

Electronic Supplementary Information (ESI)

Determination of mercury in aquatic systems by DGT device using thiol-modified carbon nanoparticles suspension as the liquid binding phase

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Table S1. Major cation concentrations, dissolved organic carbon (DOC) and pH value of the DongPu Reservoir water and Nanfei River water.

Measured parameters	Water samples	
	DongPu Reservoir water	Nanfei River water
[K ⁺]/mg L ⁻¹	2.48±0.02	17.90±0.07
[Ca ²⁺]/mg L ⁻¹	16.23±0.11	37.72±0.12
[Na ⁺]/mg L ⁻¹	9.61±0.07	63.88±0.60
[Mg ²⁺]/mg L ⁻¹	5.21±0.02	9.01±0.02
DOC	11.3±0.2	30.2±0.2
pH	7.3±0.2	7.5±0.1

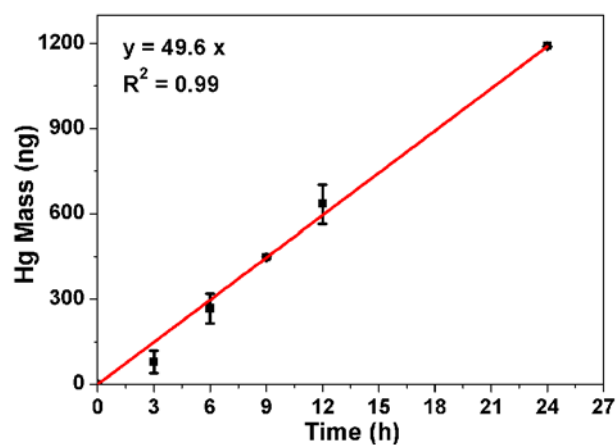


Fig. S1 Hg^{2+} accumulated mass vs. deployment time using SH-CNPs-DGT in Dongpu Reservoir water spiked with Hg^{2+} ($C_0=120 \mu\text{g L}^{-1}$). The red solid line is the linear regression used to calculate the diffusion coefficient. Mean values and ranges (bars) of triplicate measurements are given.