

Supporting Information

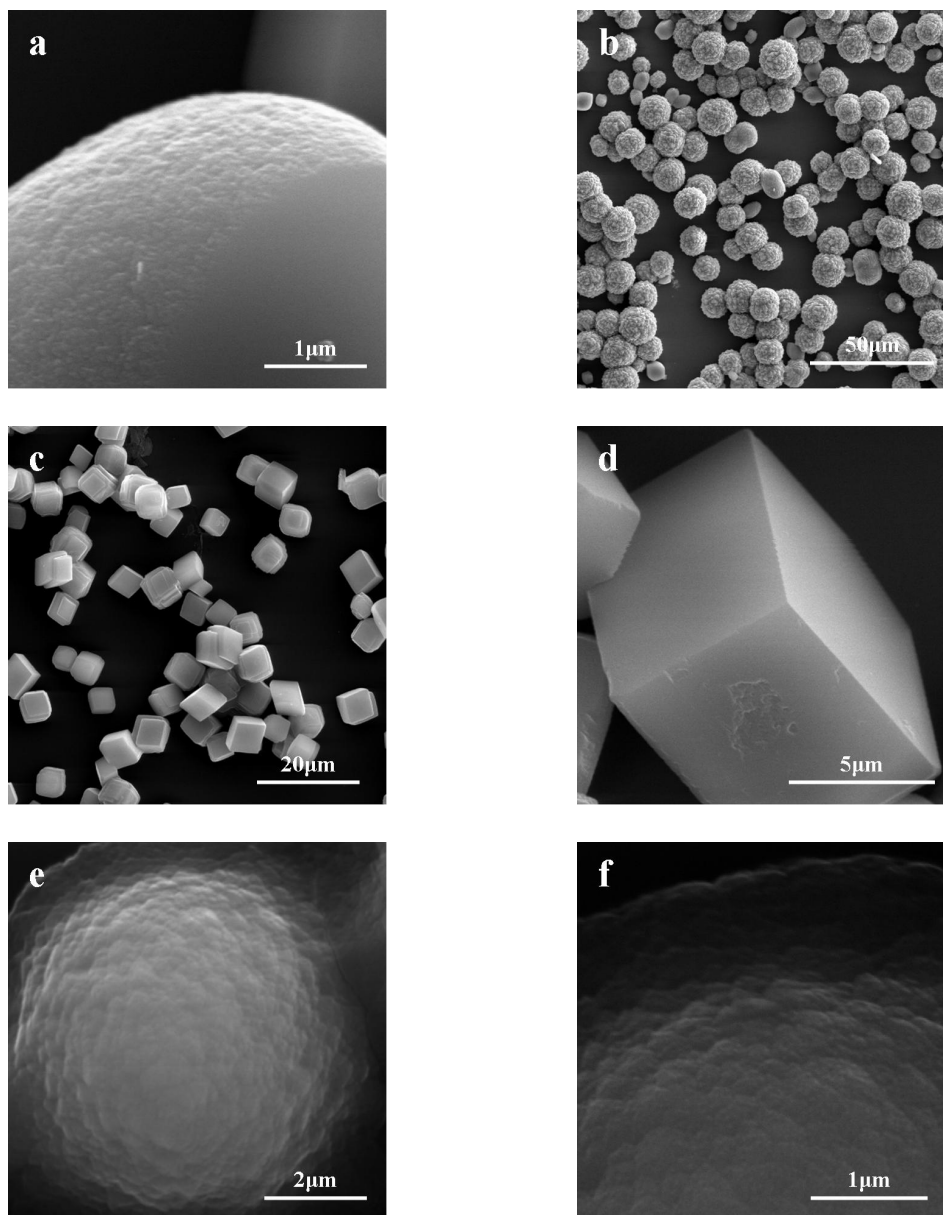


Figure S1. SEM images of CaCO₃ crystals obtained in (a) 0.01M [Ca²⁺], 1g/L NaCMC, the surface of the imperfect composed of nanoparticles; (b) 0.01M [Ca²⁺], 0.5g/L NaCMC; (c) 0.01M [Ca²⁺], 0.1g/L NaCMC; (d) control sample, i.e. no additives; (e)(f)0.1M [Ca²⁺], 0.5g/L NaCMC.

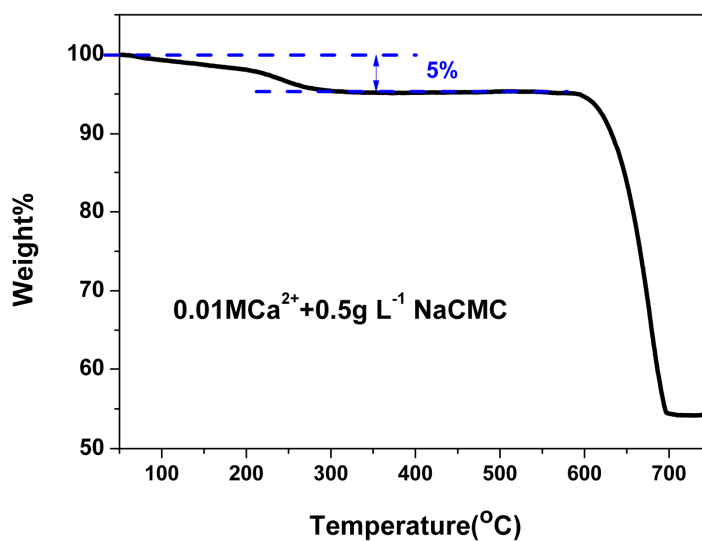


Figure S2. TGA curve of the products obtained after 4 days reaction from 0.01M [Ca²⁺] and 0.5g/L NaCMC solution.

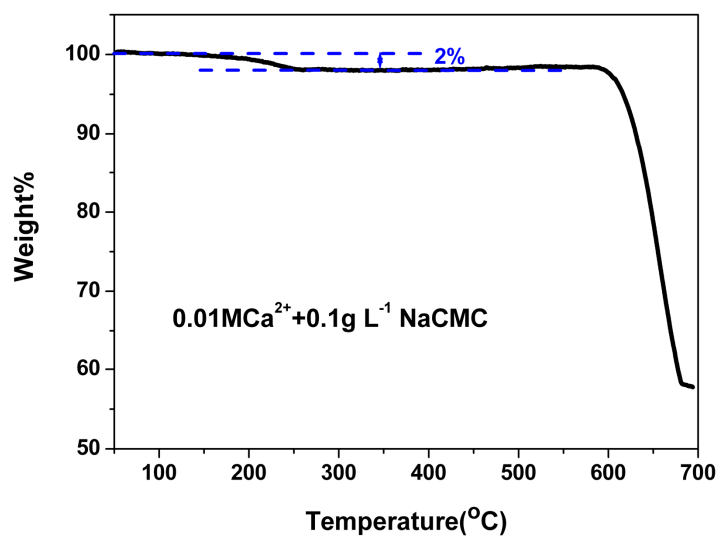


Figure S3. TGA curve of the products obtained after 4 days reaction from 0.01M [Ca²⁺] and 0.1g/L NaCMC solution.

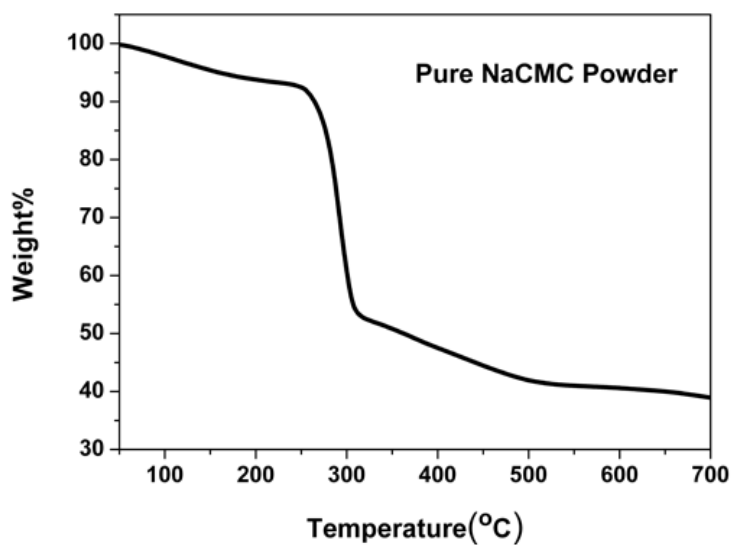


Figure S4. TGA curve of pure NaCMC powder.

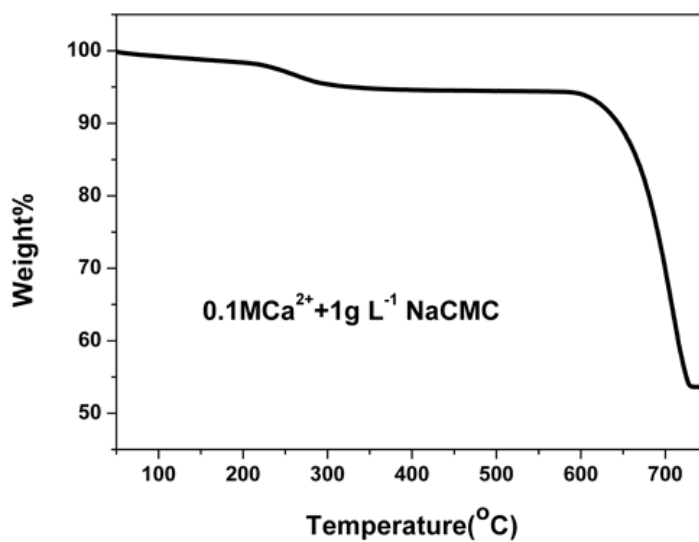


Figure S5. TGA curve of the products obtained after 4 days reaction from 0.1M $[Ca^{2+}]$ and 1g/L NaCMC solution.

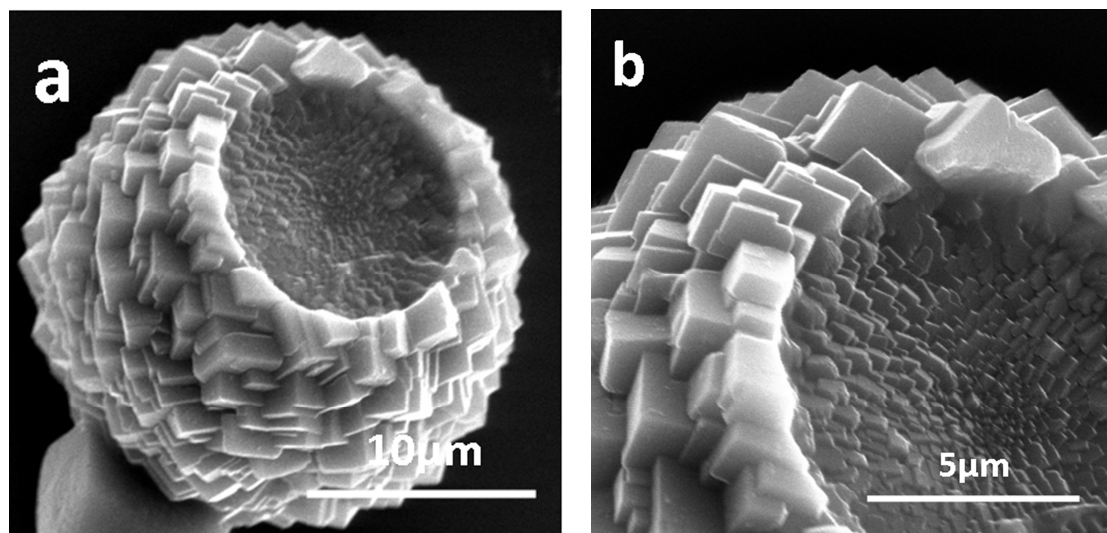


Figure S6 SEM images of CaCO₃ crystals obtained in 0.01M [Ca²⁺] and 0.5g/L NaCMC aqueous solutions after 4 hours reaction (a) and enlarged image (b).