Electronic Supplementary Information (ESI)

Azobenzene–siloxane hybrids with lamellar structures from bridged-type alkoxysilyl precursors

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Fig. S1 TG–DTA curves of (a) 1, (b) 2 and (c) 3 precursors.



Fig. S2 XRD patterns of (a) 1, (b) 2 and (c) 3 precursor films.



Fig. S3 POM images of (a) 1, (b) 2 and (c) 3 precursor films.



Fig. S4 Powder XRD patterns of (a) as-formed precipitates (**P1** before heating) and (b) **P1** (after heating of (a))



Fig. S5 FT-IR spectra of F2 (left) and F3 (right): (a) precursor (b) after hydrolysis (c) after polycondensation



Fig. S6 FT-IR spectra of (a) F1', (b) F2', and (c) F3'.



Scheme S1 Structure changes of F2 upon UV and Vis irradiation.



Fig. S7 FT-IR spectra of F2 (a) before and (b) after UV/Vis irradiation.



Fig. S8 UV–Vis spectra of (a) **F1'**, (b) **F2'**,and (c) **F3'** before irradiation (red), after 5 min of UV irradiation (blue), and after a further 5 min of visible light irradiation (green).