Supplementary information

RAFT polymerization of Bromotyramine-based 4-acryloyl-1,2,3-triazole: A Functional Monomers and Polymers Family through Click Chemistry.

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Figure 1. 1H-NMR spectra of (a) 4-ATri 4a in CDCl3, (b) its purified homopolymer (4-ATri 4a) in CDCl3
Figure 2. $^1$H-NMR spectra of (a) 4-ATri 4c in CDCl$_3$, (b) its purified homopolymer (4-ATri 4c) in CDCl$_3$. 

Figure 3. $^1$H-NMR spectra of (a) 4-ATri 4d in CDCl$_3$, (b) its purified homopolymer (4-ATri 4d) in CDCl$_3$. 

\[ \text{Diagram} \]
Figure 4. Monomer conversion vs time. Homopolymerizations of triazole acrylate 4-ATri 4b using CMDT as CTA. CMDT/AIBN molar ratio of 10/1. DMSO-d$_6$ at 70°C (▲), DMSO-d$_6$ at 60°C (■), DMF-d$_7$ at 70°C (○), DMF-d$_7$ at 60°C (●) and DMSO-d$_6$ with absence of CMDT at 70°C (×).

Figure 5. Monomer conversion vs time. Homopolymerizations of triazole acrylate 4-ATri 4b at 60°C. CTA/AIBN molar ratio of 10/1 in DMSO-d$_6$ using CMDT(■) and DDMAT (●) as CTA.
Figure 6. Monomer conversion vs time. Homopolymerizations of triazole acrylates. CDMT/AIBN molar ratio of 10/1 at 60°C in DMSO-d$_6$. 4-ATri 4a (▲), 4-ATri 4b (■), 4-ATri 4c (○) and 4-ATri 4d (●).

Figure 7. Evolution of $M_n^\text{NMR}(t)$ vs monomer conversion during the RAFT polymerization of 4-ATri 4a (▲) at 60°C in DMSO-d$_6$. 
Figure 8. Evolution of $M_n^{\text{NMR}}(t)$ vs monomer conversion during the RAFT polymerization of 4-ATri 4c (o) at 60°C in DMSO-d$_6$.

Figure 9. Evolution of $M_n^{\text{NMR}}(t)$ vs monomer conversion during the RAFT polymerization of 4-ATri 4d (●) at 60°C in DMSO-d$_6$. 
Figure 10. DCS thermograms of (a) $p$(4-ATri 4a), (b) $p$(4-ATri 4b), (c) $p$(4-ATri 4c) and (d) $p$(4-ATri 4d).

Figure 11. TGA traces of (a) $p$(4-ATri 4a), (b) $p$(4-ATri 4b), (c) $p$(4-ATri 4c) and (d) $p$(4-ATri 4d) under nitrogen at a heating rate of 10 °C/min.
Figure 12. TGA weight loss derivative as a function of temperature for (a) p(4-ATri 4a), (b) p(4-ATri 4b), (c) p(4-ATri 4c) and (d) p(4-ATri 4d) under nitrogen at a heating rate of 10 °C/min.