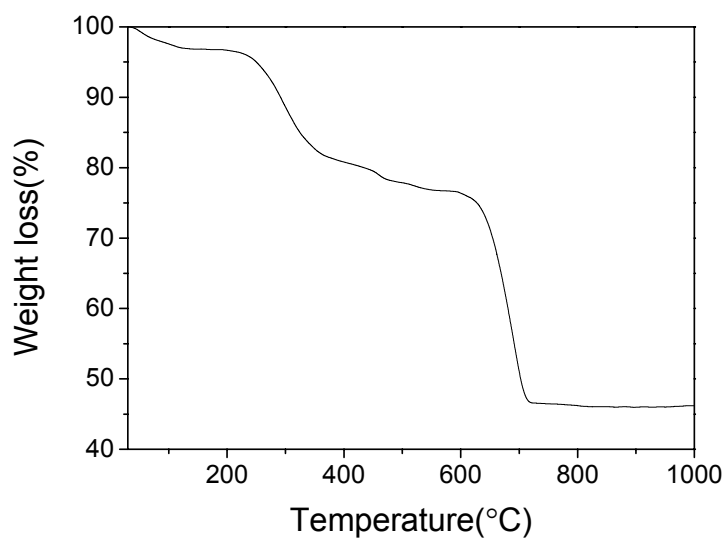Supplementary Information

Mineralization of Calcite Ribbons on an *Allium fistulosum* L. Bulb Inner Membrane in an Ethanol/Water Mixed Solvent under Control of Polyacrylic Acid by a Double Diffusion Method

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Fig. S1 TGA curve of the bulb membrane after $CaCO_3$ mineralization for 7 days. The volume ratio of DIW/ethanol is R = 1.5:1. $[CaCl_2]$ = 0.1 M, $[Na_2CO_3]$ = 0.1 M.
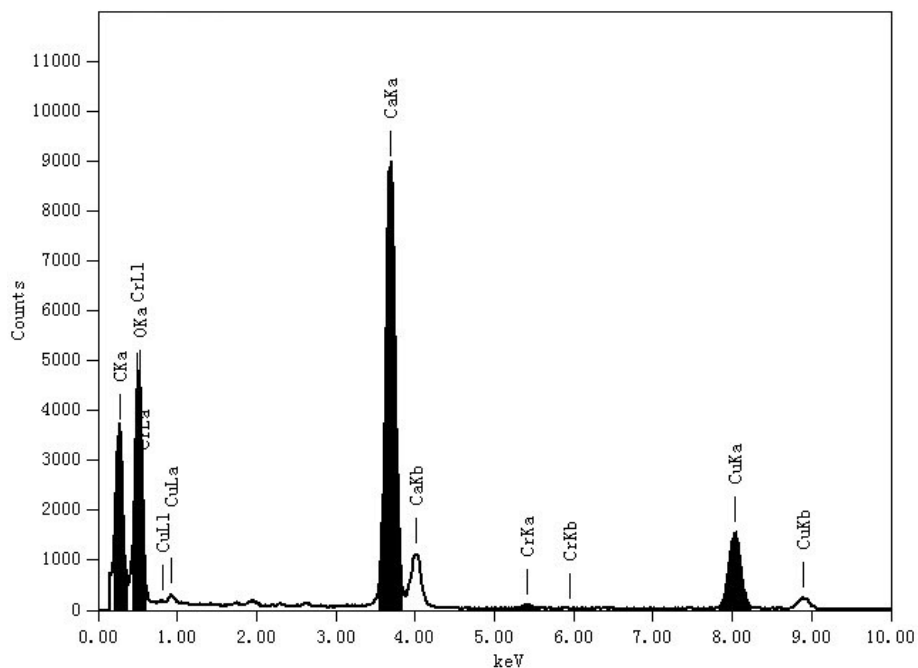
Fig. S2 EDS spectrum of the as-prepared CaCO$_3$ minerals formed on the inner surface of the bulb membrane. The volume ratio of DIW/ethanol is R = 1.5:1. [CaCl$_2$] = 0.1 M, [Na$_2$CO$_3$] = 0.1 M.
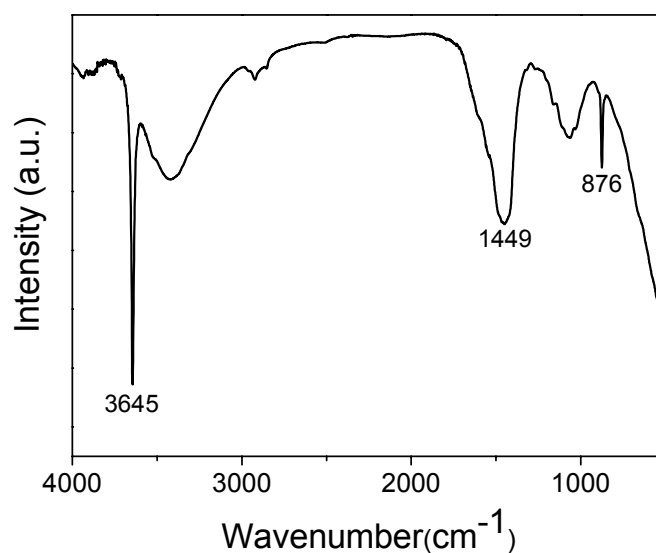
Fig. S3 FT-IR spectrum of the blossom-like crystals formed on the inner surface of the bulb membrane. The volume ratio of DIW/ethanol is R = 1.5:1. [CaCl$_2$] = 0.1 M, [Na$_2$CO$_3$] = 0.1 M. The crystallization time is 7 days.
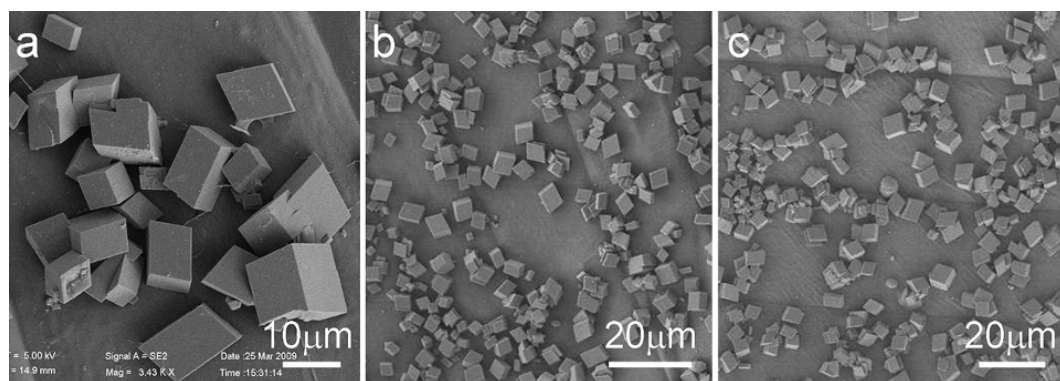
Fig. S4 SEM images of CaCO$_3$ minerals deposited on the outer surface of the bulb membrane with different concentration of PAA in CaCl$_2$ solutions: (a) 0, (b) 2×10^{-3} g·L^{-1}, (c) 5×10^{-3} g·L^{-1}. The volume ratio of DIW/ethanol is R=1.5:1. [CaCl$_2$] = 0.1 M, [Na$_2$CO$_3$] = 0.1 M.