

Supplementary Information

Shaping calcite crystals by customized self-assembling pseudopeptide foldamers

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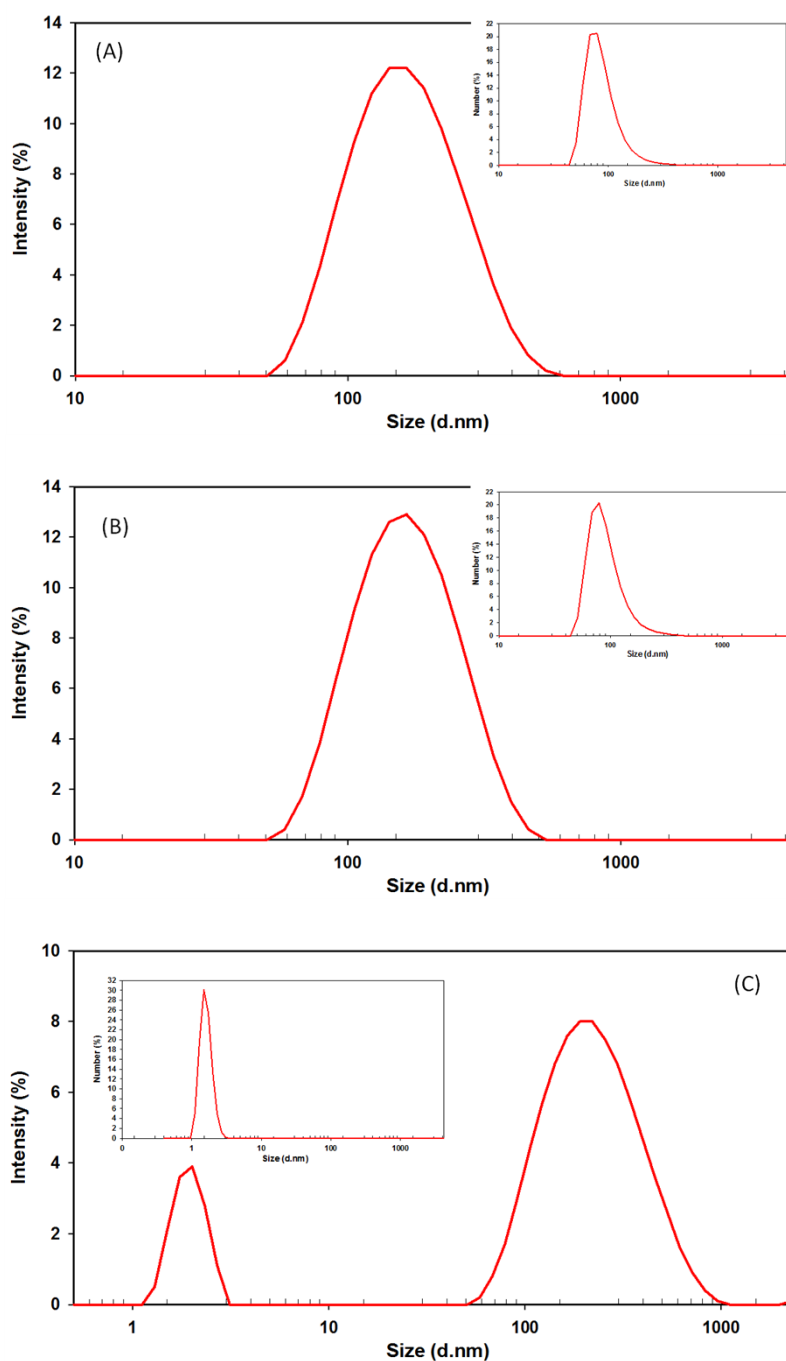


Figure S1. SDS profiles of size distribution numbers as a function of the Intensity (%) of the molecule **2** particles solution after 450 nm filtration. (A) 1 mM solution, 5 mM solution (B) and (C) 10 mM solution. In the inset in each figure the SDS profiles of size distribution numbers as a function of the number (%) is reported as well.

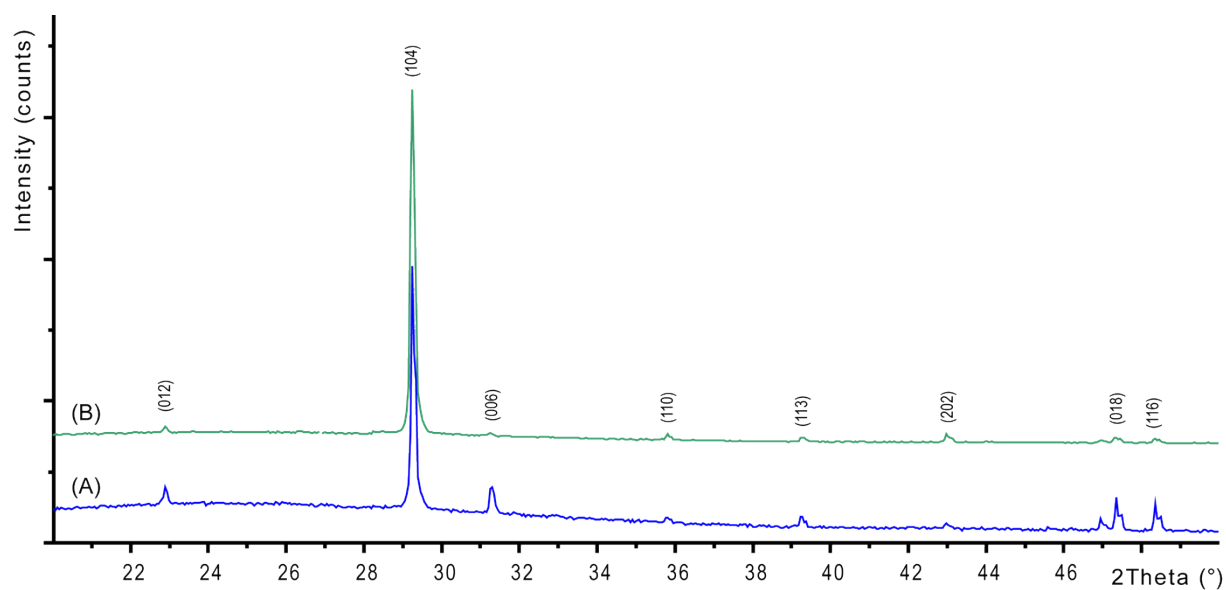


Figure S2. XRD patterns of calcium carbonate precipitates from a 9:1 (v/v) water/ethanol mixture containing 10 mM (A) or 100 mM (B) CaCl_2 . The Miller indexes of calcite are reported.

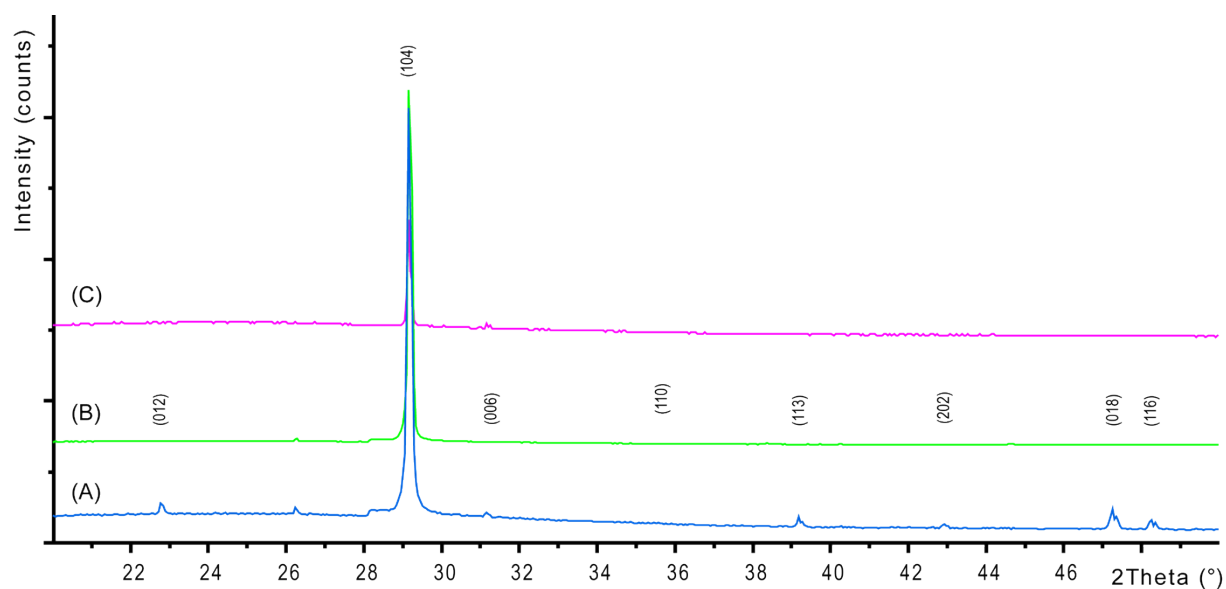


Figure S3. XRD patterns of calcium carbonate precipitates from a 9:1 (v/v) water/ethanol mixture containing 10 mM CaCl_2 in the presence of 1 mM (A), 5 mM (B) or 10 mM (C) of molecule **1**. The Miller indexes of calcite are reported.

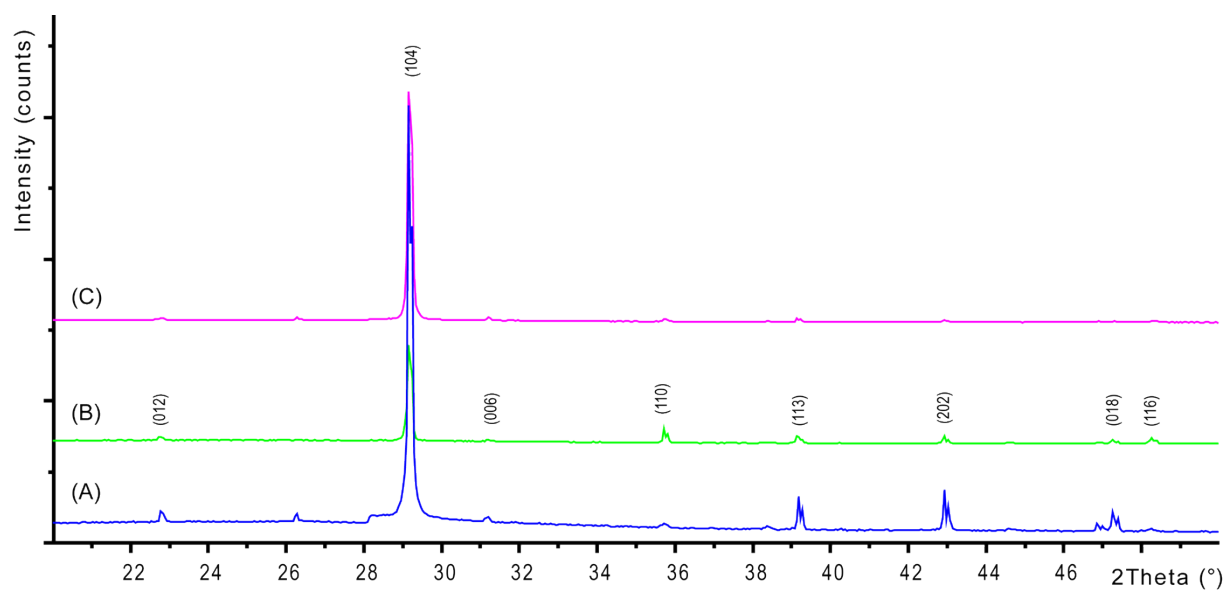


Figure S4. XRD patterns of calcium carbonate precipitates from a 9:1 (v/v) water/ethanol mixture containing 10 mM CaCl_2 in the presence of 1 mM (A), 5 mM (B) or 10 mM (C) of molecule **2**. The Miller indexes of calcite are reported.

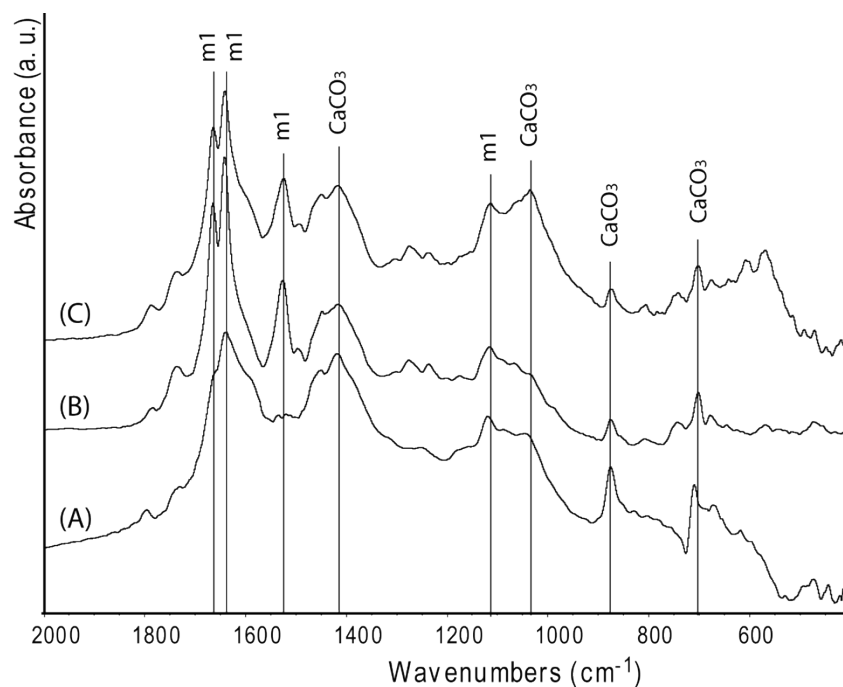


Figure S5. FTIR spectra of calcium carbonate precipitates from a 9:1 (v/v) water/ethanol mixture containing 10 mM CaCl_2 in the presence of 1 mM (A), 5 mM (B) or 10 mM (C) of molecule **1**. The absorption bands due to molecule **1** (m1) and calcite (CaCO_3) are indicated.

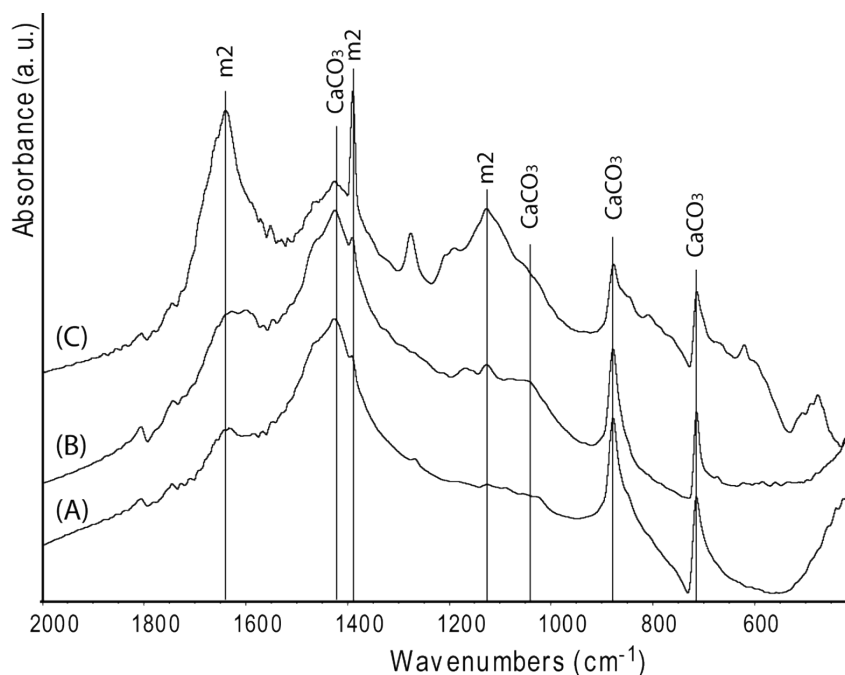


Figure S6. FTIR spectra of calcium carbonate precipitates from a 9:1 (v/v) water/ethanol mixture containing 10 mM CaCl_2 in the presence of 1 mM (A), 5 mM (B) or 10 mM (C) of molecule **2**. The absorption bands due to molecule **2** (m2) and calcite (CaCO_3) are indicated.

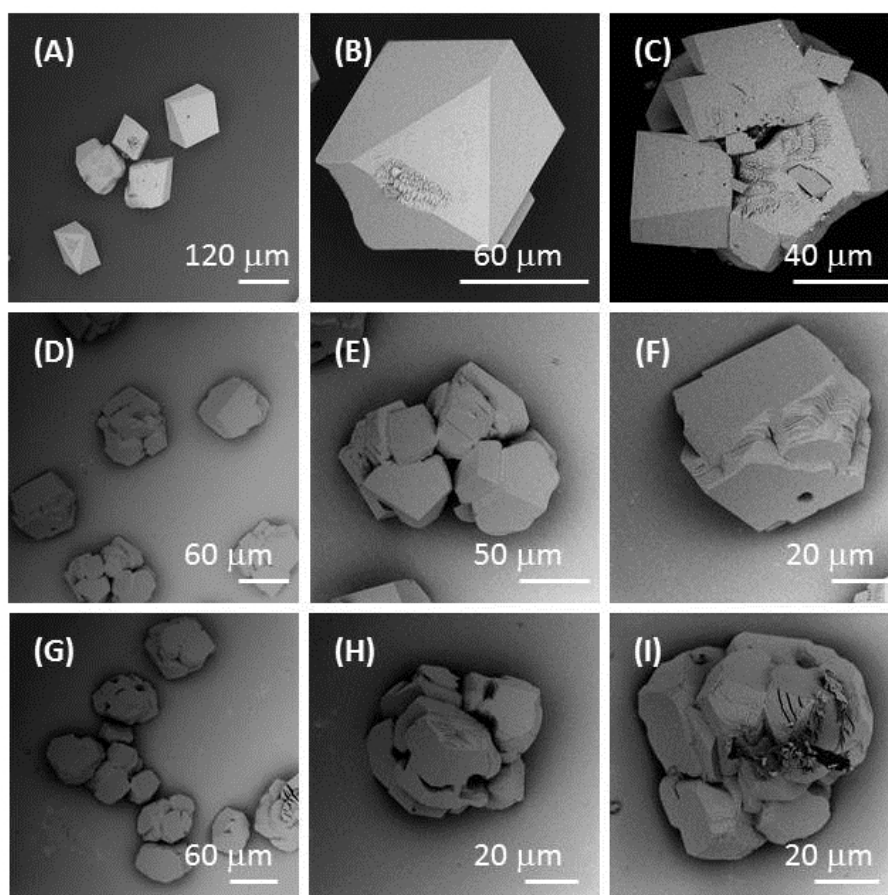


Figure S7. SEM images of calcium carbonate precipitates obtained from a 100 mM CaCl_2 solution in the presence of 1 mM (A-C), 5 mM (D-F) or 10 mM (G-I) of molecule **2**.