

## Electronic supplementary information

### Synthesis of Hybrid Silica Nanoparticles Grafted with Thermoresponsive Poly(ethylene glycol) methyl ether methacrylate via AGET-ATRP

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#### Content:

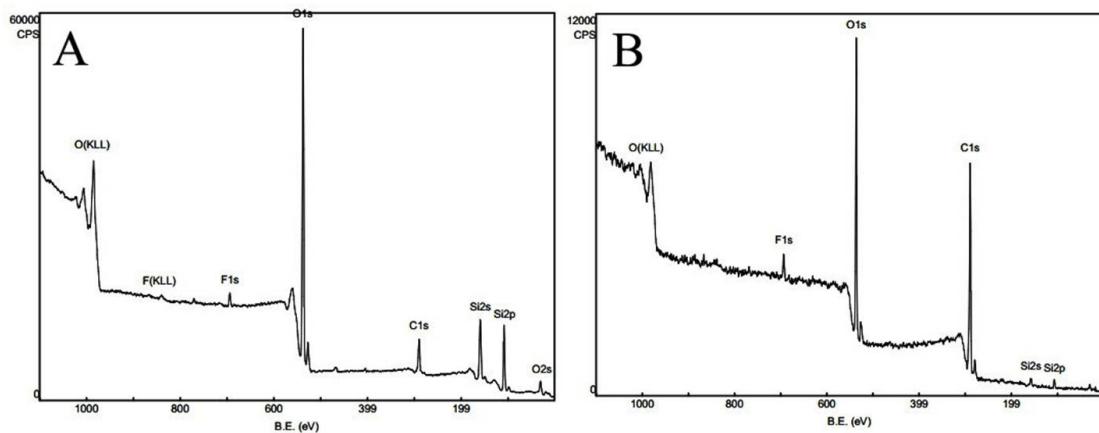
**Figure S1:** XPS spectra of A: wide scan of the bare SiO<sub>2</sub>, B: wide scan of SiO<sub>2</sub>-POEGMA<sub>500</sub>.

**Table S1:** Elementary composition of the bare SiO<sub>2</sub>.

**Table S2:** Elementary composition of the SiO<sub>2</sub>-POEGMA<sub>500</sub>.

**Figure S2:** <sup>1</sup>H NMR spectrum of the polymer POEGMA<sub>500</sub>

**Figure S3:** Microscopic image of the reemulsification of pickering emulsion.



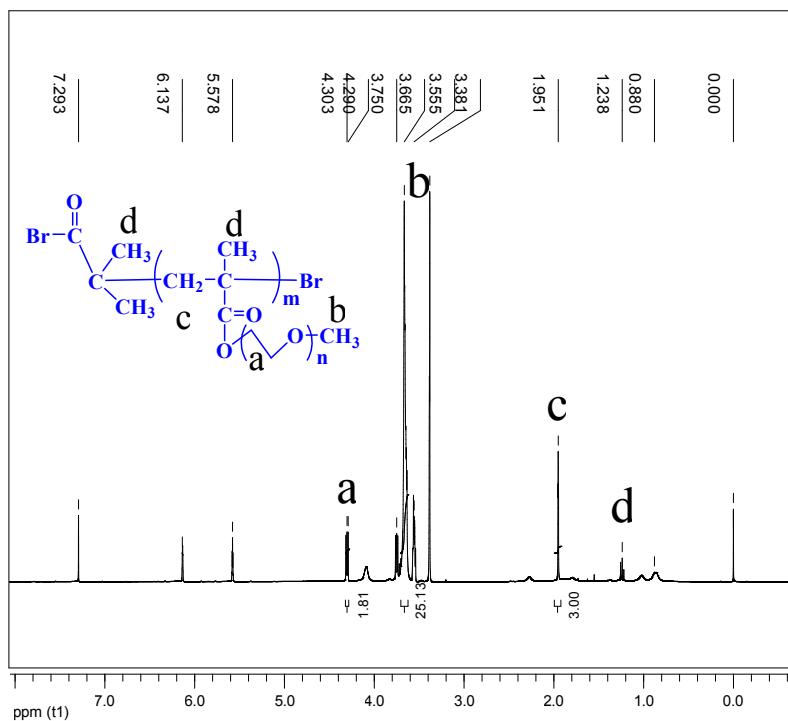
**Figure S1.** XPS spectra of A: wide scan of the bare  $\text{SiO}_2$ , B: wide scan of  $\text{SiO}_2\text{-POEGMA}_{500}$ .

**Table S1** Elementary composition of the bare  $\text{SiO}_2$

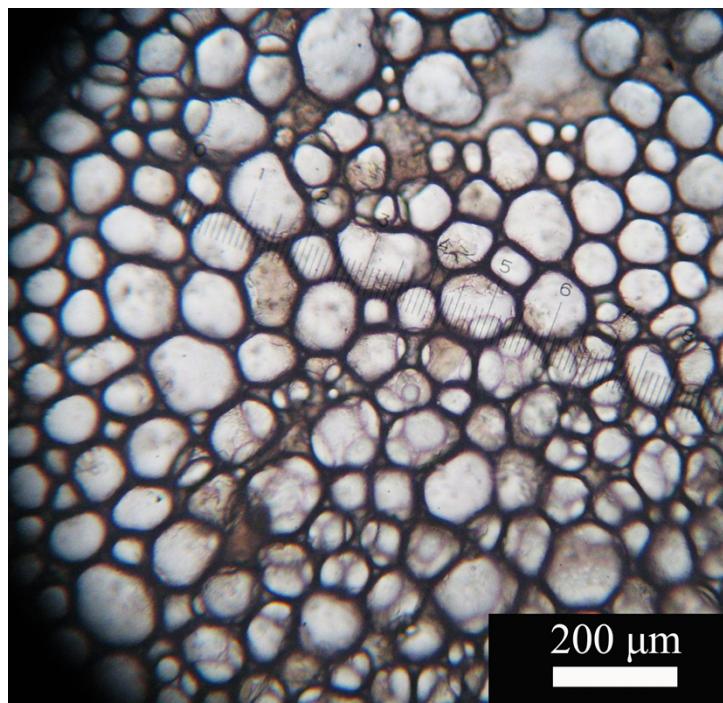
Element	CPS	S.F.	At%
F	2206.8	1	1.46
O	63379	0.66	63.59
Si	13191.7	0.25	34.94

**Table S2** Elementary composition of the  $\text{SiO}_2\text{-POEGMA}_{500}$

Element	CPS	S.F.	At%
F	662.1	1	1.48
O	8937.4	0.66	30.34
Si	300.6	0.29	2.32
C	7347.1	0.25	65.85



**Figure S2:**  $^1\text{H}$  NMR spectrum of the polymer POEGMA<sub>500</sub>



**Figure S3.** Microscopic image of the reemulsification of pickering emulsion.