

Electronic Supplementary Information for:

Controlled radical polymerization of styrene with magnetic iron oxides prepared through hydrothermal, bioinspired, and bacterial processes

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Figure S1. MWD curves for the poly(MMA)s

Figure S2. MWD curves for the polystyrenes obtained in the monomer addition experiment

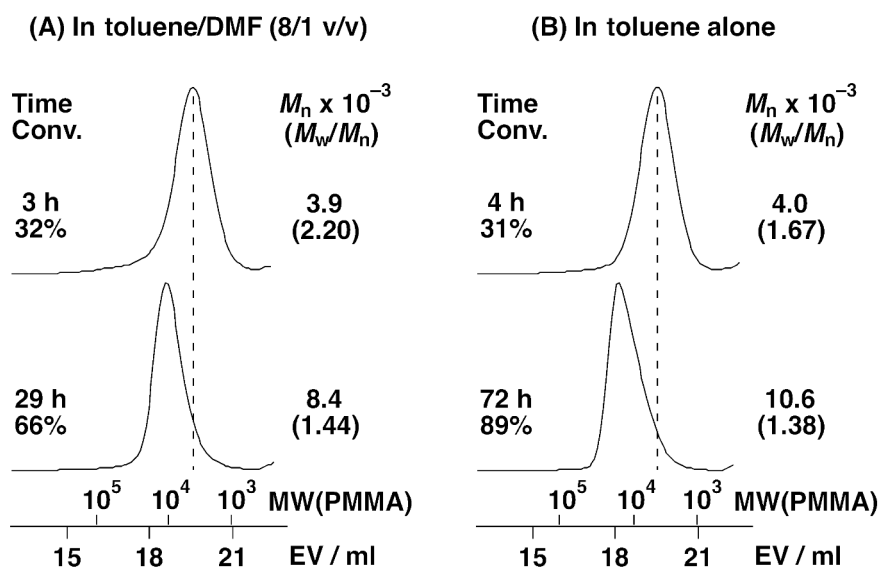


Figure S1. MWD curves for the poly(MMA)s: $[MMA]_0 = 4.0$ M, $[EBPA]_0 = 40$ mM, $[Fe_3O_4]_0/[EBPA]_0 = 2$, $[Ph_3P]_0 = 20$ mM, in (A) toluene/DMF (8/1 v/v; entry 15 in Table 1) or (B) toluene alone (entry 16 in Table 1) at 80 °C.

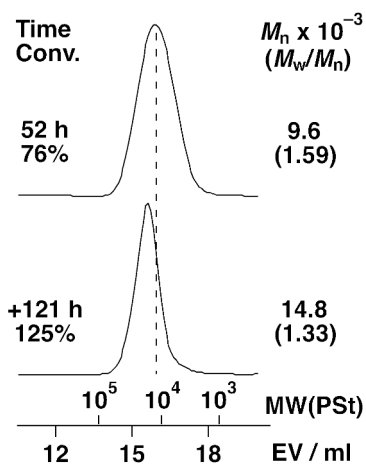


Figure S2. MWD curves for the polystyrenes obtained in the monomer addition experiment using Fe_3O_4 prepared through hydrothermal synthesis: $[styrene]_0 = 4.0$ M, $[styrene]_{added} = 4.0$ M, $[EBPA]_0 = 40$ mM, $[Fe_3O_4]_0/[EBPA]_0 = 2$, $[Ph_3P]_0 = 20$ mM, in toluene/DMF (8/1 v/v) at 80 °C.

Note for Figure S2: The polymerization rate gradually became smaller. The decrease of the stirring efficiency due to the increased viscosity may be partly responsible for the deceleration. In particular, stirring stopped after the monomer conversion reached approximately 120%.