

Supporting Information

The role of *E. coli*-secretion and Melamine in Selective Formation of $\text{CaC}_2\text{O}_4 \cdot \text{H}_2\text{O}$ and $\text{CaC}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$ Crystals

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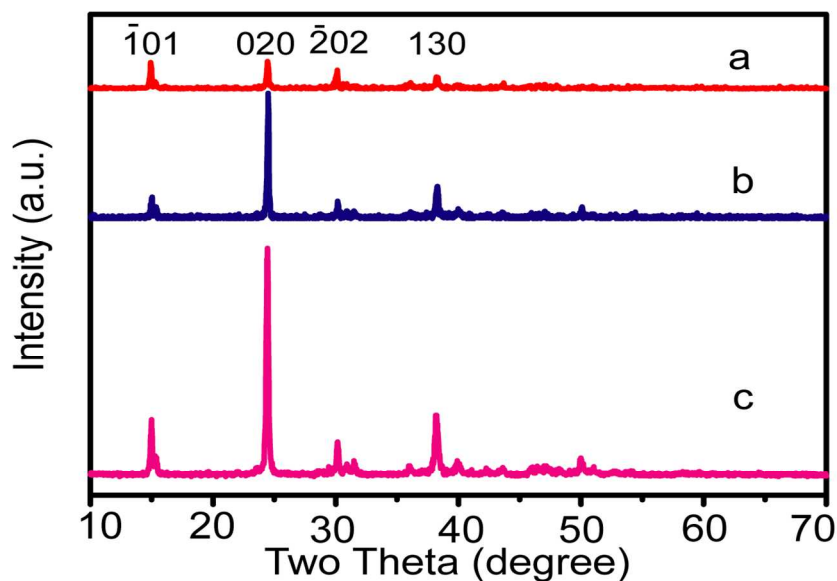


Figure S1. XRD images of CaOxa precipitates obtained in aqueous solution (a-c), with

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different $[\text{Ca}^{2+}]/[\text{C}_2\text{O}_4^{2-}]$ ratios at 1/20, 1 and 20, respectively.

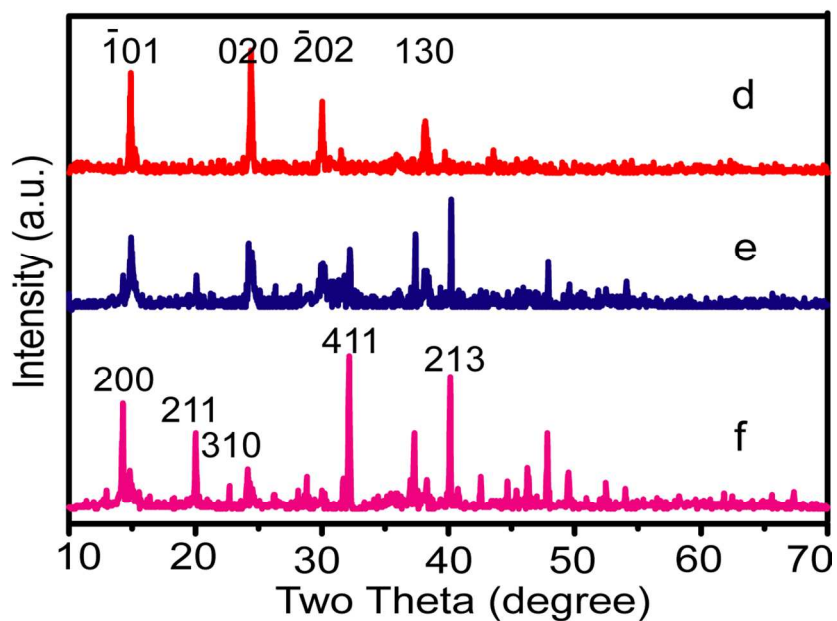


Figure S2. XRD images of CaOxa precipitates obtained (d-f) in 10 ml E. coli secretion with different $[\text{Ca}^{2+}]/[\text{C}_2\text{O}_4^{2-}]$ ratios at 1/20, 1 and 20, respectively.

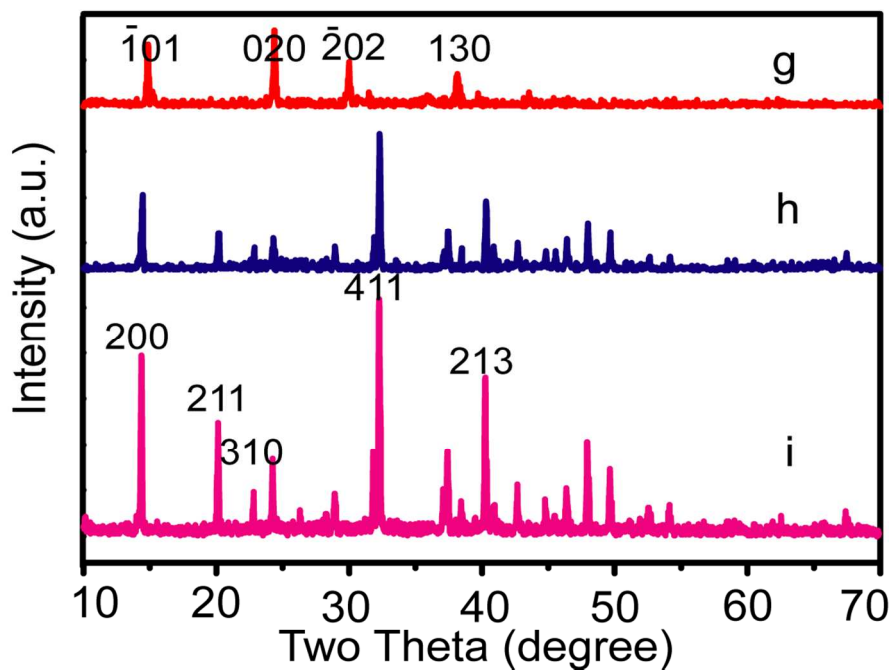


Figure S3. XRD images of CaOxa precipitates obtained in 10ml LB medium (g-i), with

different $[\text{Ca}^{2+}]/[\text{C}_2\text{O}_4^{2-}]$ ratios at 1/20, 1 and 20, respectively.

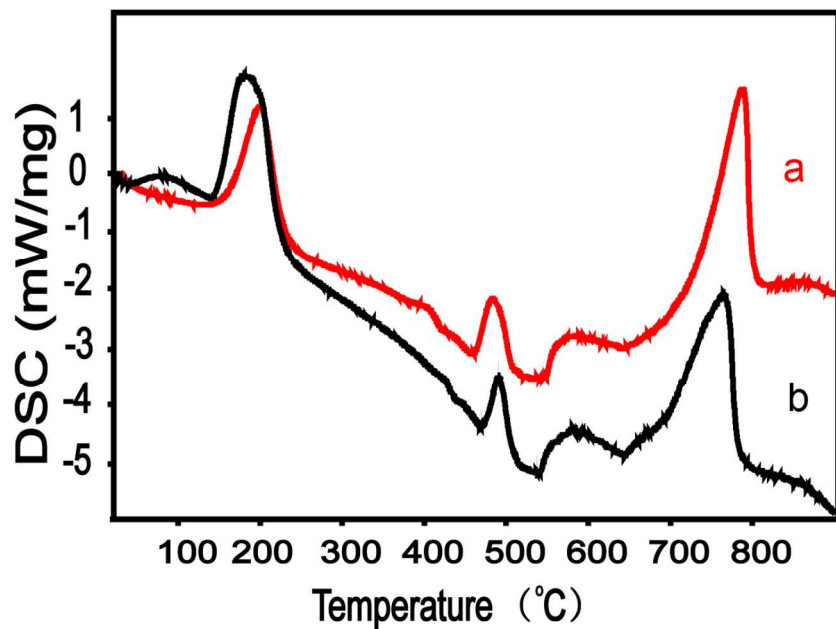


Figure S4. DSC curves of COM (a) and COD (b) under air sweeping

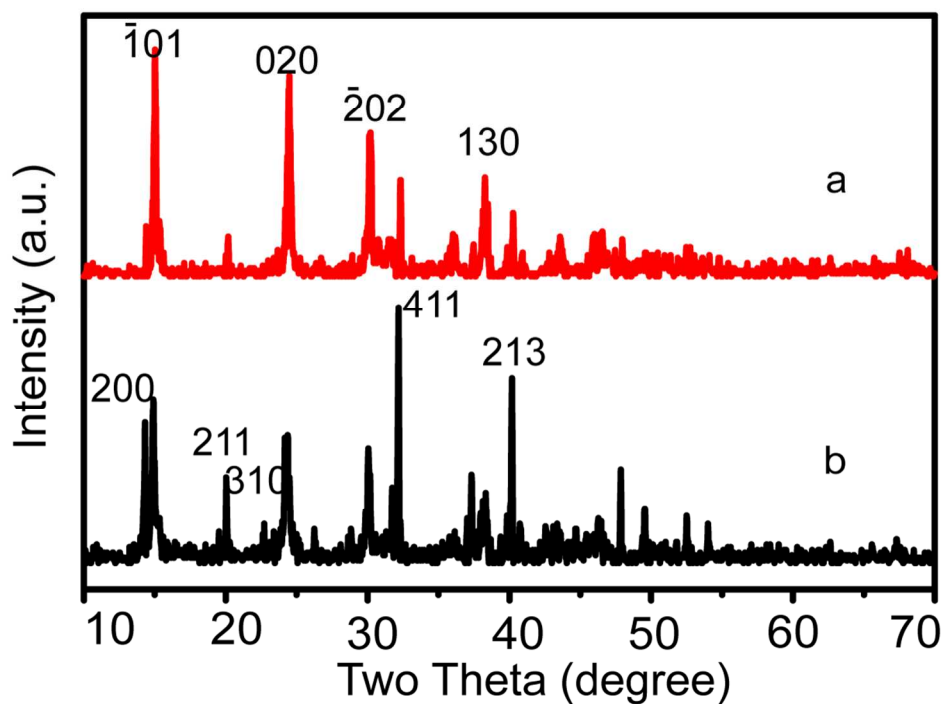


Figure S5. XRD images of samples without (a) and with (b) *E. coli* secretion under air sweeping

artificial urine circumstance.

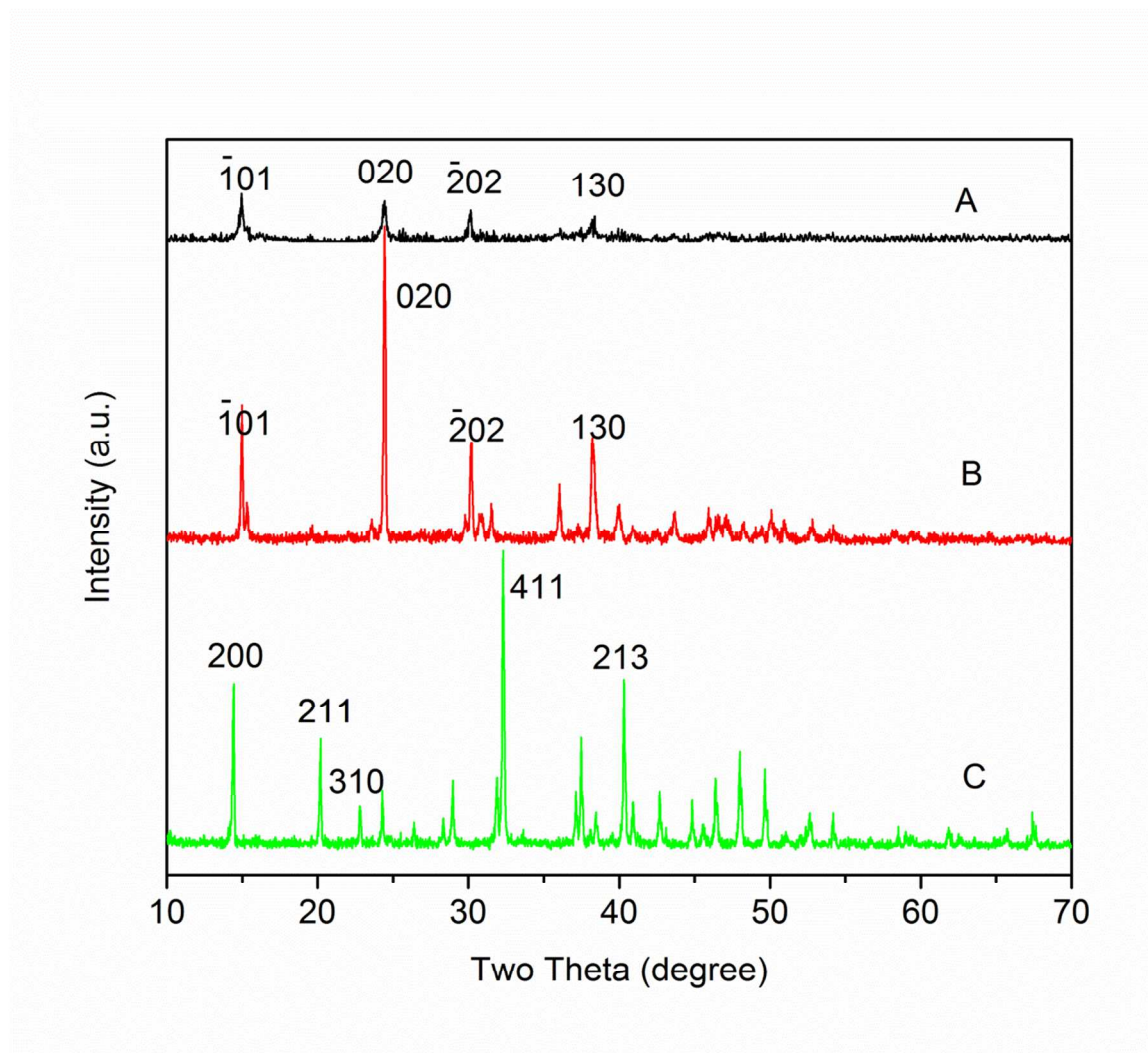


Figure S6. XRD images of CaOxa precipitates obtained with $[\text{Ca}^{2+}]/[\text{C}_2\text{O}_4^{2-}]$ ratios 1:1 in three systems: (A) with *E. coli* precipitate; (B) with 10 ml *E. coli* solution; (C) with 10ml *E. coli*-secretion.