

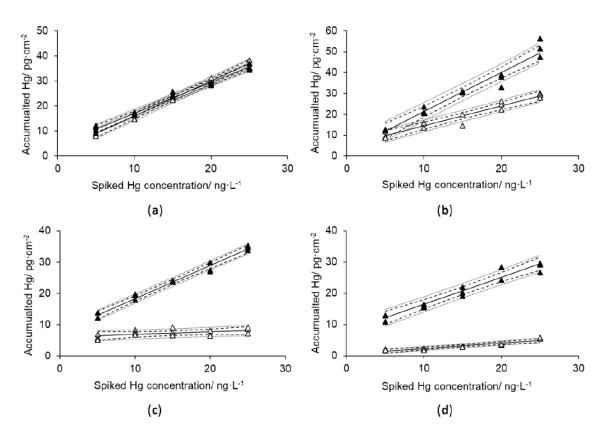


## Supplementary Materials

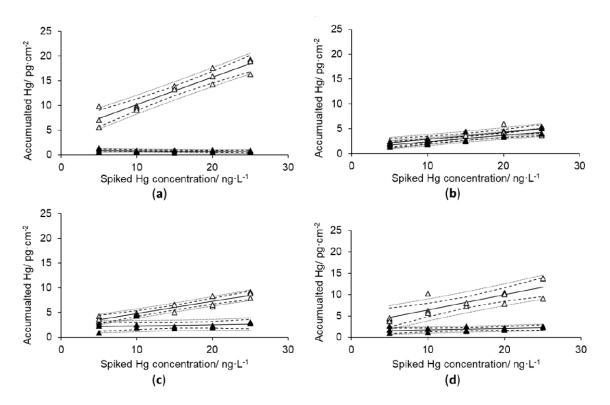
## Photoactive Titanium Dioxide Films with Embedded Gold Nanoparticles for Quantitative Determination of Mercury Traces in Humic Matter-Containing Freshwaters

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**Figure S1.** Accumulation of mercury traces onto new AuNP@TiO<sub>2</sub> dipstick (**a**) in absence and (**b**–**d**) in presence of different concentrations of DOC (**b**) 5 mg L<sup>-1</sup>, (**c**) 10 mg L<sup>-1</sup>, (**d**) 15 mg L<sup>-1</sup> DOC. Filled symbols represent experiments with UV irradiation and empty symbols without UV irradiation during accumulation. Solid lines represent linear regression, dashed lines represent confidence interval, and dotted grey lines represent prediction intervals with *P* = 95% and *n* = 15. (Sample volume: 8 mL; Accumulation time: 5 min; Shaking speed: 230 rpm; Active dipstick area: 1.53 cm<sup>2</sup>.).



**Figure S2.** Accumulation of mercury traces onto AuNP@SiO2 dipstick (**a**) in absence and (**b**–**d**) in presence of different concentrations of DOC (**b**) 5 mg L<sup>-1</sup>, (**c**) 10 mg L<sup>-1</sup>, (**d**) 15 mg L<sup>-1</sup> DOC. Filled symbols represent experiments with UV irradiation and empty symbols without UV irradiation during accumulation. Solid lines represent linear regression, dashed lines represent confidence interval, and dotted grey lines represent prediction intervals with *P* = 95% and *n* = 15. (Sample volume: 8 mL; Accumulation time: 5 min; Shaking speed: 230 rpm; Active dipstick area: 1.53 cm<sup>2</sup>.).



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