Electronic Supplementary Material

Interfacial mechanism of hydrogel with controllable thickness for stable drag reduction

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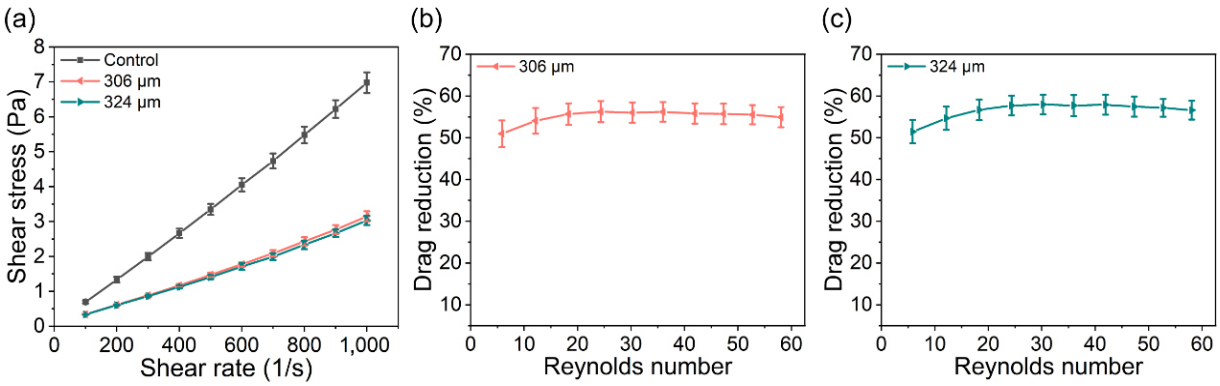

Fig. S1 (a) Shear stress on the surface of poly(acrylic acid)-poly(acrylamide) (PAA–PAM) hydrogel coatings with thicknesses of about 306 and 324 μm using a mixture of water and glycerol as the medium; drag reduction rate for thicknesses of about (b) 306 and (c) 324 μm corresponding to the Reynolds number Re.

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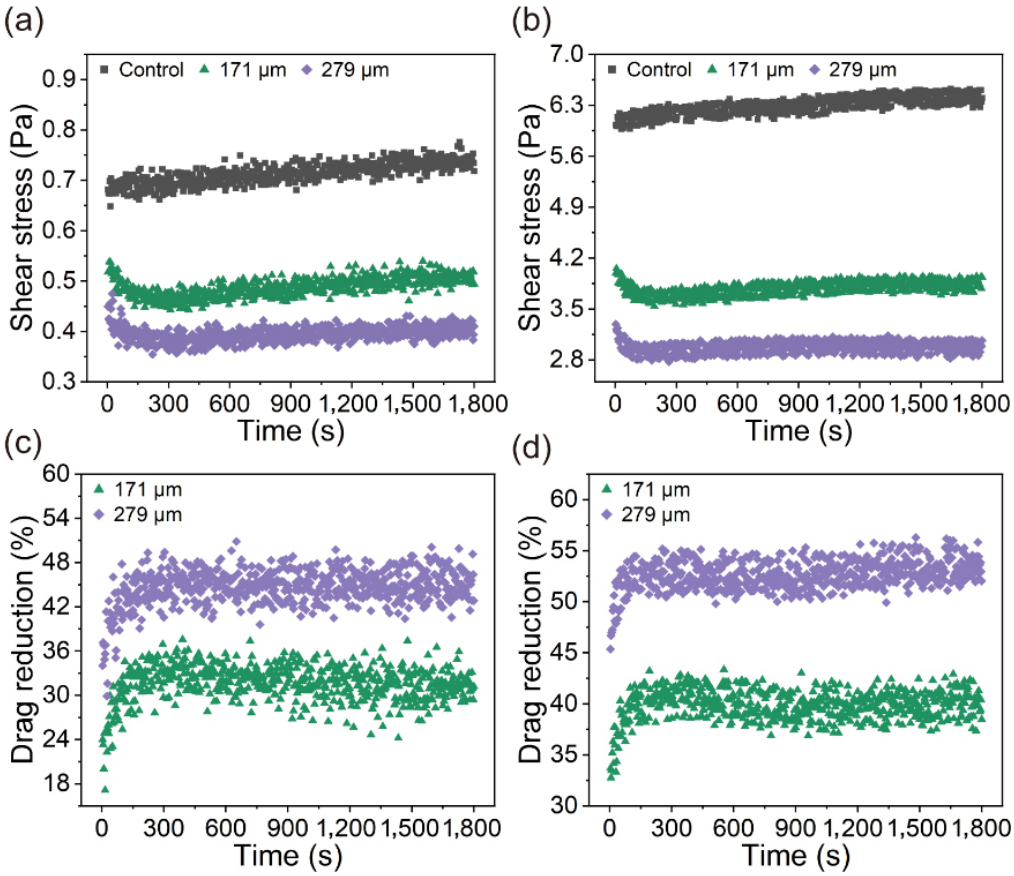

Fig. S2 Shear stress on the surface of PAA–PAM hydrogel coatings with different thicknesses at constant shear rate of (a) 100 and (b) 900 s^{-1}; drag reduction rate for thicknesses of about (c) 171 and (d) 279 μm corresponding to the constant shear rate.