

Cerium Oxide Encapsulation by Emulsion Polymerization Using Hydrophilic MacroRAFT Agents

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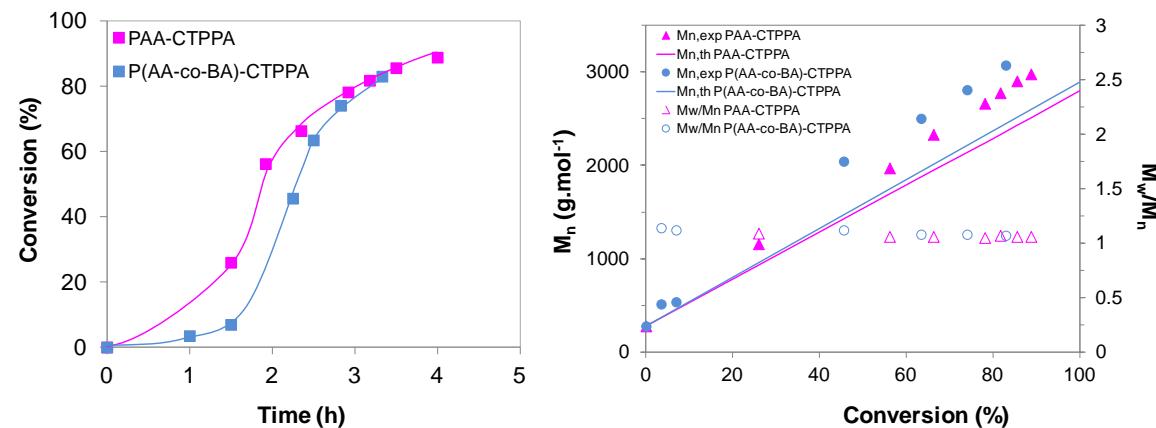


Figure S1: Evolution of a) monomer conversion versus time and b) number-average molar mass M_n (full symbols) and $D = M_w/M_n$ (open symbols) versus conversion (straight lines are the theoretical evolution of molar masses with conversion) for RAFT polymerizations of AA and AA/BA (50/50 mol/mol) carried out with CTPPA as control agent. See the Experimental Section for detailed conditions.

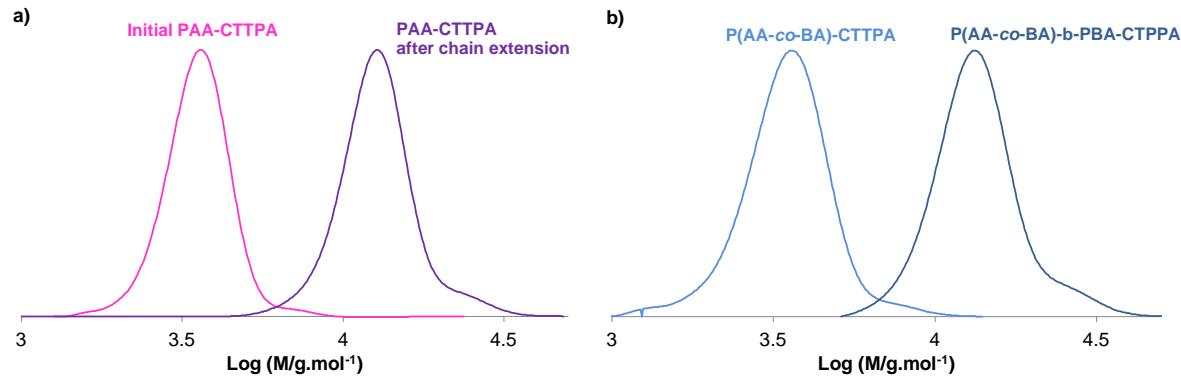


Figure S2: Size exclusion chromatograms from chain extensions experiments. a) Polymerization of AA from PAA₃₈-CTPPA macroRAFT agent. b) Polymerization of BA from P(AA₁₁-*co*-BA₁₁)-CTPPA. Both polymerizations were performed at 70°C in 1,4-dioxane using ACPA as initiator.

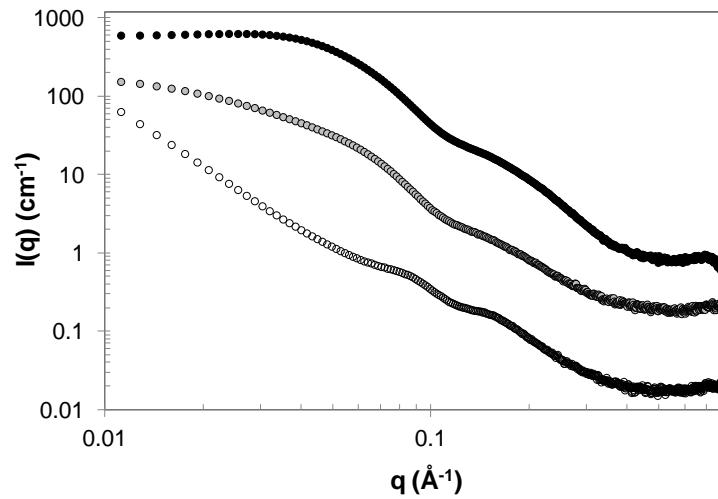


Figure S3: Small-angle X-ray scattering intensity profiles of CeO₂ nanoclusters (black circles), CeO₂/PAA₃₈-CTPPA (gray circles) and CeO₂/P(AA₁₁-*co*-BA₁₁)-CTPPA (open circles). For clarity, intensity values obtained for CeO₂ clusters and CeO₂/PAA₃₈-CTPPA have been multiplied by 10.

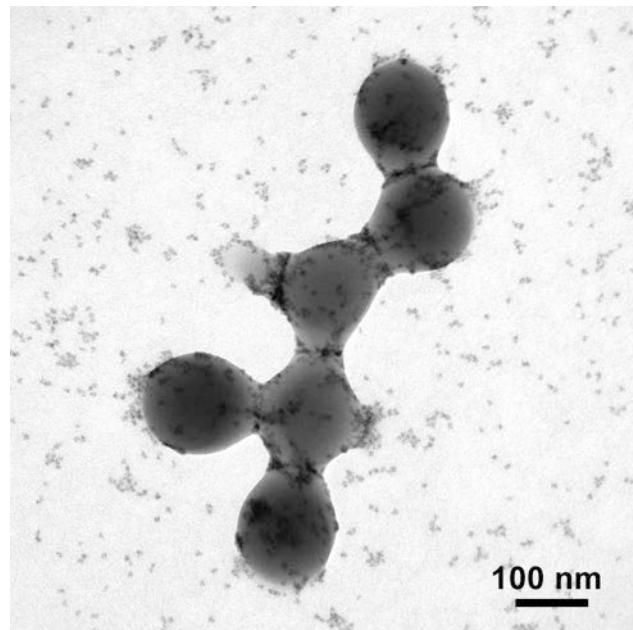


Figure S4: TEM image of the latex prepared from PAA_{38} -CTPPA-coated CeO_2 nanoclusters (Latex 1). The suspension was deposited on a carbon/formvar-coated copper grid and allowed to evaporate.