Electronic Supplementary Material (ESI) for Soft Matter

Construction of Highly Viscoelastic Anionic Wormlike Micellar Solutions by Carboxylate Gemini Surfactant with A *p*-Dibenzenediol Spacer

Danhua Xie, Jianxi Zhao*, Yi You

Institute of Colloid and Interface Chemistry, College of Chemistry and Chemical Engineering,

Fuzhou University, Fuzhou, Fujian, 350108, China

S1 Intensity-fraction distributions of 12-azo-12

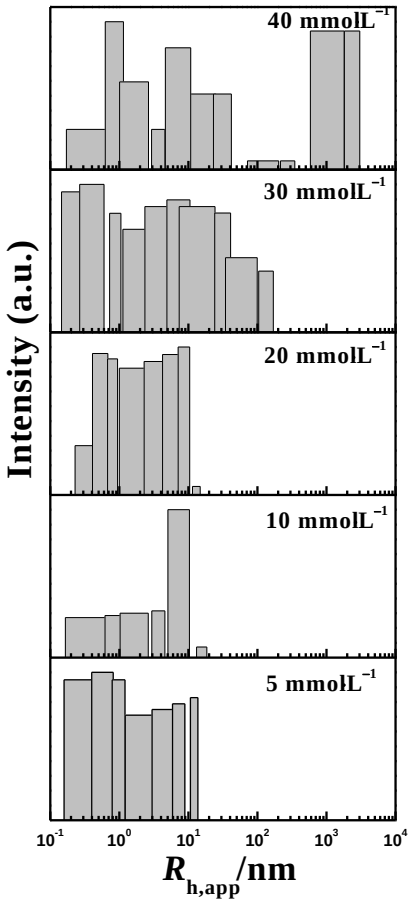

Figure S1 Intensity-fraction distributions measured at a detector angle θ = 90° and analyzed by CONTIN model for 12-azo-12 at different concentrations

S2 The time correlation functions

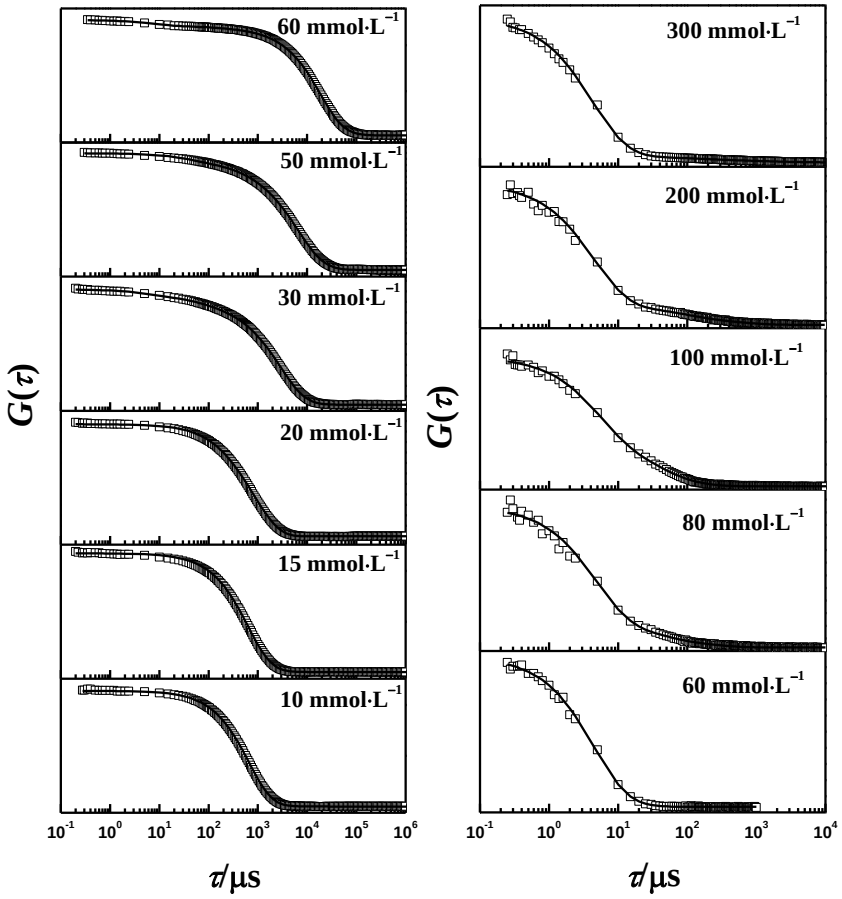

Figure S2 Time correlation functions of intensity for different concentrations of $C_{12}\phi_2C_{12}$ (left row) and $C_{12}\phi C_{12}$ (right row) in the aqueous solution at the detector angle θ = 90°, the solid lines express the fitting results according to CONTIN model

S3 Dynamic rheological spectra

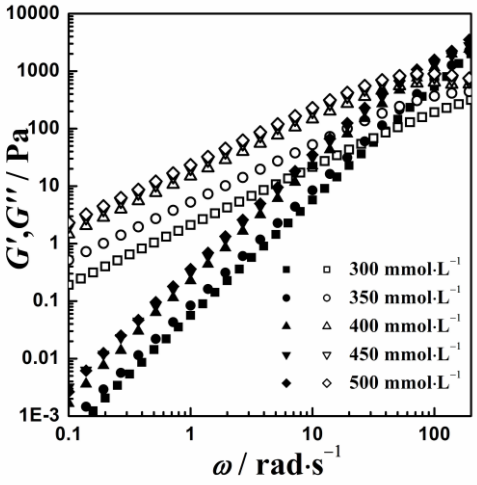

Figure S3 Variation of *G*' (filled symbols), *G*'' (open symbols) with sweep frequency ω for

$C_{12}\phi C_{12}$ aqueous solutions at different concentrations

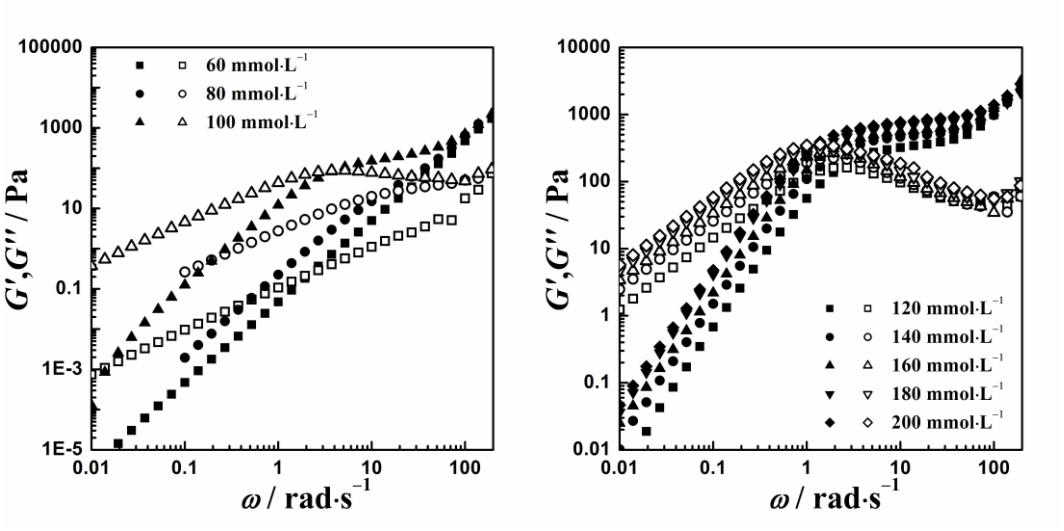

Figure S4 Variation of *G*' (filled symbols), *G*'' (open symbols) with sweep frequency ω for $C_{12}\phi_2C_{12}$ aqueous solutions at different concentrations

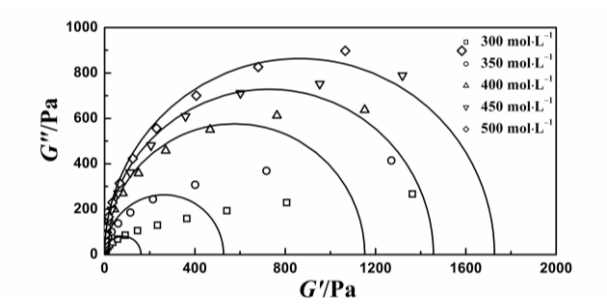

Figure S5 The Cole-Cole plots for $C_{12}\phi C_{12}$ aqueous solutions at different concentrations

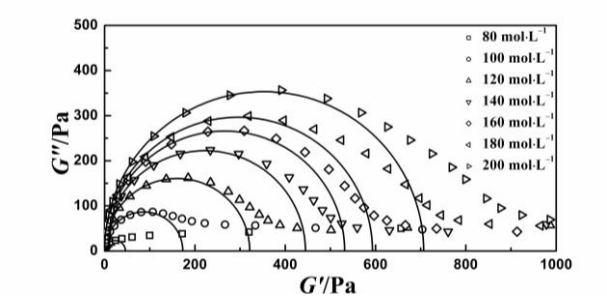

Figure S6 The Cole-Cole plots for $C_{12}\phi_2C_{12}$ aqueous solutions at different concentrations