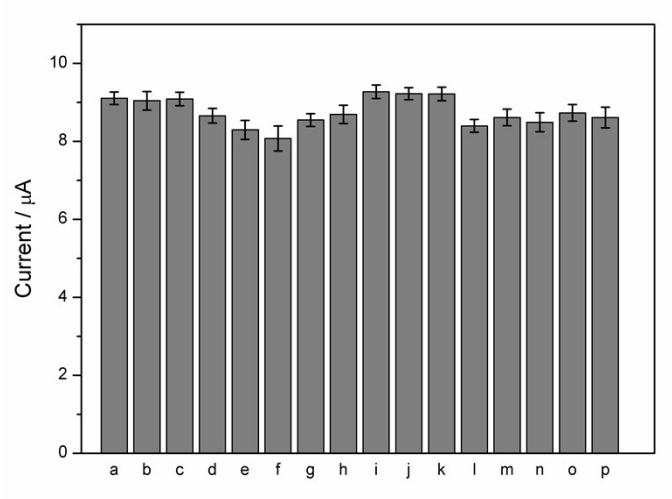

Fig. S1 Amperometric response in 0.1 mol/L PBS containing 7.5 mmol/L ATCl in the absence (a) and presence of 0.5 mmol/L glucose (b), 0.5 mmol/L oxalic acid (c), 9 nmol/L *p*-nitrophenol (d), 9 nmol/L *p*-toluenesulfonic acid (e), 9 nmol/L nitrobenzene (f), 1.8 nmol/L carbaryl (g), 1.8 nmol/L paraoxon (h) after incubated by 1.8 nmol/L carbofuran. And absence (i), presence of 0.5 mmol/L glucose (j), 0.5 mmol/L oxalic acid (k), 9 nmol/L *p*-nitrophenol (l), 9 nmol/L *p*-toluenesulfonic acid (m), 9 nmol/L nitrobenzene (n), 1.8 nmol/L carbaryl (o), 1.8 nmol/L carbofuran (p) after incubated by 1.8 nmol/L paraoxon.

Table S1 Fitting values of the equivalent circuit elements

	bare GCE	GO-MWCNTs/GCE	e-GON-MWCNTs/GCE	AChE/e-GON-MWCNTs/GCE
Capacitance, CPE (F/cm^2)	4.17×10^{-4}	3.34×10^{-5}	3.45×10^{-5}	4.42×10^{-5}
Resistance, R_s (Ω cm^2)	7.053	8.16	9.23	9.67
Resistance, R_{ct} (Ω cm^2)	15.44	59.21	8.29	168.34
Resistive Warburg, W_1-R (Ω cm^2)	328.59	329.37	397.89	1145.59
Capacitive Warburg, W_1-T (Ω cm^2)	1.55	1.15	1.65	149.6