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EPS of living bacteria influence the crystallization of EPS-hydrogel-calcite composite aggregates

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To understand the influence of bacterial metabolic activity at calcite crystallization, we synthesized hydrogel-calcite composite aggregates with *B. subtilis*. Our results show that living microorganisms strongly influence the mineral microstructure and texture. This characteristic indicates that bacterial EPS can be developed as a further tool (a biomarker) for the recognition and identification of bacterially mediated calcification in present environments as well as in the geological record.

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