Electronic Supplementary Information

Synergy of Mg^{2+} and poly(aspartic acid) in additive-controlled calcium carbonate precipitation

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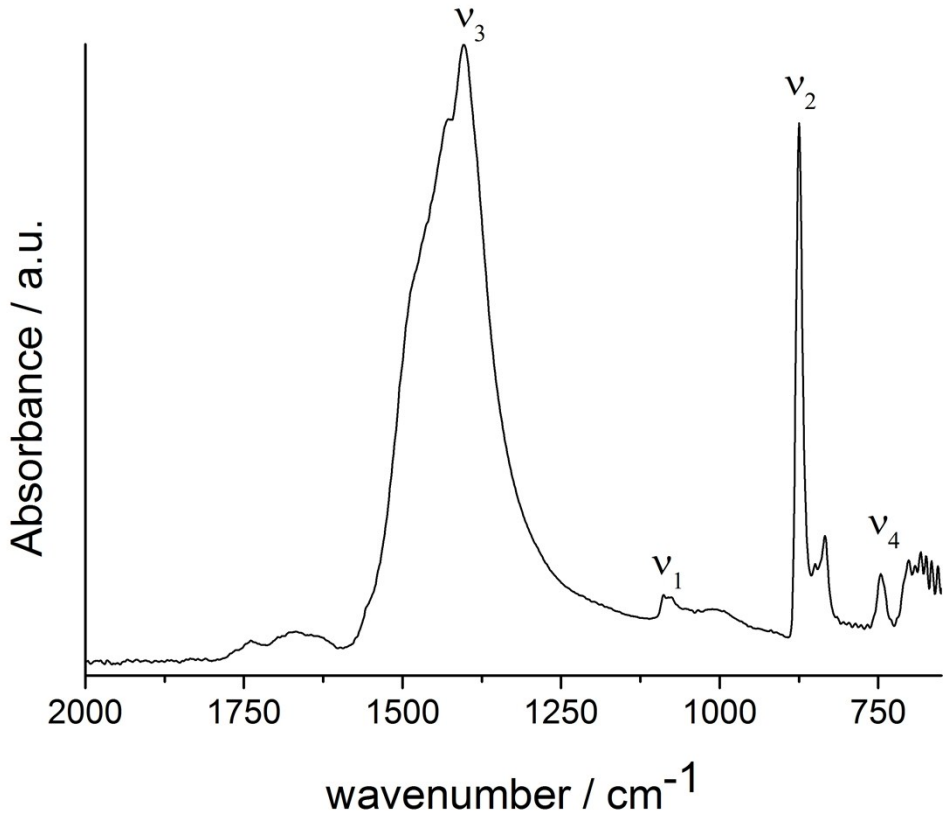

Figure S1: IR spectrum of a sample obtained with 10 µg/ml PAsp at the end of the titration assay experiment. The bands are consistent with vaterite – (ν_4 = 743 cm^{-1}).

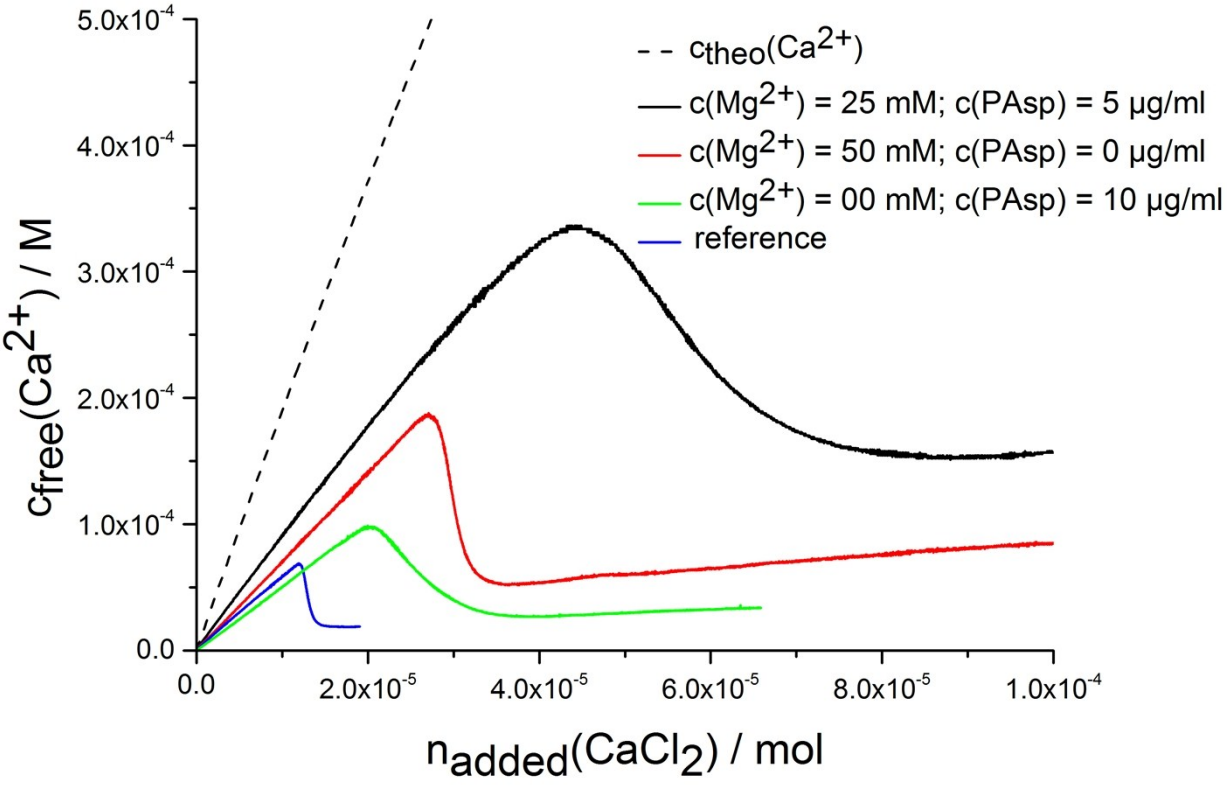

Figure S2 Development of free calcium concentration upon continuous addition of calcium solution with and without additives (as indicated) into 10 mM carbonate buffer (pH 9.75) at a rate of 10 µl/min.

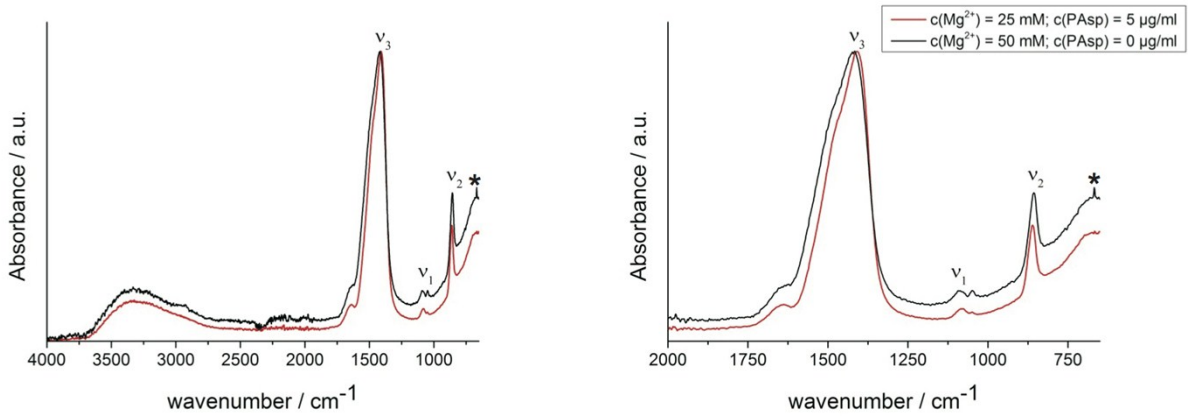

Figure S3: Complete spectral range of the IR-spectra of the ACCs formed in presence of Mg and both Mg and PAsp. The band marked by an asterisk is due to atmospheric CO_2 (668 cm^{-1}; bending vibration).

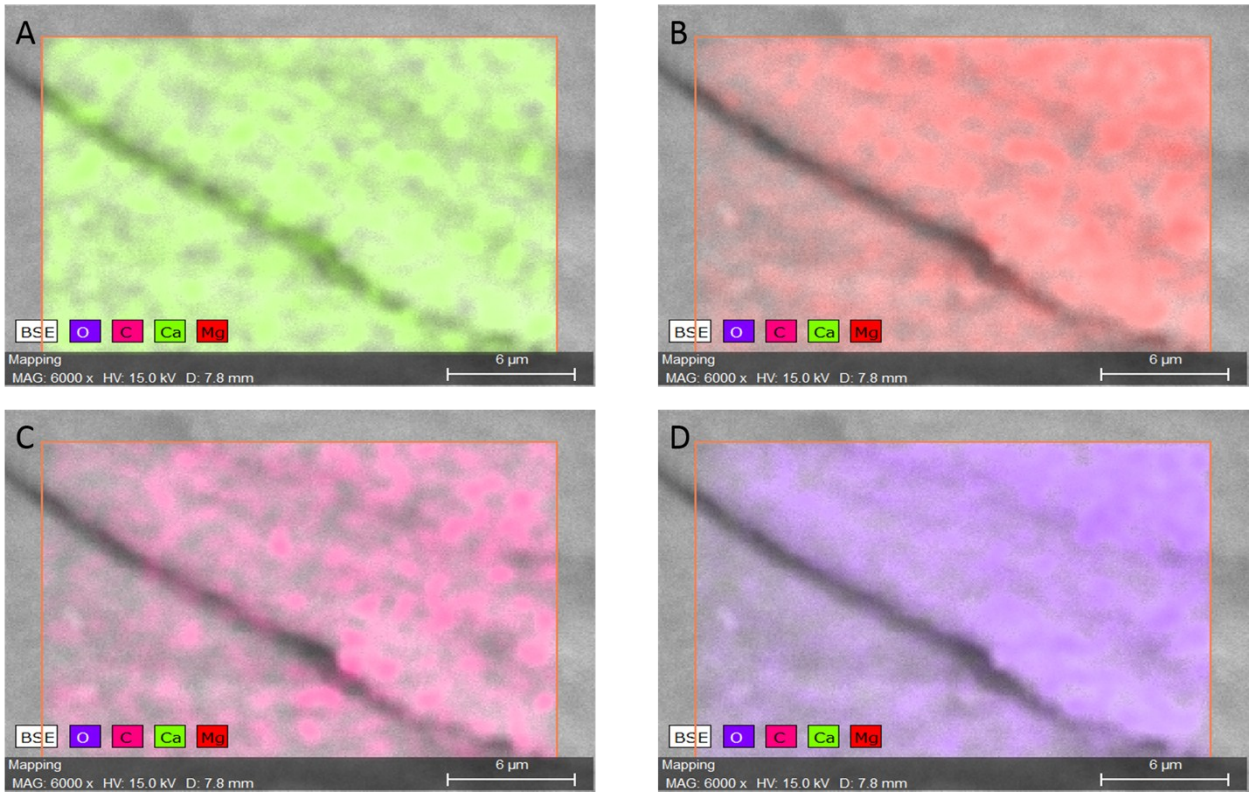

Figure S4: EDS mapping of the different Elements

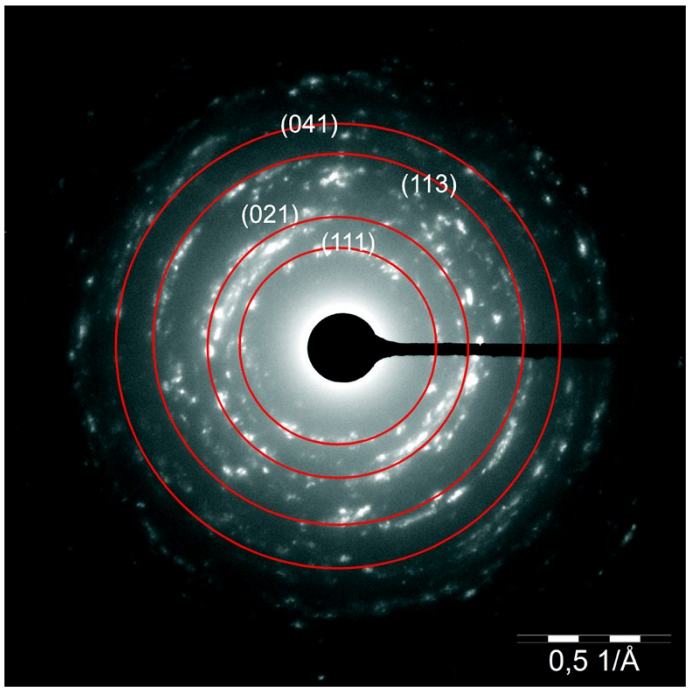

Figure S5: Indexed ED pattern of the crystalline part. The reflexes correspond to aragonite