

Abstract Submitted
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Writing with vesicles CHI HANG BOYCE TSANG, Univ of Illinois - Urbana, YONGFENG ZHOU, Shanghai Jiao Tong University , STEVE GRANICK, Univ of Illinois - Urbana — Ultra-stretchable vesicles on micrometer scale are prepared in dimethyl sulfoxide (DMSO) via hydration with ABC star triblock copolymeric amphiphiles. We selected poly(ethylene glycol) as the hydrophilic block, and polystyrene and poly-azobenzene as hydrophobic blocks. The resultant vesicle deforms in response to blue light (488 nm) illumination and thus can be manipulated by a laser. A rich spectrum of morphology was demonstrated through control of laser scanning, polarization and incident power. Such deformation can also be reversed by UV light (405 nm) illumination.

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