Supporting Information

Stable amorphous calcium oxalate: Synthesis and potential intermediate in biomineralization

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Fig. S1 SEM micrograph of COM microcrystals obtained from a reaction of $CaCl_2$ x 2 H_2O and an aqueous dimethyl oxalate solution.

Fig. S2 X-ray diffractogram of COM microcrystals obtained from a reaction of $CaCl_2$ x 2 H_2O and an aqueous dimethyl oxalate solution. The calculation reflection positions in the low angle range are indicated by red tick marks. The crystallite size in the sub-micrometer range is reflected in larger full width at half maximum.

Fig. S3. X-ray diffractogram of thermal decomposition product of ACO after heating to 750°C.

Fig. S4 IR spectrum of ACO.

Fig. S5. Left: Raman spectra of COM (reference, top trace) and ACO (bottom trace). Right: Enlarged portion of the spectrum between 1400 and 1700 cm^{-1} showing the overlapping bands for the asymmetric and the symmetric ν(C=O) stretching modes at 1629 and at 1486, 1465 cm^{-1} (approximated with Lorenz curves).

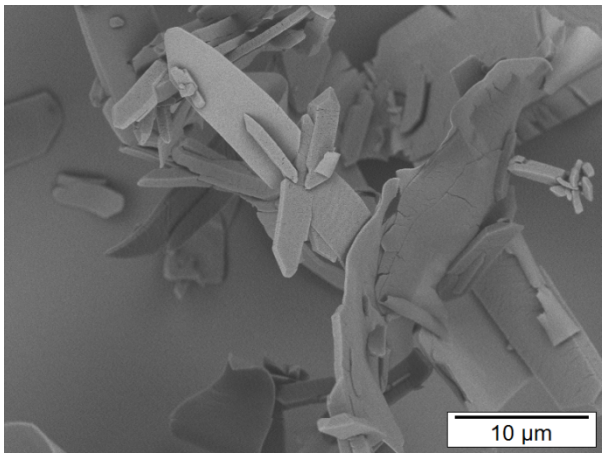
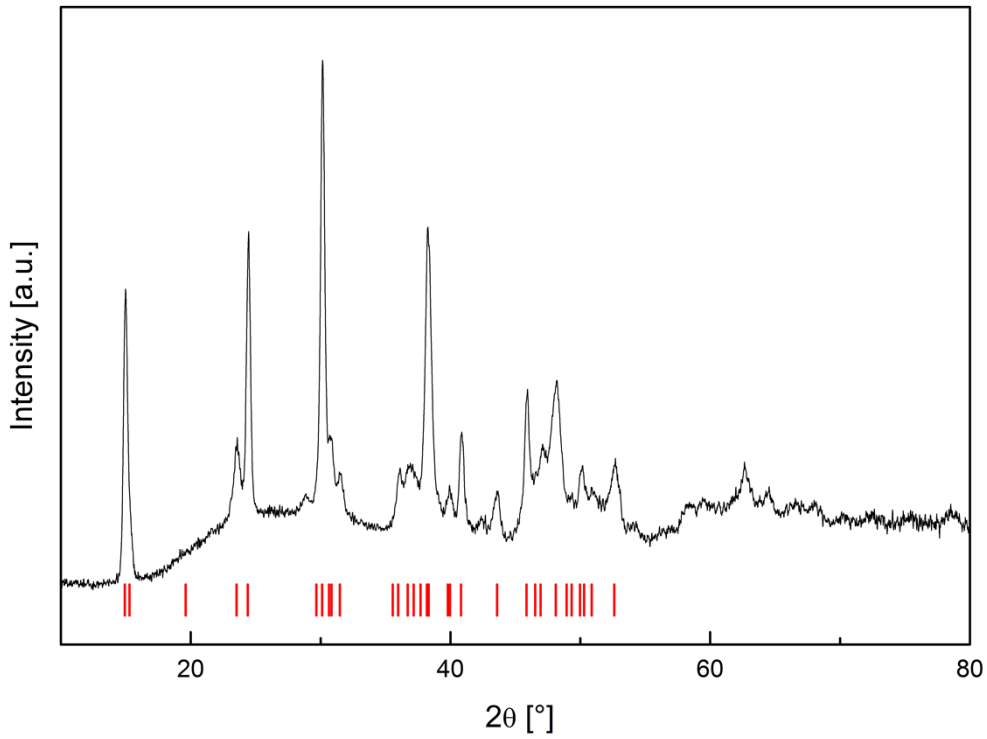


Fig. S1 SEM micrograph of COM microcrystals obtained from a reaction of $CaCl_2$ x 6 H_2O and an aqueous dimethyl oxalate solution.



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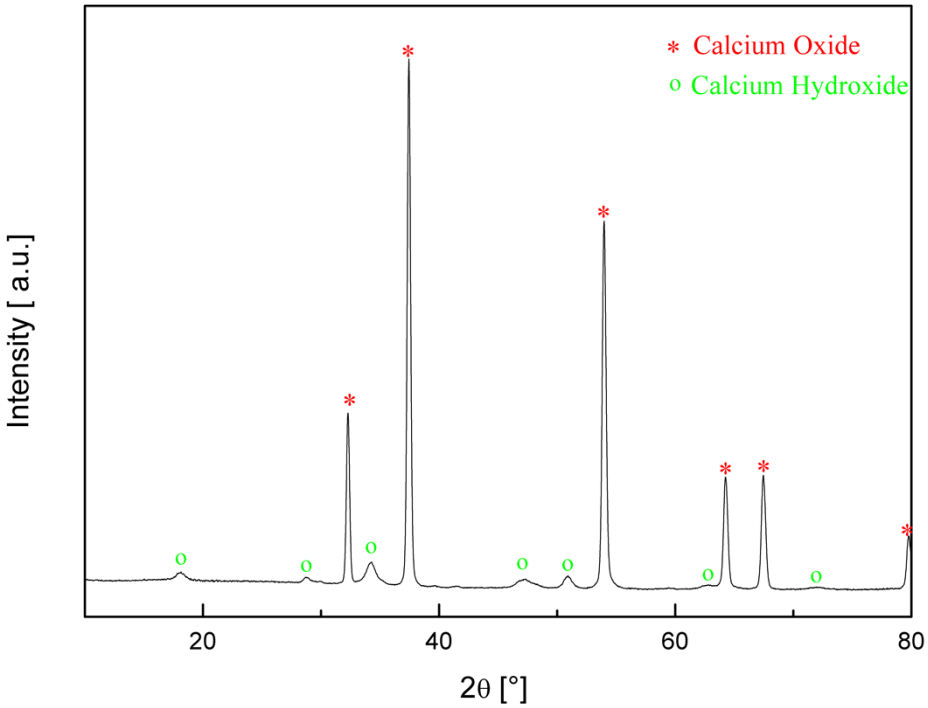

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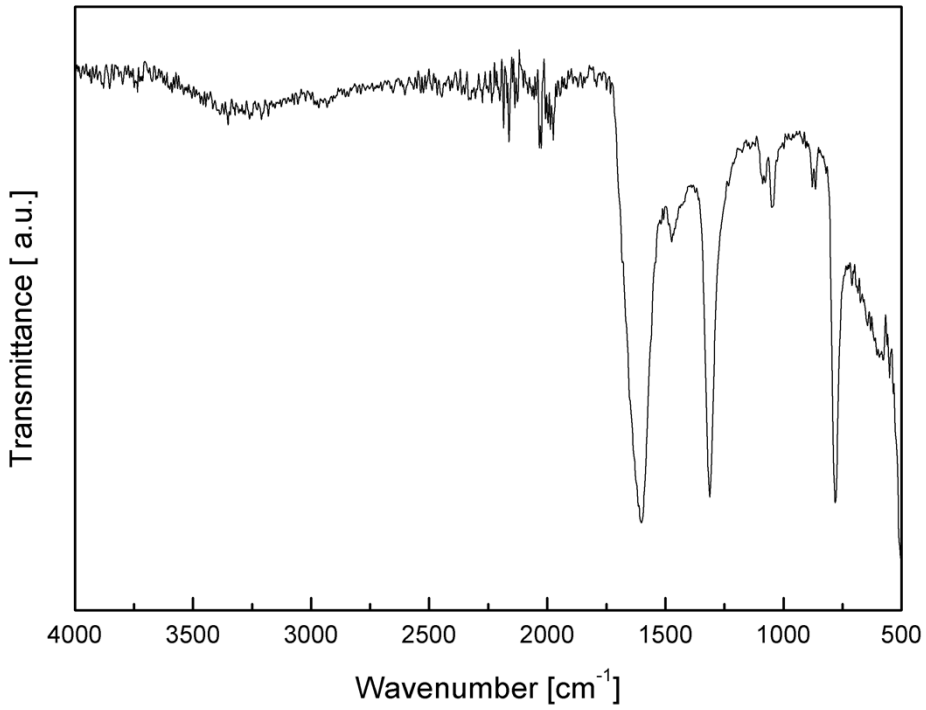

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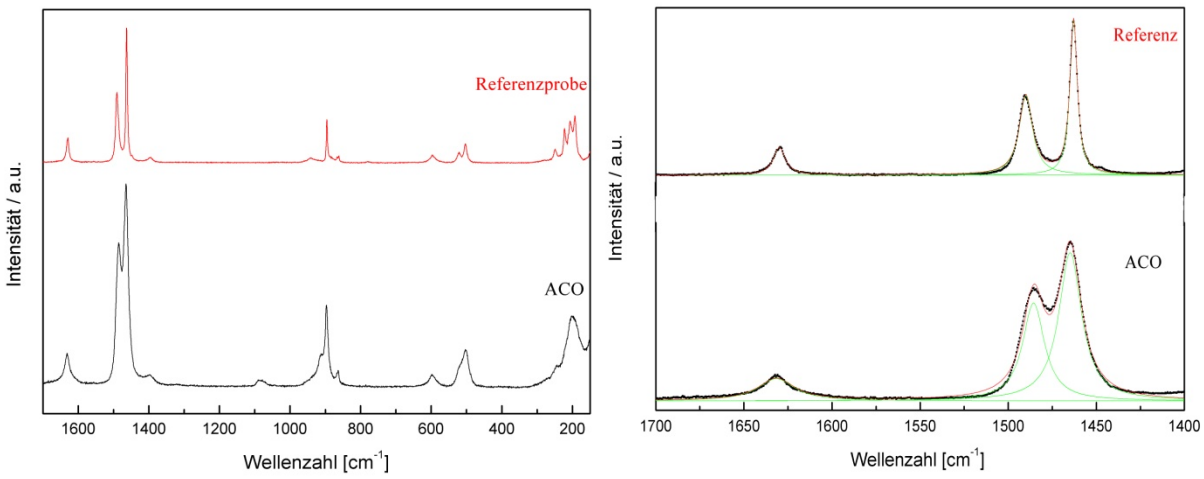

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