

Electronic supplementary information

The First Fluorescent Sensor for Medium-chain Fatty Acids in Water: Design, Synthesis and Sensing Properties of an Organic-inorganic Hybrid Material

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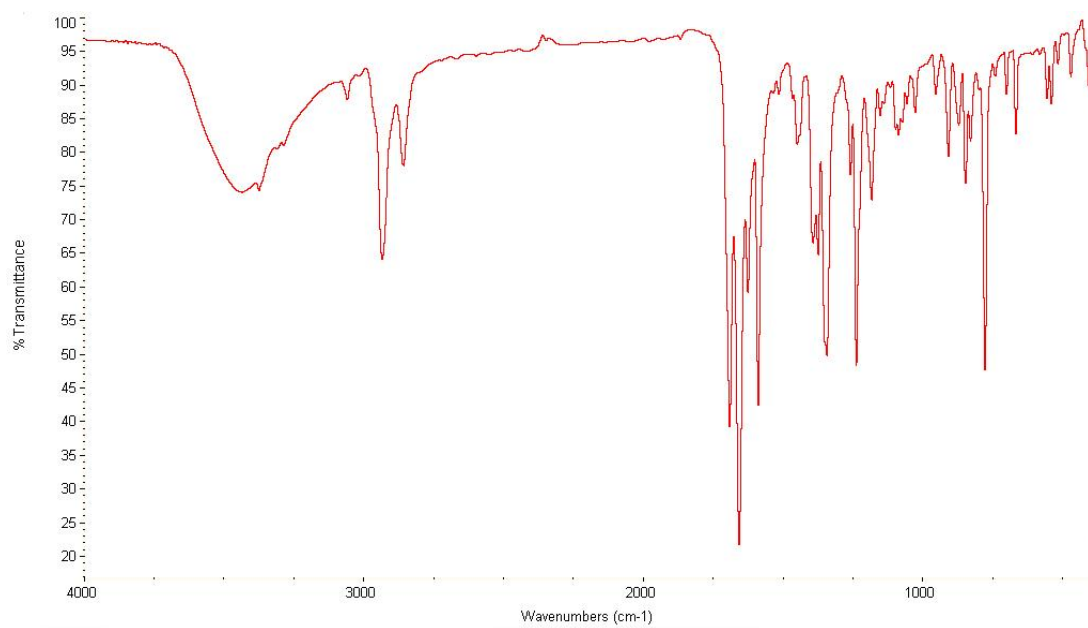


Figure S1. The FT-IR spectrum of compound **3**.

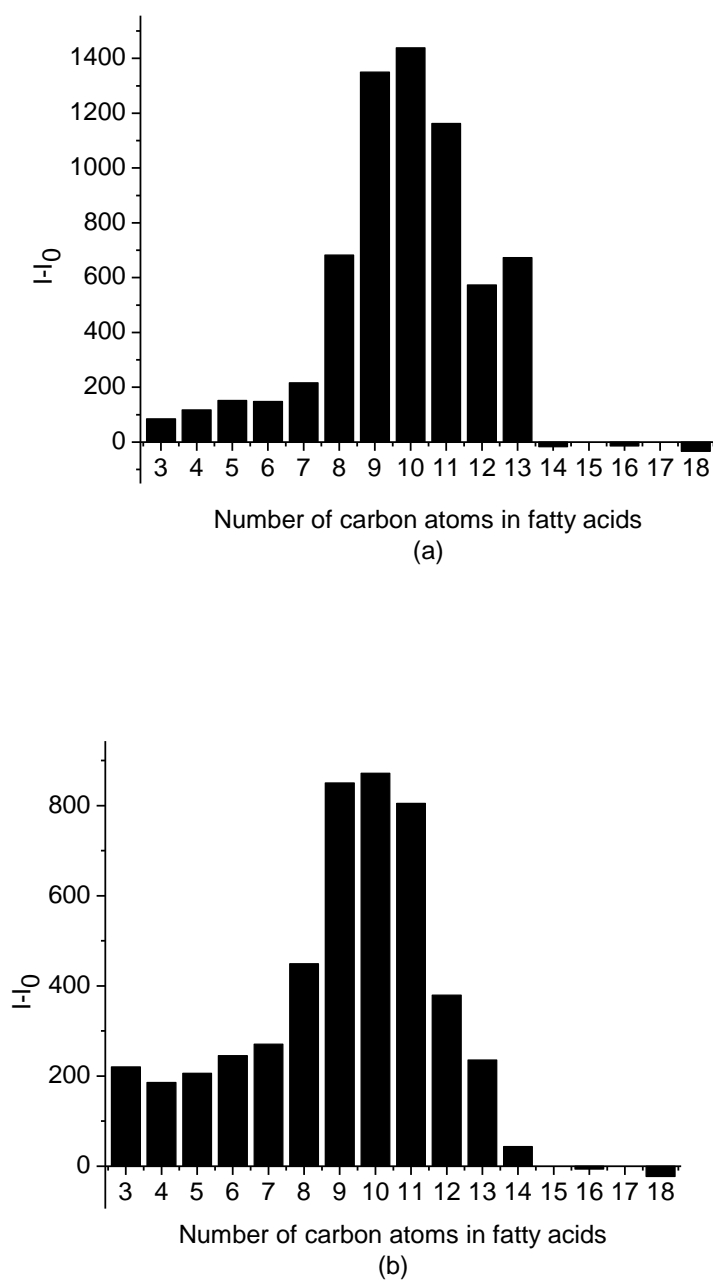


Figure S2. Normalized fluorescence response $I-I_0$ of solid **S2** (200 mg L^{-1} , 2.00 mL) in aqueous buffer solution at (a) pH 5.80 in the presence of various fatty acids ($1.0 \times 10^{-1} \text{ mol L}^{-1}$, $800 \text{ }\mu\text{L}$), and (b) pH 8.00 in the presence of various fatty acids ($1.0 \times 10^{-1} \text{ mol L}^{-1}$, $550 \text{ }\mu\text{L}$). $\lambda_{\text{ex}} = 416 \text{ nm}$. I_0 corresponds to the emission of solid **S2** without aliphatic acids.

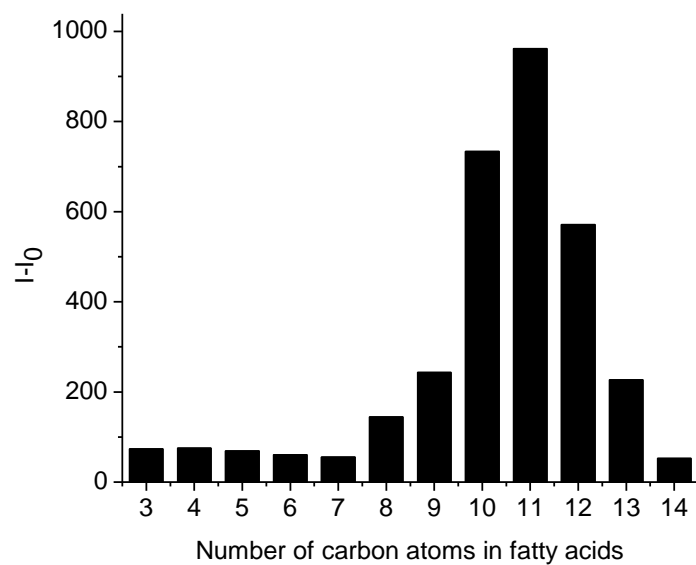


Figure S3. Normalized fluorescence response $I-I_0$ of solid **S2** (200 mg L^{-1} , 2.00 mL) in aqueous buffer solution at pH 7.16 in the presence of various fatty acids with benzoic acid together ($1.0 \times 10^{-1} \text{ mol L}^{-1}$, $150 \text{ }\mu\text{L}$ for both). $\lambda_{\text{ex}} = 416 \text{ nm}$.