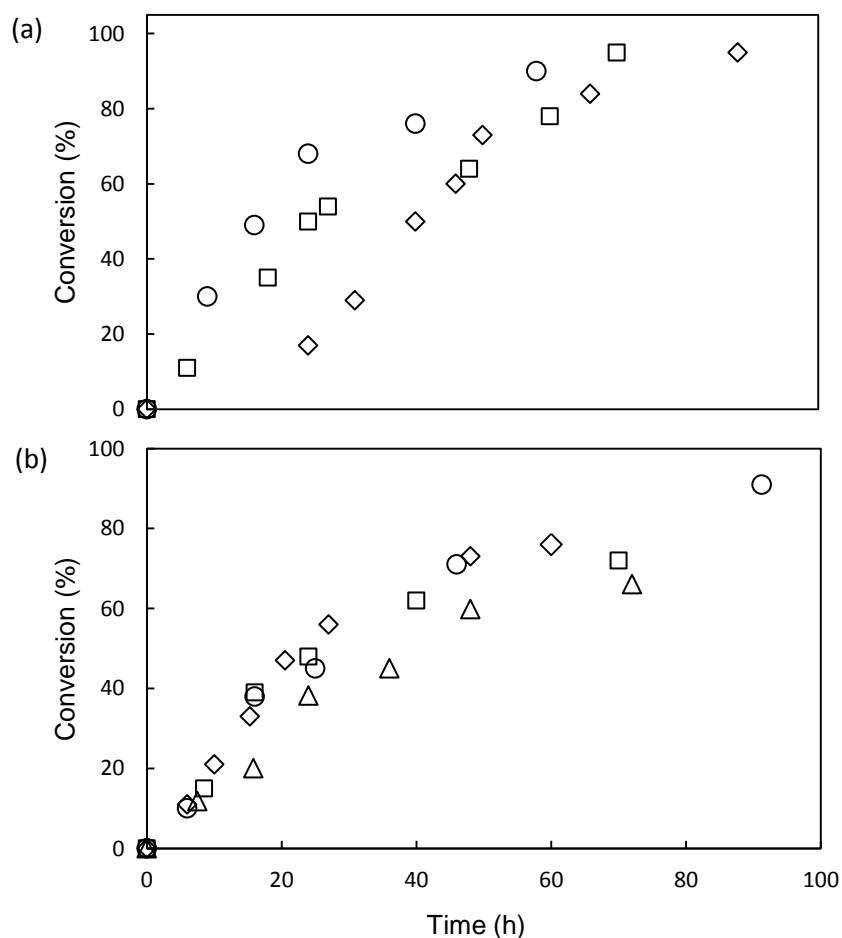


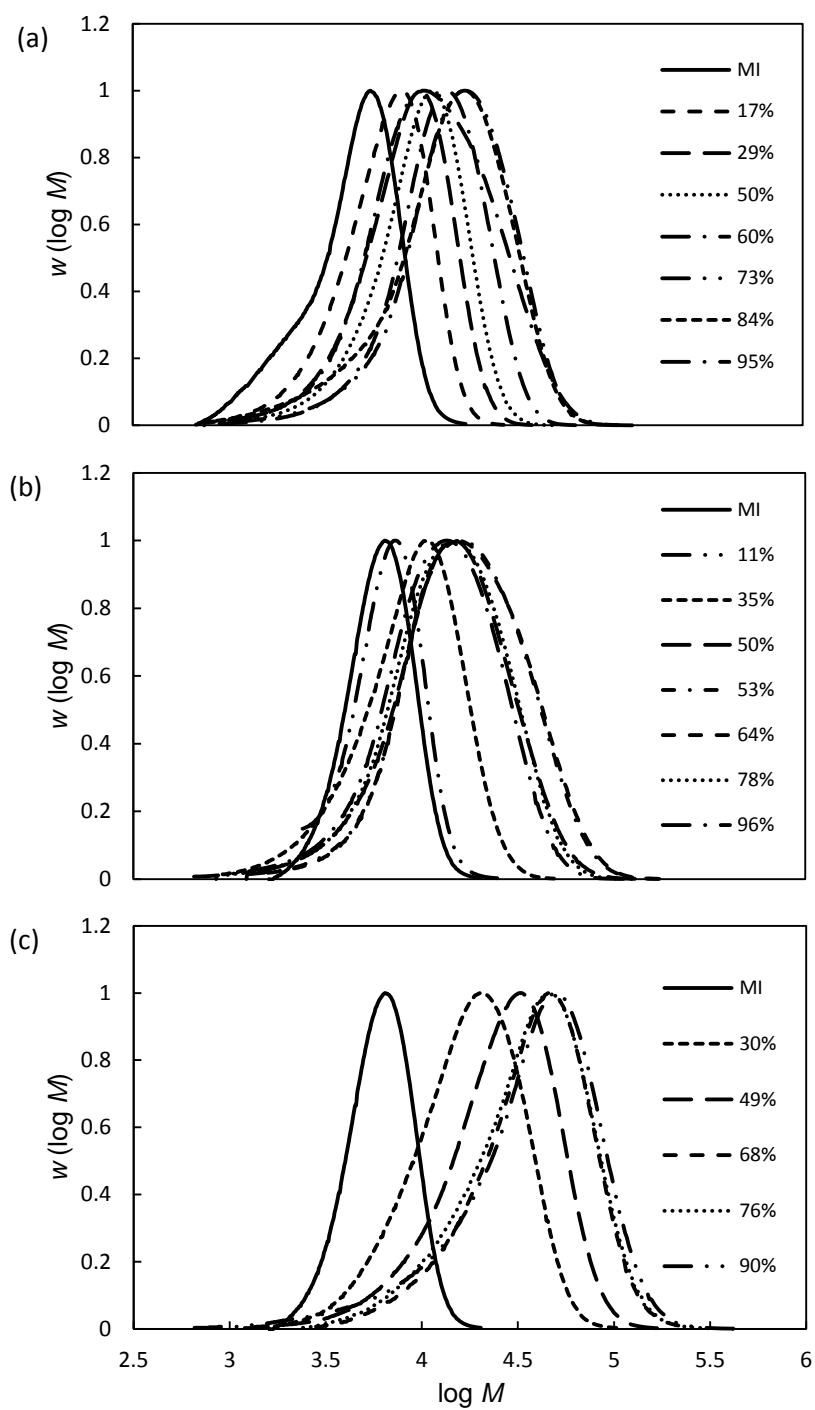
# Chain transfer to solvent in the radical polymerization of structurally diverse acrylamide monomers using straight-chain and branched alcohols as solvents

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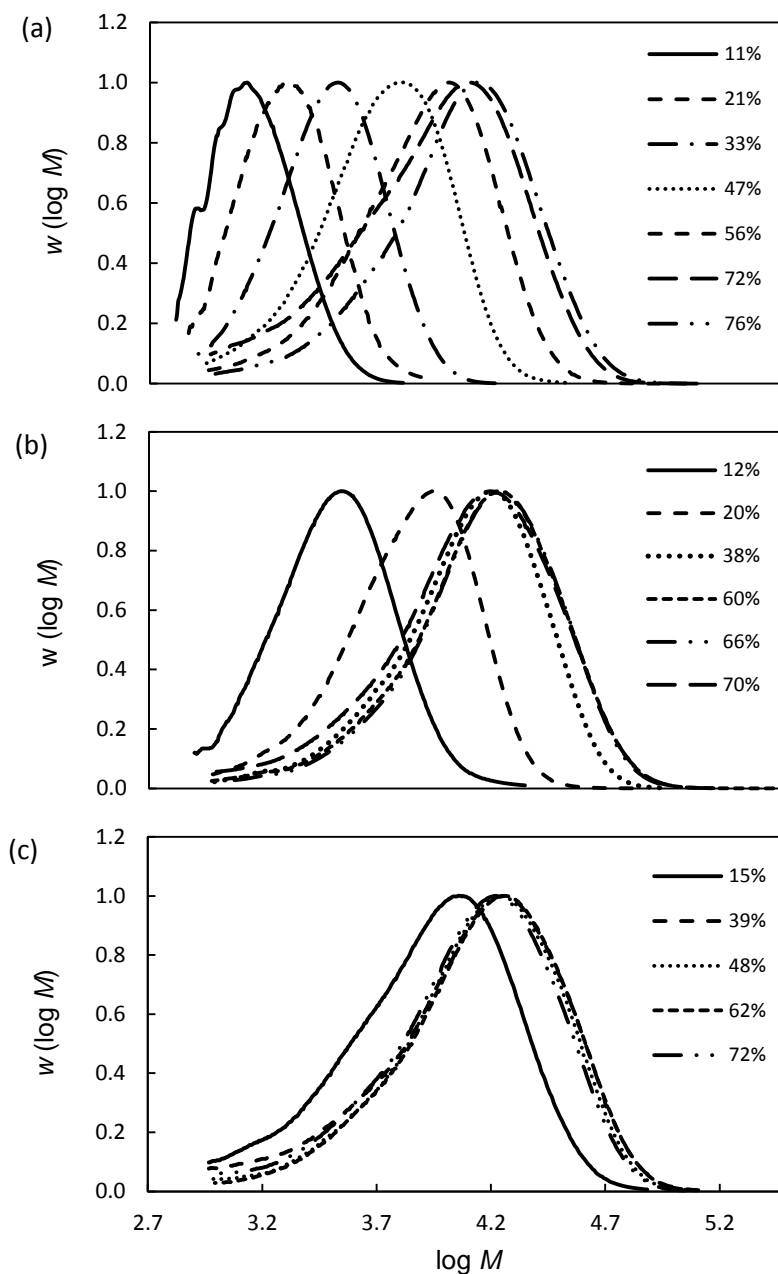
## Supplementary Data



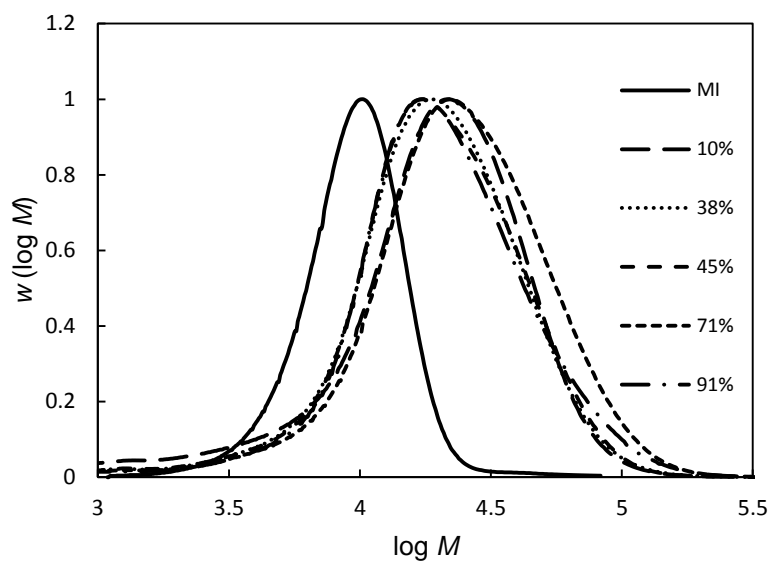
**Figure S1.** Conversion versus time for NMP of 2 M TBAM and MEA at 120 °C: Where (a) are polymerizations of TBAM initiated by poly(*t*-BA)-SG1, where  $[TBAM]_0/[poly(t-BA)-SG1]_0 = 300$ , and in the presence of 25 mol % free SG1 in 1-propanol ( $\diamond$ ), 1-hexanol ( $\square$ ) and 3-methyl-3-pentanol ( $\circ$ ), and (b) polymerizations of MEA using the bimolecular system of  $[SG1]_0/[AIBN]_0 = 2.5$  and  $[MEA]_0/[AIBN]_0 = 222$ , 444 in 1-propanol, and  $[MEA]_0/[AIBN]_0 = 444$  in 1-hexanol ( $\square$ ), and poly(*t*-BA)-SG1-initiated system with 25 mol % free SG1 and  $[MEA]_0/[poly(t-BA)-SG1]_0 = 300$  in 3-methyl-3-pentanol ( $\circ$ ).



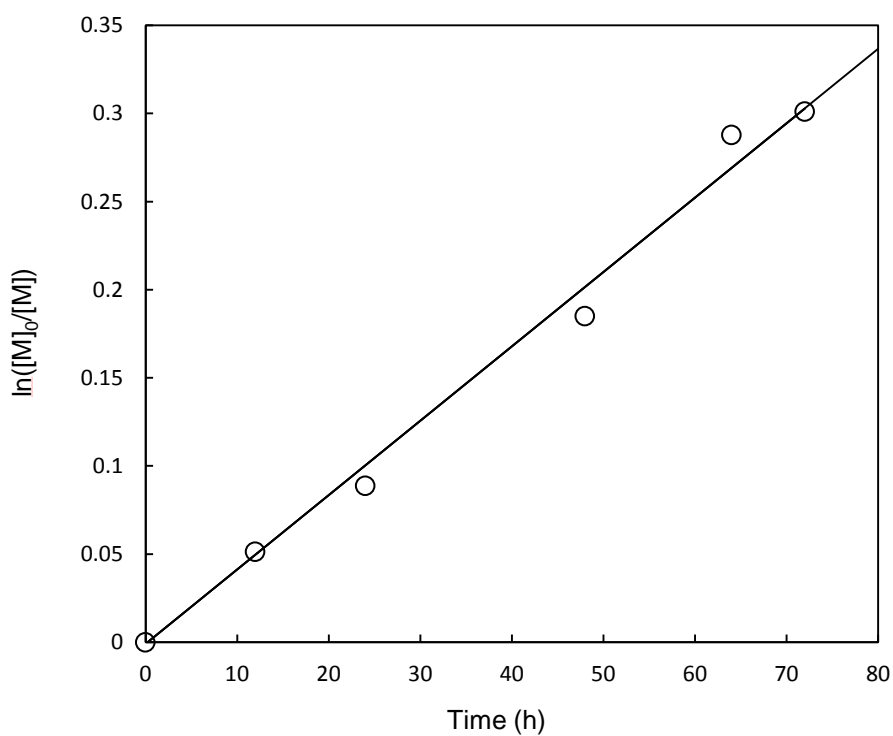
**Figure S2.** MWDs for poly(*t*-BA)-SG1-initiated NMP of 2M TBAM with 25 mol% excess free SG1 and  $[TBAM]_0/[poly(t-BA)-SG1]_0 = 300$  in (a) 1-propanol, (b) 1-hexanol and (c) 3-methyl-3-pentanol at 120 °C.



**Figure S3.** MWDs for NMP of 2 M MEA at 120 °C using  $[SG1]_0/[AIBN]_0 = 2.5$  and (a)  $[MEA]_0/[AIBN]_0 = 222$  in 1-propanol (b)  $[MEA]_0/[AIBN]_0 = 444$  in 1-propanol (c)  $[MEA]_0/[AIBN]_0 = 444$  in 1-hexanol.



**Figure S4.** MWDs for poly(*t*-BA)-SG1-initiated NMP of 2 M MEA with 25 mol% excess free SG1 and  $[MEA]_0/[poly(t-Bu)-SG1]_0 = 300$  in 3-methyl-3-pentanol at 120 °C.



**Figure S5.** First-order plot of the spontaneous polymerization (in the absence of initiator or nitroxide) of 2 M MEA in 1-propanol at 120 °C