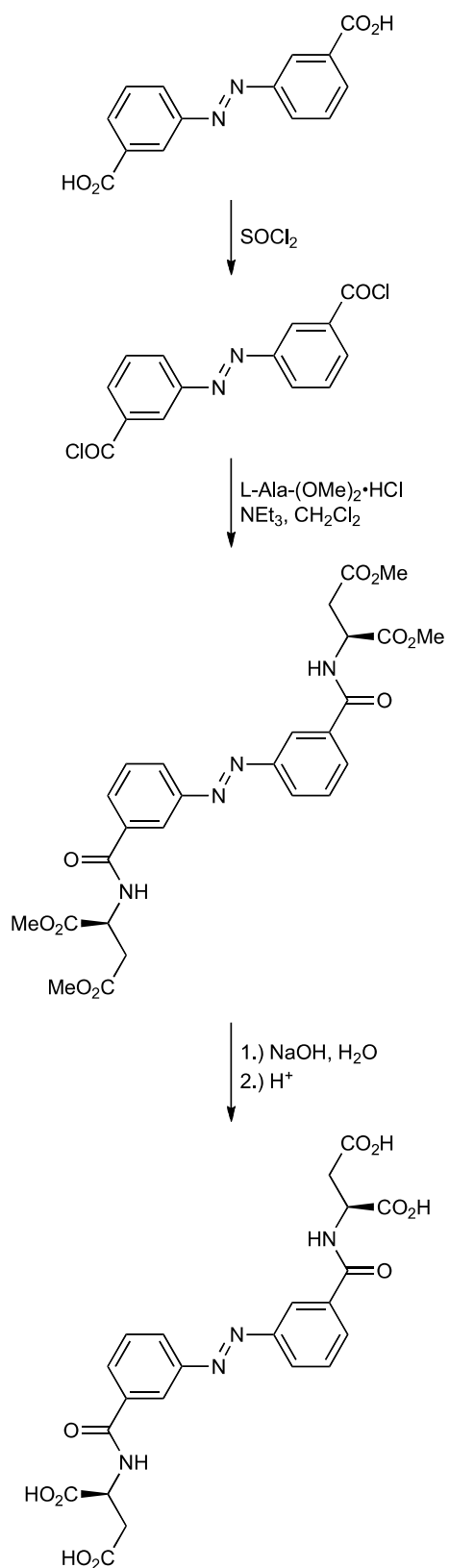


An azobenzene-based photoswitchable crystal growth modifier

Gareth L. Nealon, David H. Brown, Franca Jones, Gordon Parkinson, and Mark I. Ogden

Supplementary Information



Scheme S1. Synthesis of the target substituted azobenzenes, as outlined for aspartic acid derivative **1**.

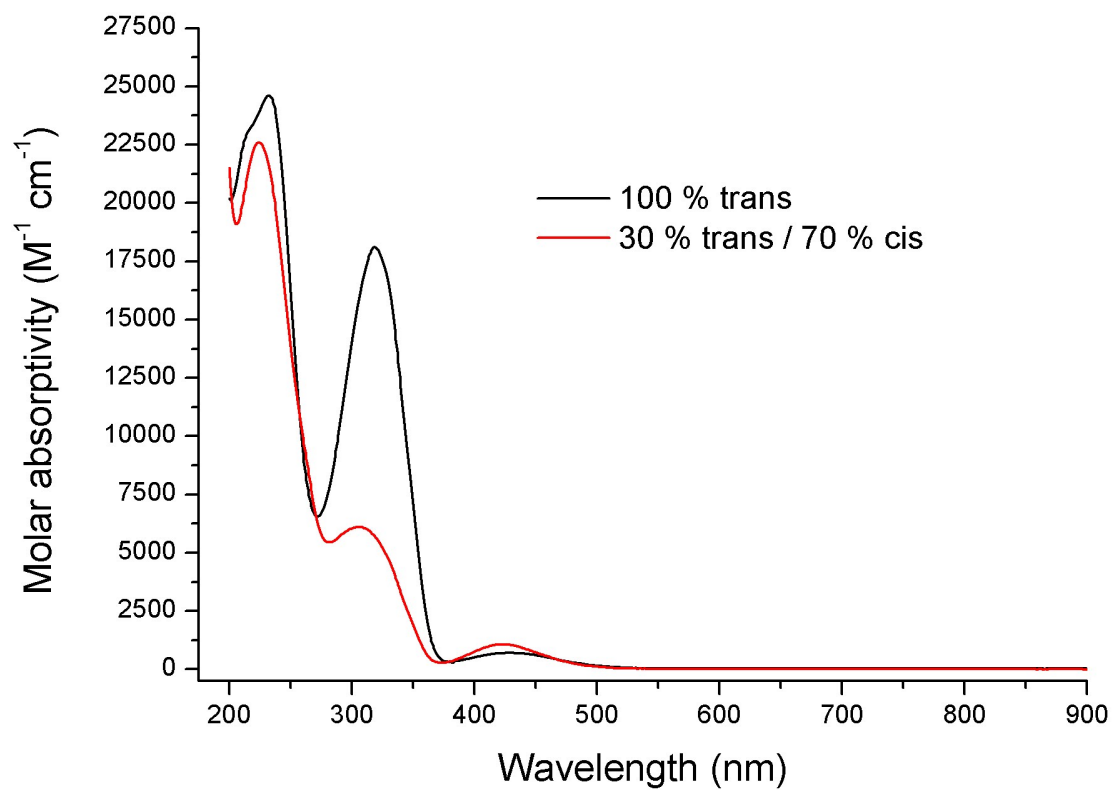


Figure S1. UV-Vis spectra of (1-4H)⁴⁺ in aqueous solution. The black curve corresponds to the trans isomer, the red to a 70% cis/30% trans mixture.

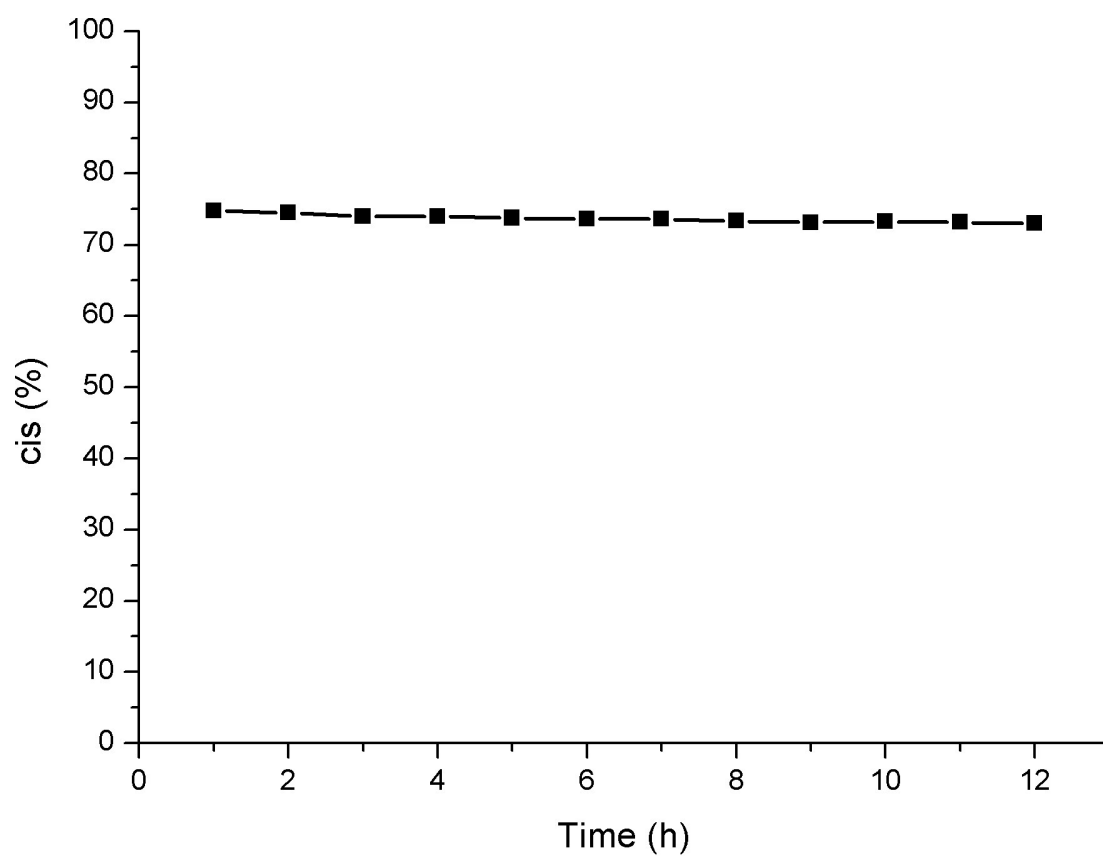


Figure S2. Rate of relaxation of *cis*-1 at 25 °C in the dark (from RP-HPLC analysis, 0.20 mM).

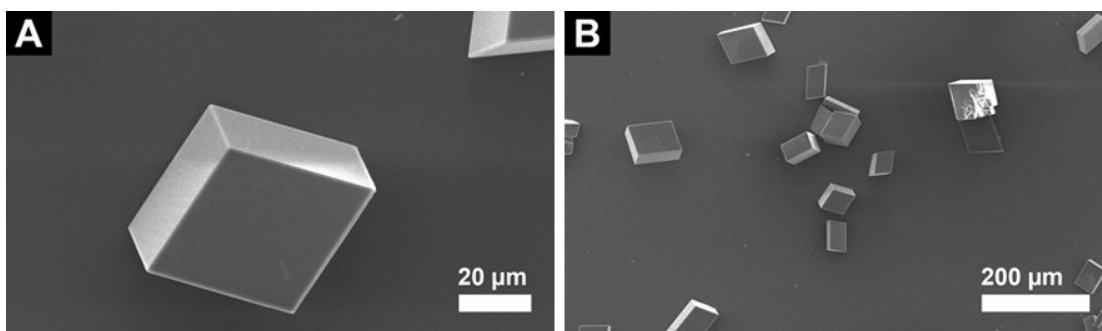


Figure S3. Calcite morphology observed in the presence of 500 ppm glycine functionalised additive **2**, at two different magnifications.

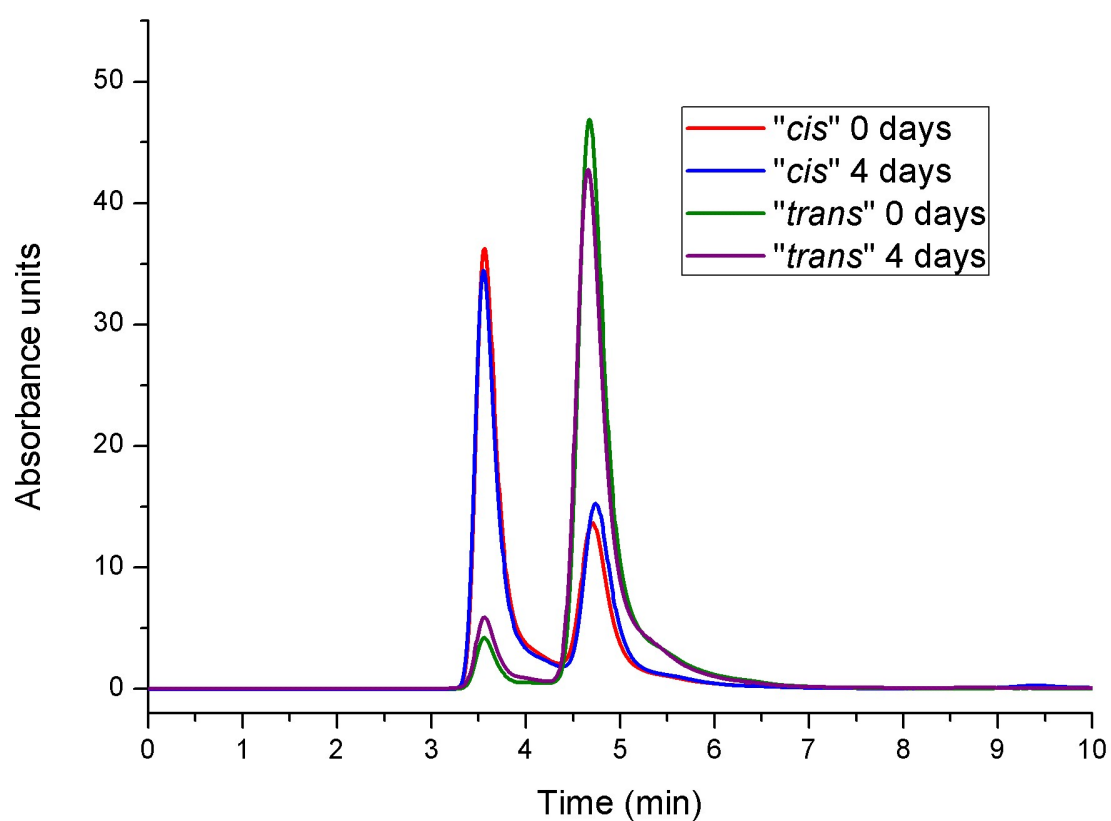


Figure S4. Representative RP-HPLC chromatograms before and after calcite crystallisation experiments in the presence of *cis*- and *trans*-**1** (shown for 0.2 mM additive). The first peak at 3.6 min corresponds to *cis*-**1**, and the second peak at 4.7 min corresponds to *trans*-**1**.

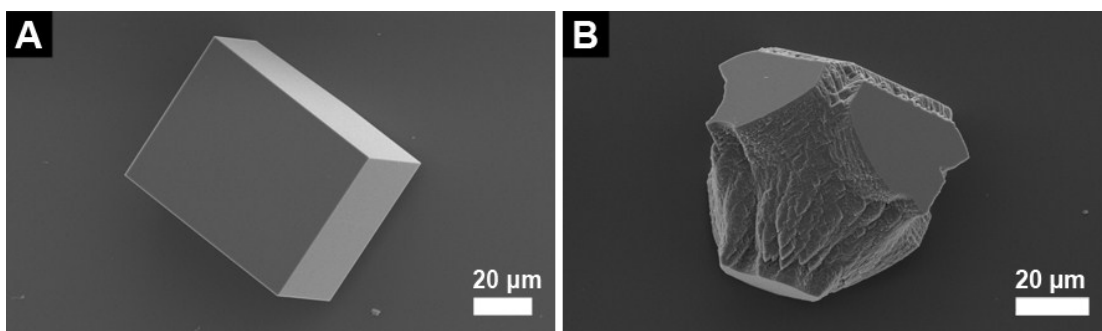


Figure S5. Calcite grown in the presence of compound **1**. (A) Under constant UV irradiation and (B) maintained in the dark.

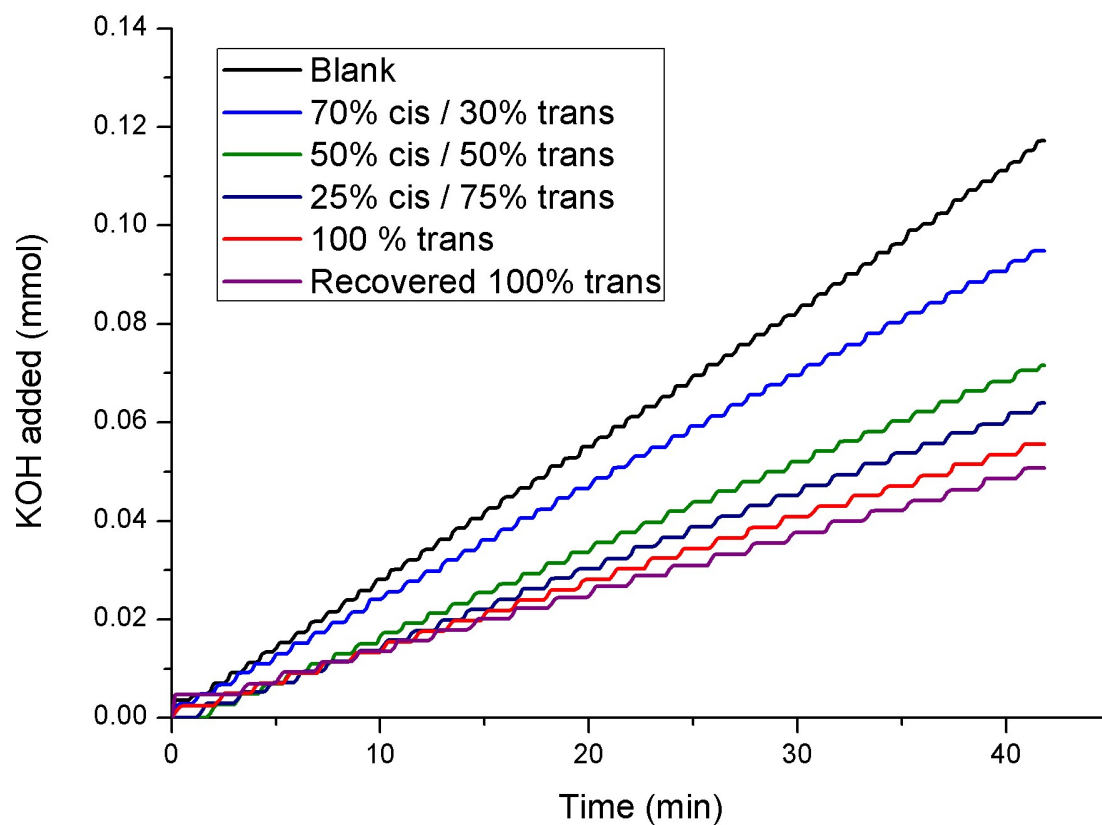


Figure S6. Raw data for the graph depicted in Figure 6 in the article.

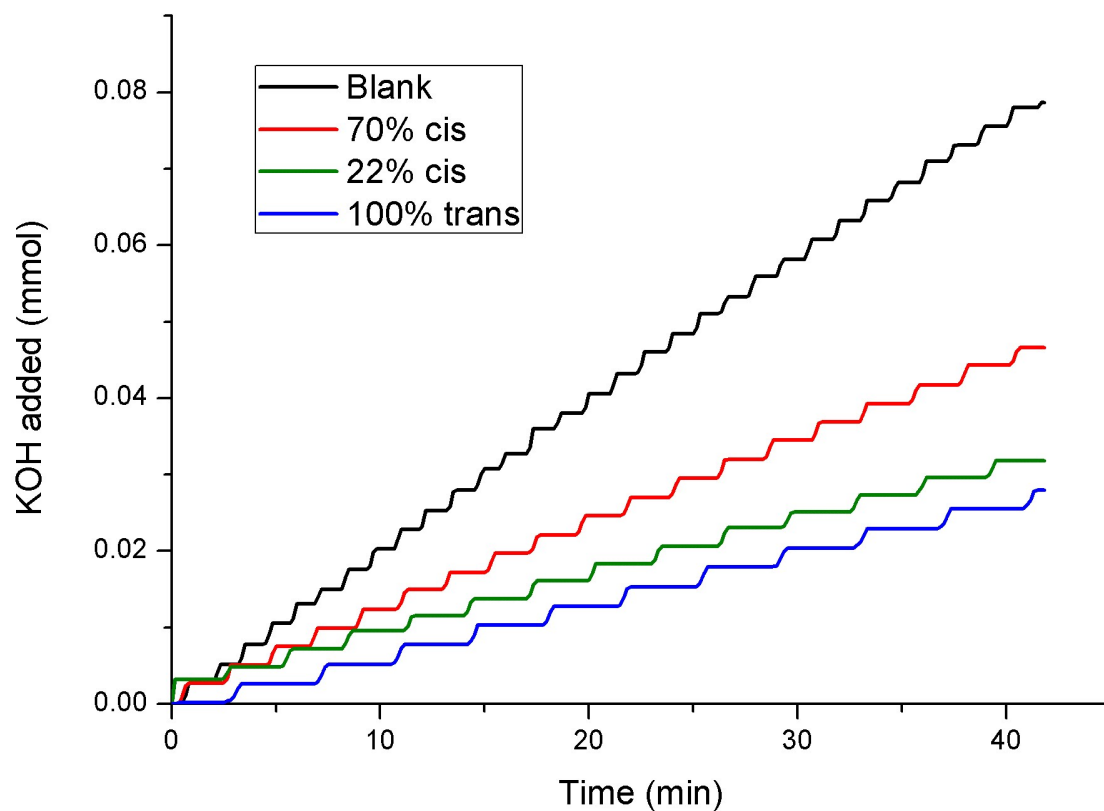


Figure S7. Raw data for the graph depicted in Figure 7 in the article.

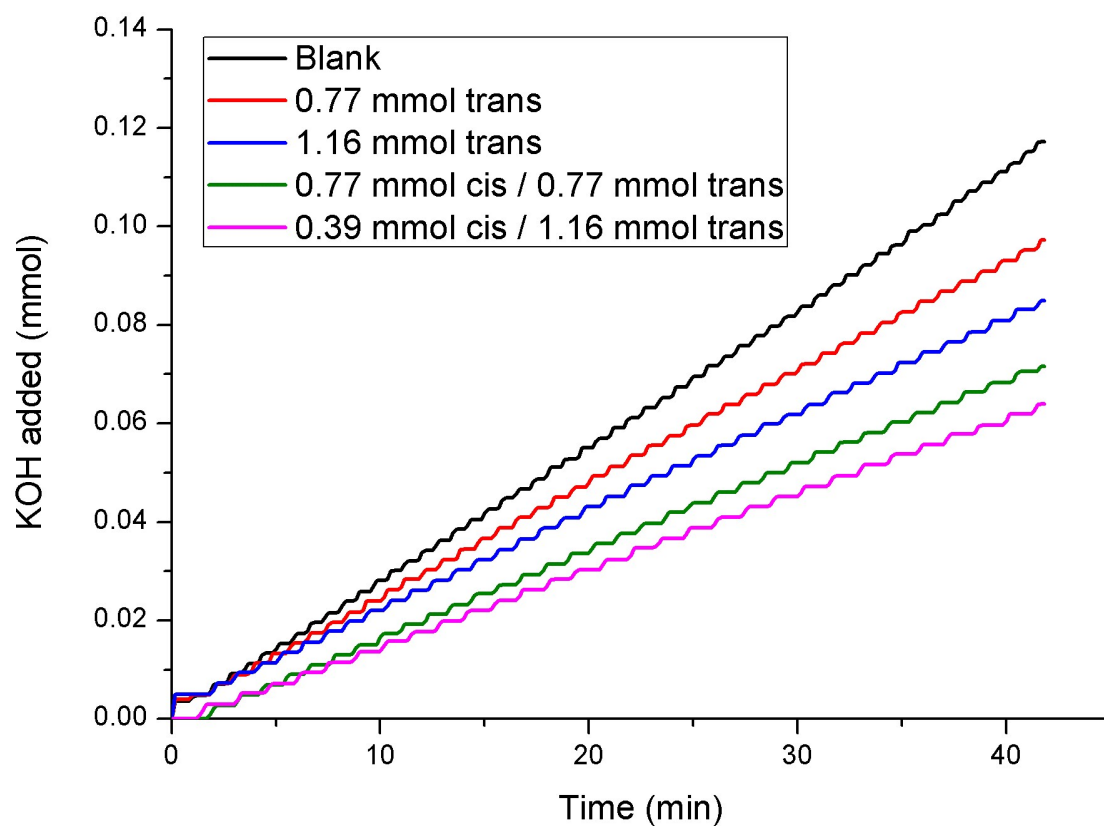


Figure S8. Raw data for the graph depicted in Figure 8 in the article.