Analytical and Bioanalytical Chemistry

Electronic Supplementary Material

Optical microalgal biosensors for aqueous contaminants using organically doped silica as cellular hosts

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Fig. S1 Evolution of fluorescence spectra (λ_{exc} = 470 nm) with pollutant addition (10 µM) for *A. flos-aquae* suspensions: (a) overview, (b) with Cd^{2+}, (c) with Pb^{2+} and (d) with anthracene

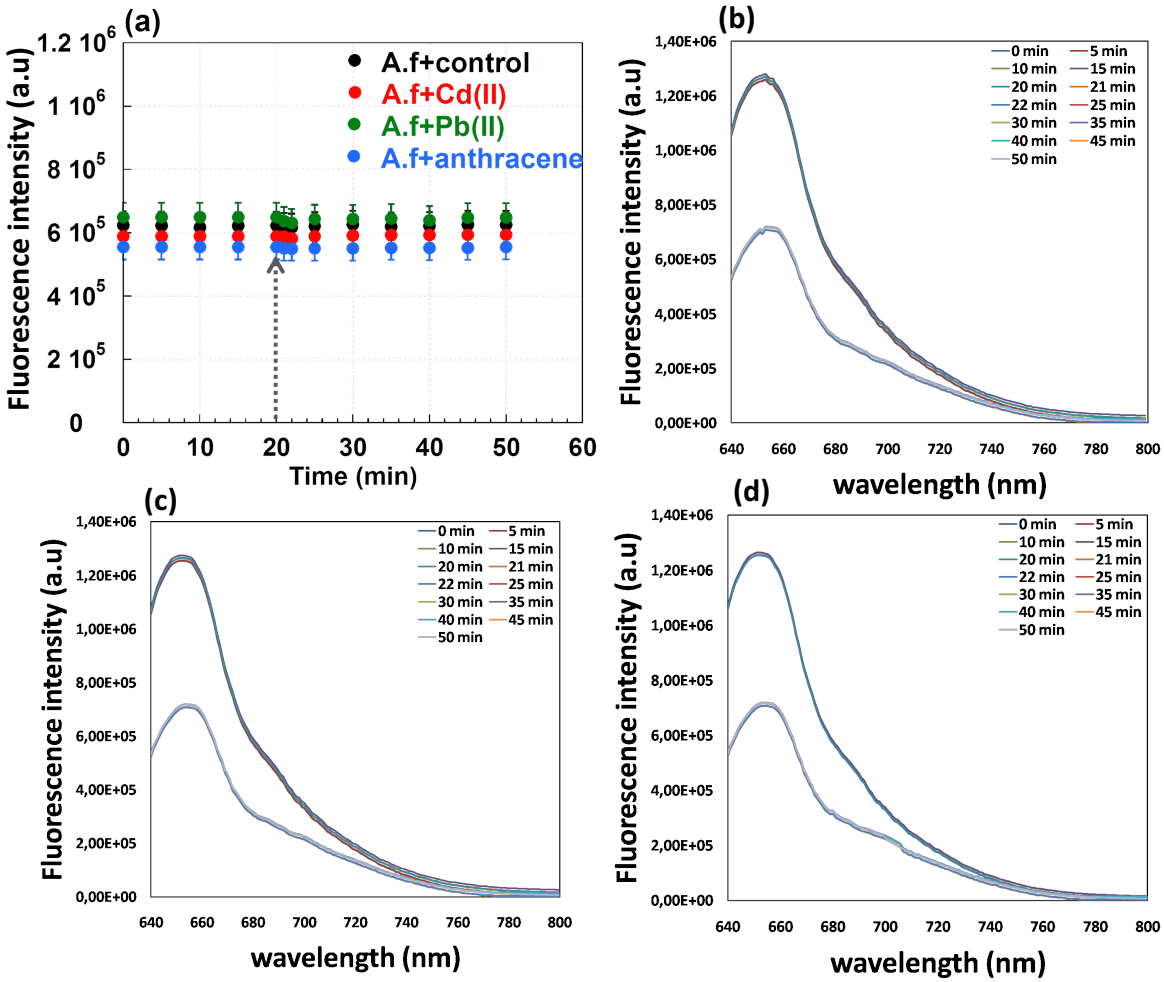

Fig. S2 Fluorescence inhibition of cells suspension at low pollutant doses for (a) *A. flos-aquae*, (b) *C. vulgaris* and (c) *E. gracilis*

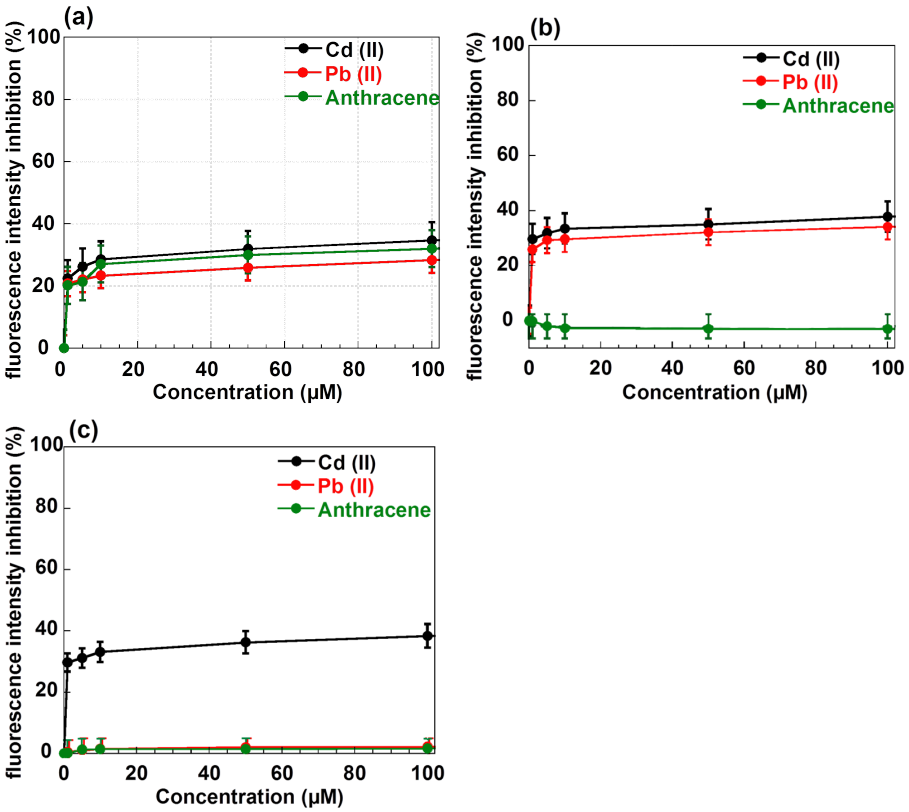

Fig. S3 Evolution of fluorescence spectra (λ_{exc} = 470 nm) with pollutant addition (10 µM) for *A. flos-aquae* in selected conditions: (a) pure silica gel with added Cd^{2+}, (b) pure silica gel with added anthracene (c) ETES-modified gel with added Cd^{2+} and (d) APTMS-modified gel with added anthracene

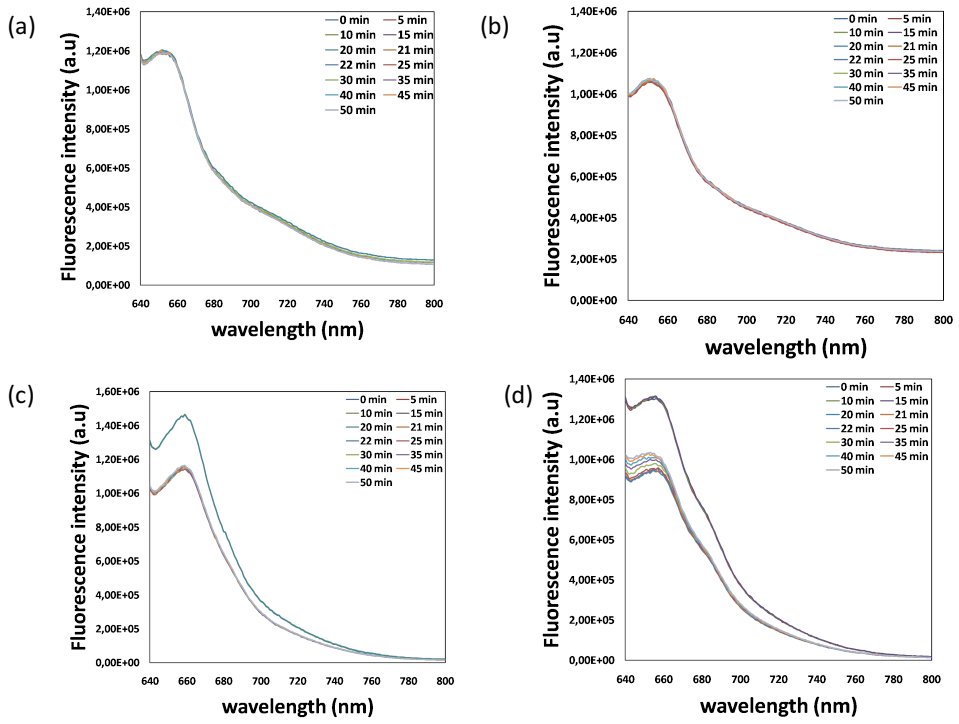

Fig. S4 ATP-metry studies of cells encapsulated in (top line) APTMS and (bottom line) ETES-modified hybrid silica gels in the presence of pollutants