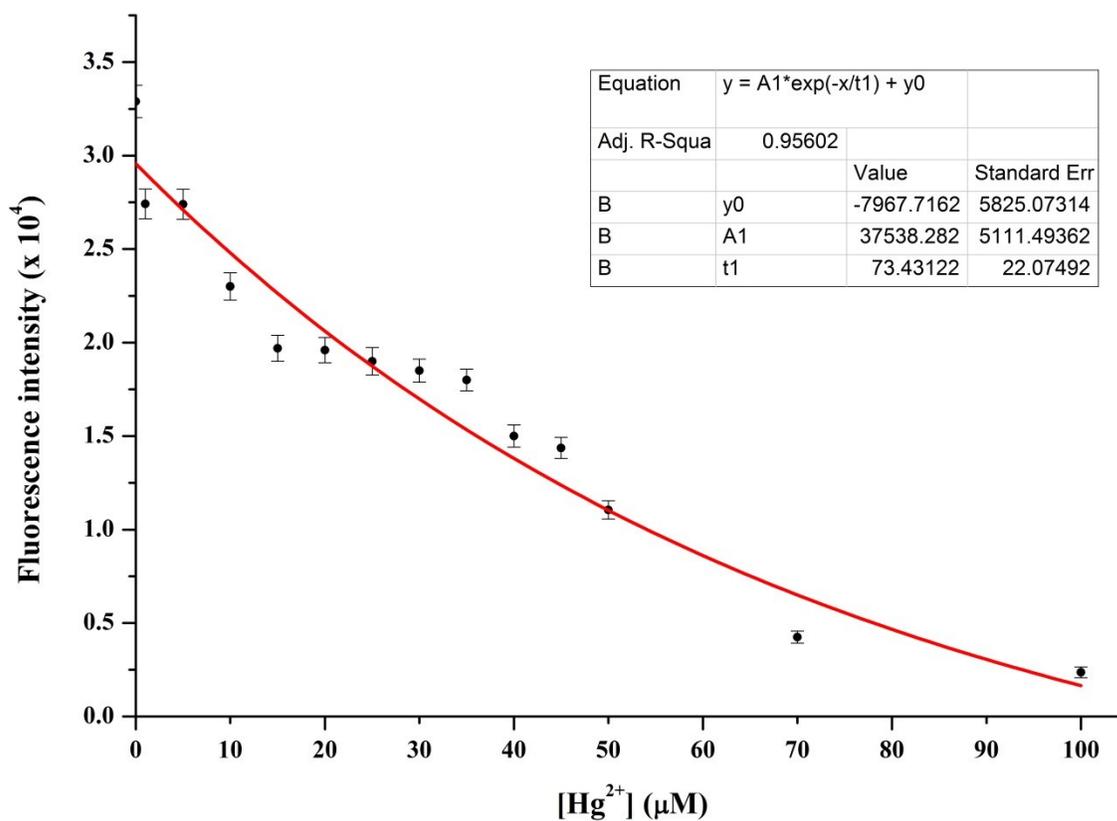
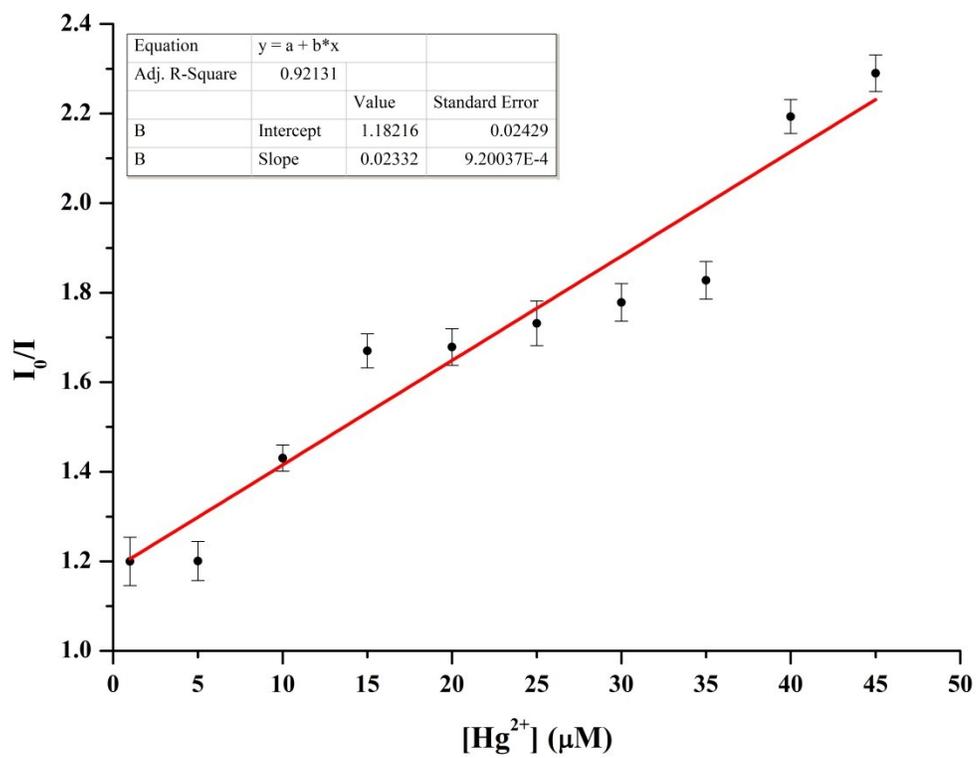


Supplimentary figures:

Fig.S1:Fluorescence intensity graph



**Fig.S2:** Stern–Volmer constant ( $K_{sv}$ ) calculation for C-PC-Hg<sup>2+</sup> interaction.



**Fig.S3:**backscatter electron image of C-PC- Hg<sup>2+</sup> (SEM-EDX)

