

Figure S1: XRPD spectra acquired in samples S1 and S3 (a). Inset of the XRPD patterns (b) where the main diffraction peaks are labeled. DCPD: DCPD; Suv: struvite, Dol: dolomite, CaPs: calcium phosphates, DAP: diammonium hydrogen phosphate.

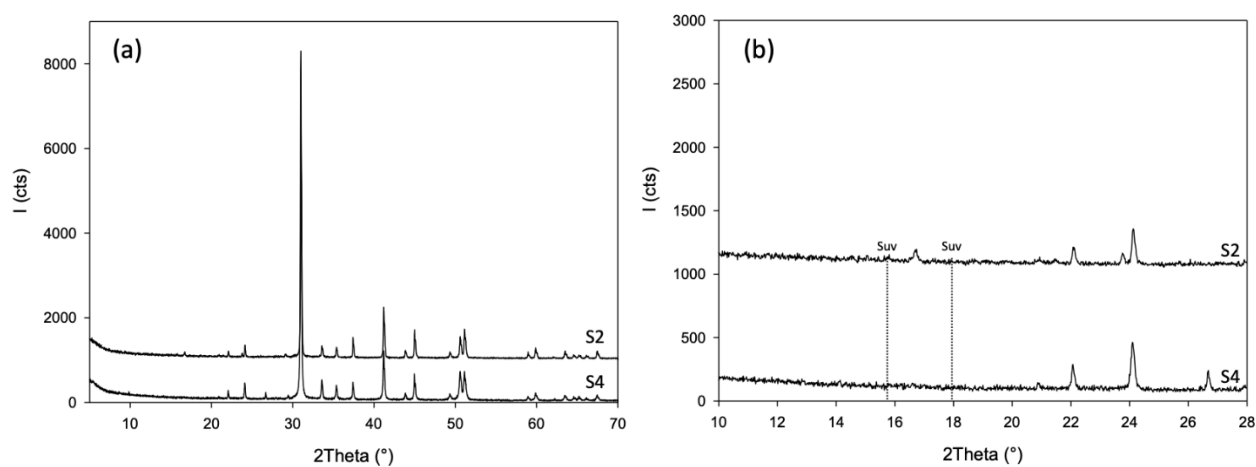


Figure S2: XRPD spectra acquired in samples S2 and S4 (a). Inset of the XRPD patterns (b) where the main diffraction peaks are labeled. Suv: struvite.

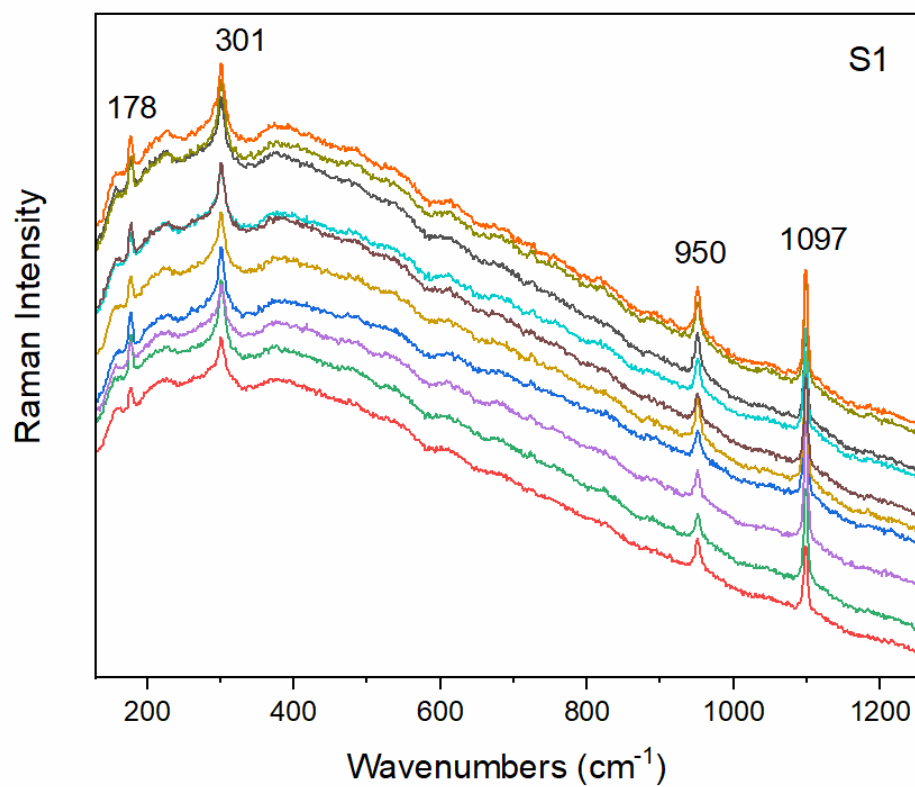


Figure S3: Representative Raman spectra acquired in samples S1. Struvite band at 950 cm^{-1} and dolomite at 1097, 301 and 178 cm^{-1} are mainly present.

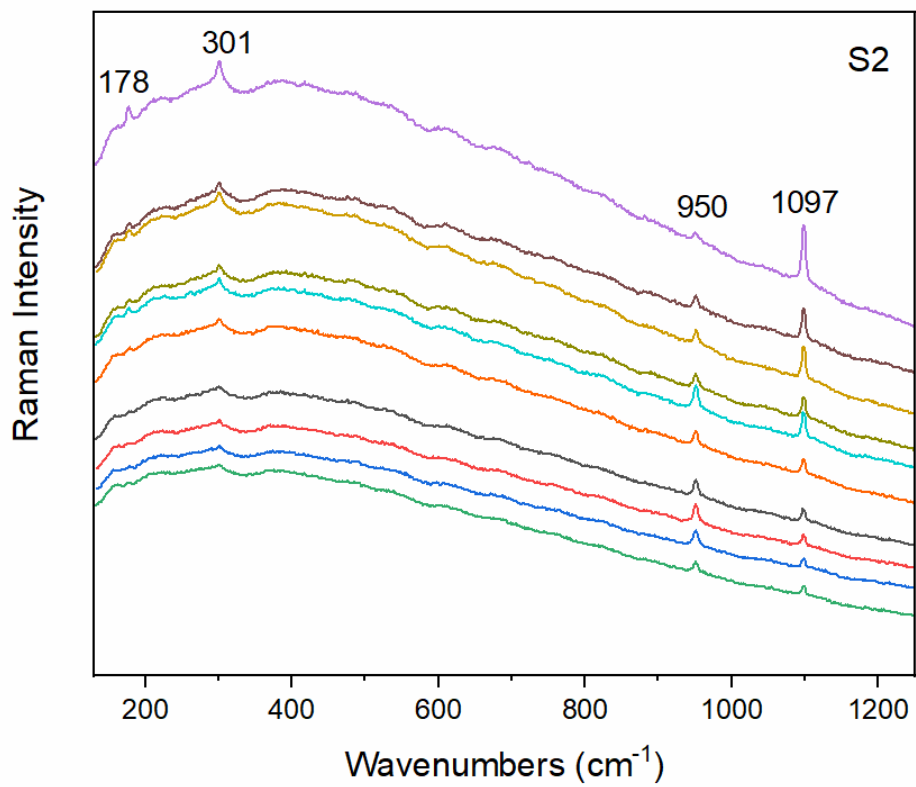


Figure S4: Representative Raman spectra acquired in samples S2. Struvite band at 950 cm^{-1} and dolomite at 1097, 301 and 178 cm^{-1} are mainly present.

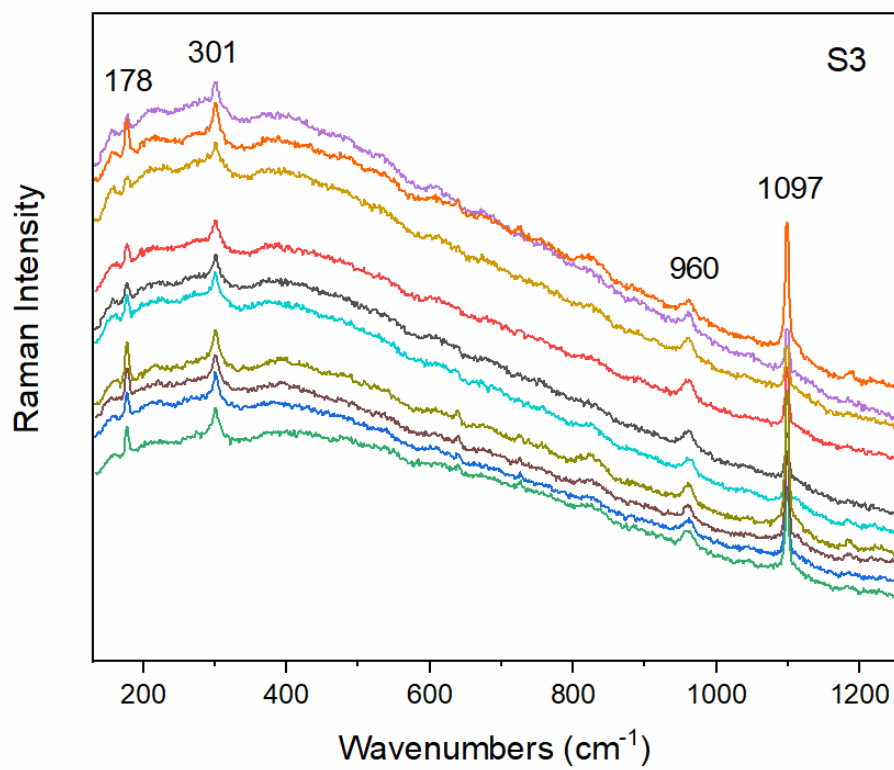


Figure S5: Representative Raman spectra acquired in samples S3. HAP/OCP band at 960 cm^{-1} and dolomite at 1097, 301 and 178 cm^{-1} are mainly present.

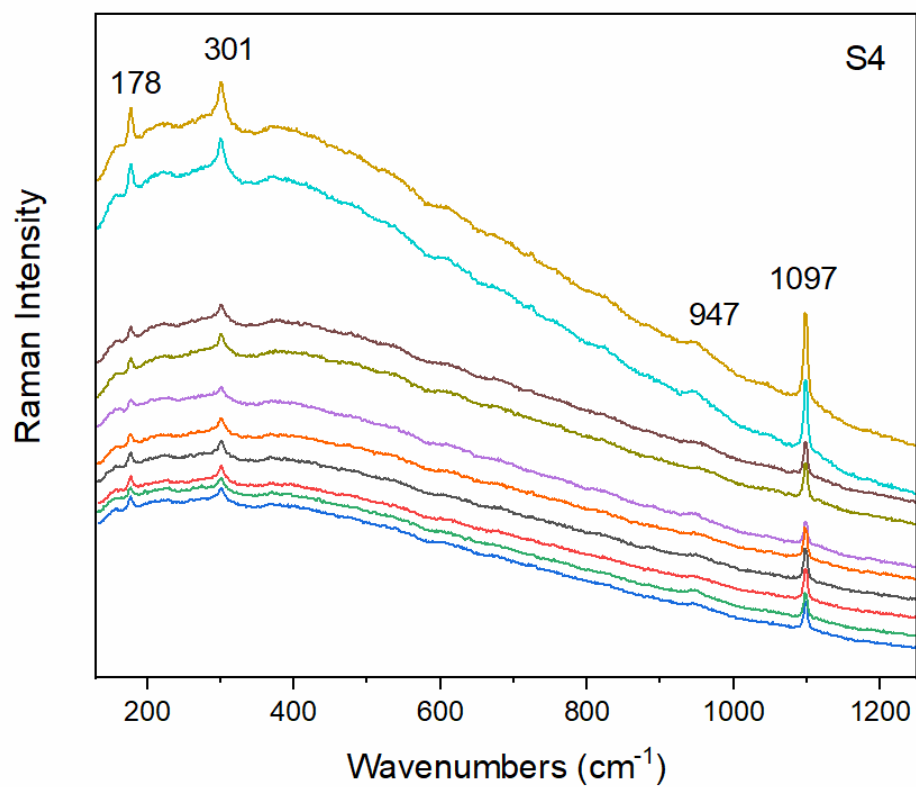


Figure S6: Representative Raman spectra acquired in samples S4. An unidentified broad band at 947 cm⁻¹ is present, along with dolomite at 1097, 301 and 178 cm⁻¹.

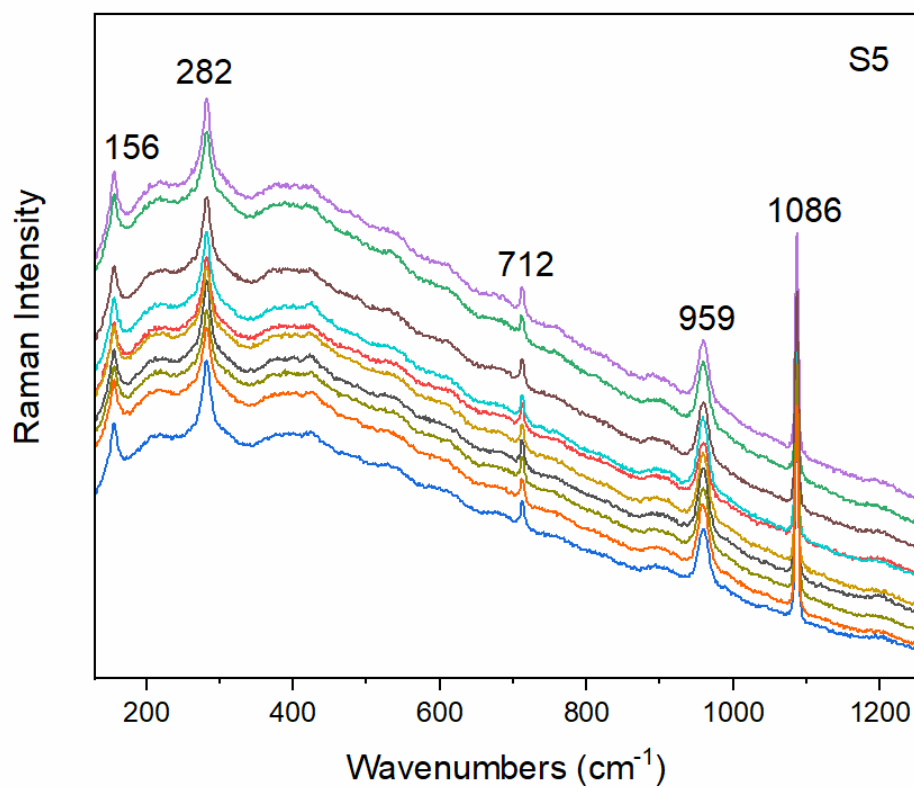


Figure S7: Representative Raman spectra acquired in samples S5. HAP/OCP band at 959 cm^{-1} and calcite at 1089, 712 and 282 and 156 cm^{-1} are mainly present.

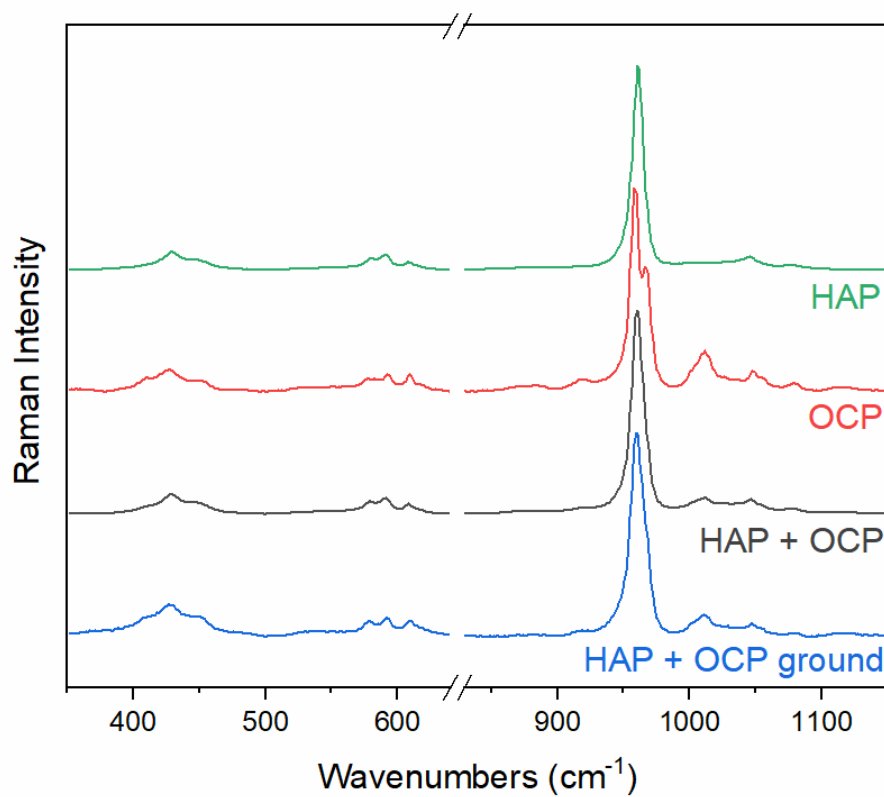


Figure S8: Averaged Raman spectra of reference pure powders (HAP and OCP), of the physical mixture (HAP+OCP) and of the ground physical mixture (HAP+OCP ground). See Figure 4 for the frequency values.