Figure S1. Loss tangent versus temperature obtained from dynamic mechanical analysis (DMA) for fully cured BTT-TCDDA networks with different thiol-acrylate stoichiometry \((R = (\text{SH})_0/(\text{C=C})_0)\). With decreasing \(R\), \(T_g\) and the breadth of the transition increases.
Figure S2. Simulation of the variation of the spectral second moment ($M_2$) for different pre-exponential correlation time, $\tau_0$, assuming the Arrhenius temperate dependence shown in Eqn. 2 as a function of (a) temperature and (b) the reduced temperature. The activation energy, $E_a$, was held constant at 33 kJ/mol.
Figure S3. Simulated probability distribution assuming (a) a Gaussian distribution (Eqn. A8) of the activation energy $E_a$ for different distribution widths $\sigma$ (b) the corresponding correlation time $\tau$ distribution using Arrhenius relationship (Eqn. 2), and (c) a Davidson-Cole distribution with the characteristic correlation time $\tau_z$ and the distribution parameter $\varepsilon$ (Eqn. A9). Simulations obtained assuming a mean $E_a = 31$ kJ/mol, $\tau_0 = 0.5905$ ns and $T = 423$ K.
Figure S4. Correlation between thiol-acrylate stoichiometry ($R = (\text{SH})_0/(\text{C} = \text{C})_0$) and (a) activation energy ($E_a$) and (b) the natural log of the pre-exponential correlation time ($\tau_0$) obtained from the analysis of the Arrhenius temperature behavior in Figure 11.