Photosensitive vesicles from a *cis*-azobenzene gemini surfactant show high photoresponse

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Supplementary Information

Fig. S1 UV of 1 (A) and 2 (B) in dichloromethane solution upon irradiation at 365 nm.

Fig. S2 Mass spectral analysis (MS-TOF) of samples of E-2 prior and after irradiation.

Fig. S3 1 H and 13 C NMR of 4.

Fig. S4 ¹H NMR of **5**.

Fig. S5 ¹H NMR of **6**.

Fig. S6 ¹H NMR of *E*-1.

Fig. S7 ¹H NMR of **8**.

Fig. S8¹H NMR of **9**.

Fig. S9 ¹H NMR of **10**.

Fig. S10 ¹H NMR of *E*-2.



Fig. S1 UV spectral changes upon photoinduced E,Z isomerization of 1 (A) and 2 (B) in dichloromethane solution upon irradiation at 365 nm.



Fig. S2 Mass spectral analysis (MS-TOF) of samples of *E*-**2** prior to irradiation (A) and following irradiation in dichloromethane at 365 nm to generate the PSS(365) mixture, solubilization in water, and irradiation at 254 nm (B).



Fig. S3 ¹H (top) and ¹³C (bottom) NMR of 4.



Fig. S4¹H NMR of 5.



Fig. S5 ¹H NMR of **6**.



Fig. S6 ¹H NMR of *E*-1.



Fig. S7 ¹H NMR of **8**.



Fig. S8¹H NMR of 9.







Fig. S10 ¹H NMR of *E*-2.