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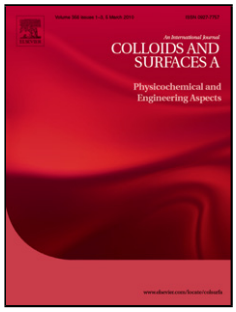

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HPAM assisted controllable synthesis of peanut-like $CaCO_3$ in fixed silicate solution

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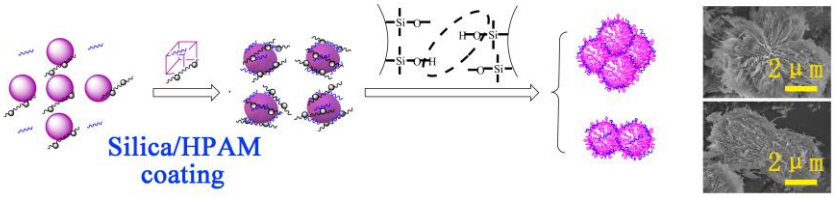
GRAPHICAL ABSTRACT

The surface of $CaCO_3$ was rough, which indicated that the silicate-HPAM complex coated on the surface of $CaCO_3$ particles. With further condensation reactions of silanol groups，unusual morphology of the peanut-like $CaCO_3$ were prepared.



HIGHLIGHTS

- Polysilicic acid exhibited a dramatic effect on the precipitation.
- Peanut-like $CaCO_3$ was controllable prepared in silicate-HPAM hybrid system.

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