Morphology and diffusion of ionic PDMS melts

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S1 Mean square displacement of Br anions
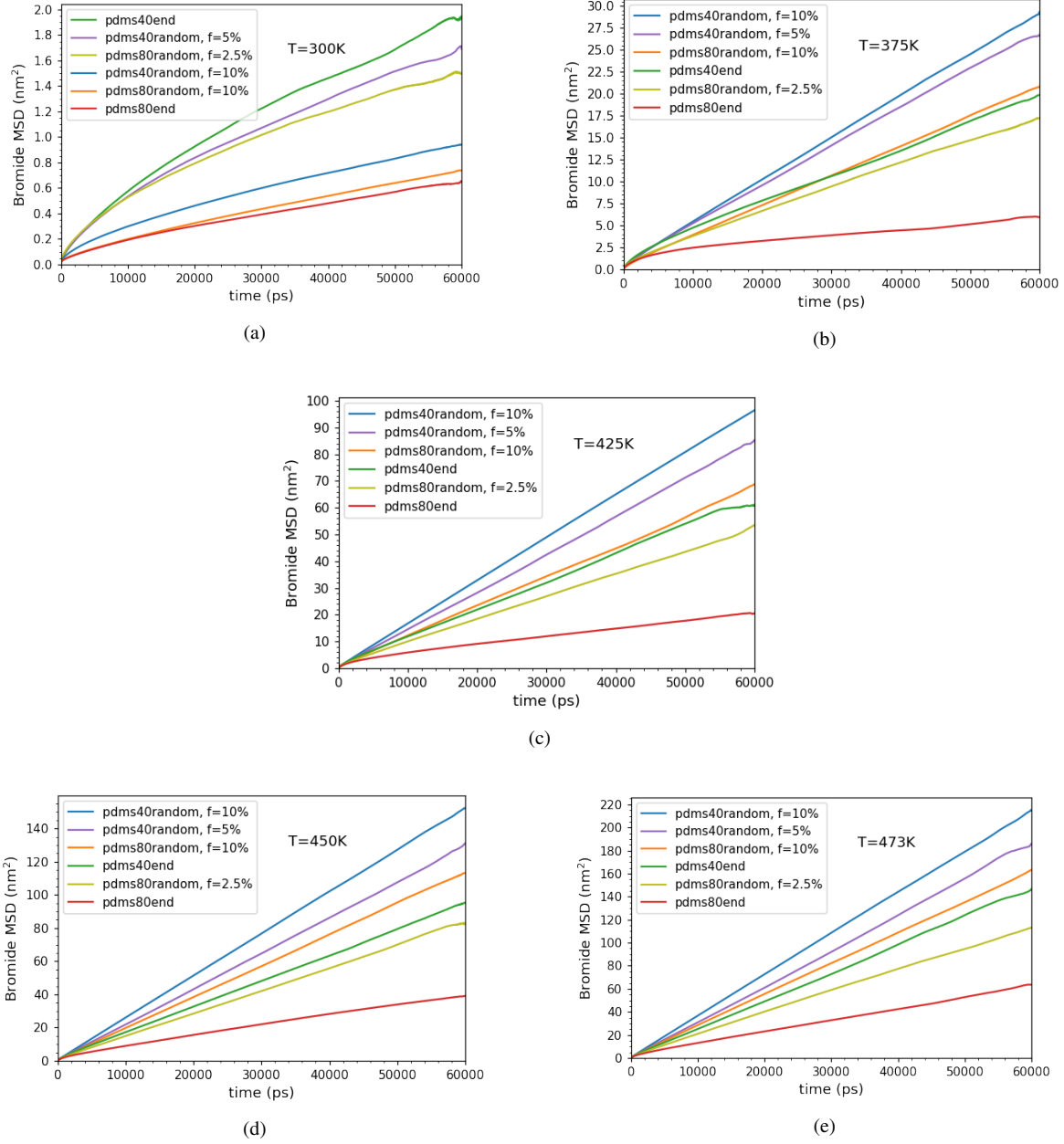

Figure S1: Mean square displacement versus time of Br^- anions in differently functionalized ionic PDMS melts, at **(a)** $T = 300$ K, **(b)** $T = 375$ K, **(c)** $T = 425$ K, **(d)** $T = 450$ K, and **(e)** $T = 473$ K
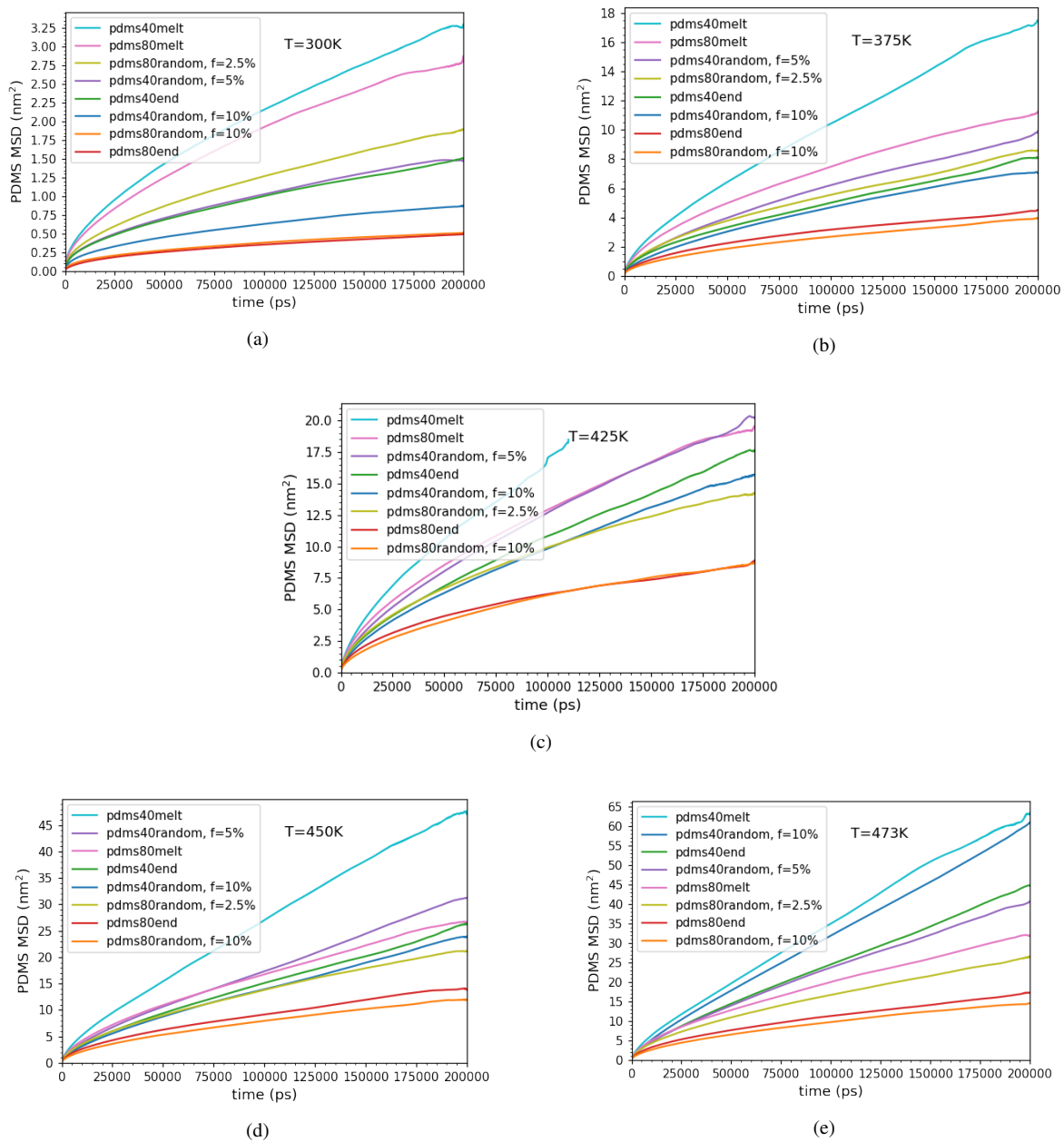
S2 Mean square displacement of PDMS chains

Figure S2: Mean square displacement versus time for differently functionalized PDMS melts at **(a)** $T = 300$ K, **(b)** $T = 375$ K, **(c)** $T = 425$ K **(d)** $T = 450$ K, and **(e)** $T = 473$ K.
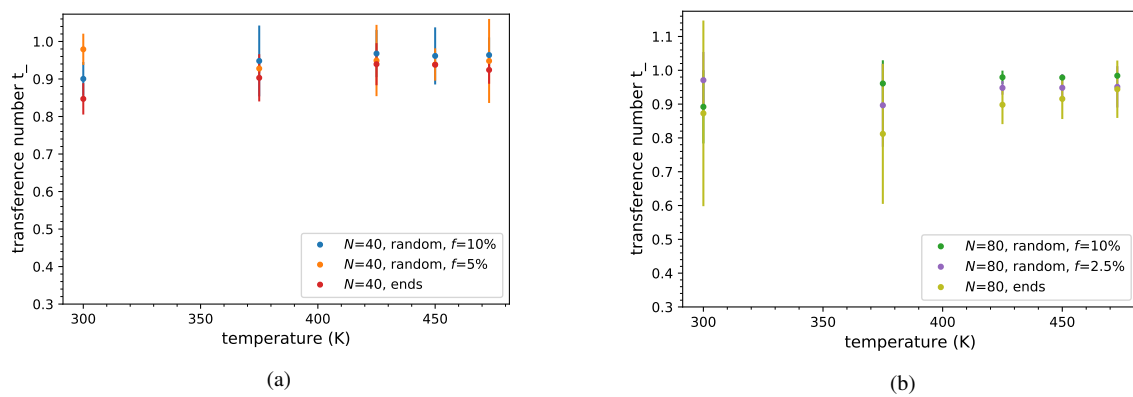
S3   Apparent transference number

(a)

(b)

Figure S3: Apparent transference number t_- versus temperature T of PDMS chains end- and randomly grafted functionalized PDMS chains,**(a)** $N = 40$ K, **(b)** $N = 80$ K.