Synthesis, Characterization and Mechanism Study of Green

Aragonite Crystals from Waste Biomaterials as Calcium

Supplement

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Supplementary Materials

Number of Pages: 6

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Number of Figures: 5

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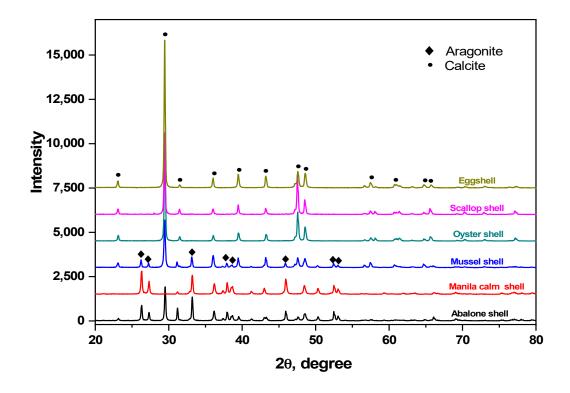


Figure S1. Powder X-ray diffraction patterns of raw waste bivalve seashells.

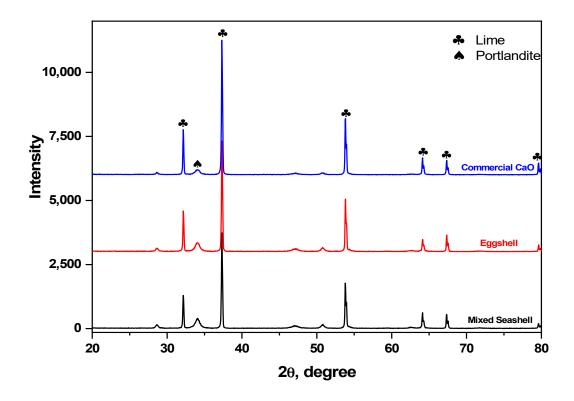


Figure S2. Powder X-ray diffraction patterns of commercial grade calcium oxide (CO_{COMM}), calcinated mixed bivalve seashell and calcinated chicken eggshell.

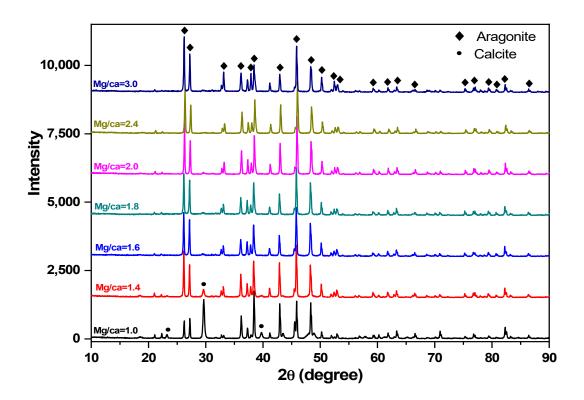


Figure S3. Powder X-ray diffraction patterns of synthesized green aragonite with different Mg to Ca molar ratios (Mg:Ca = 1-3).

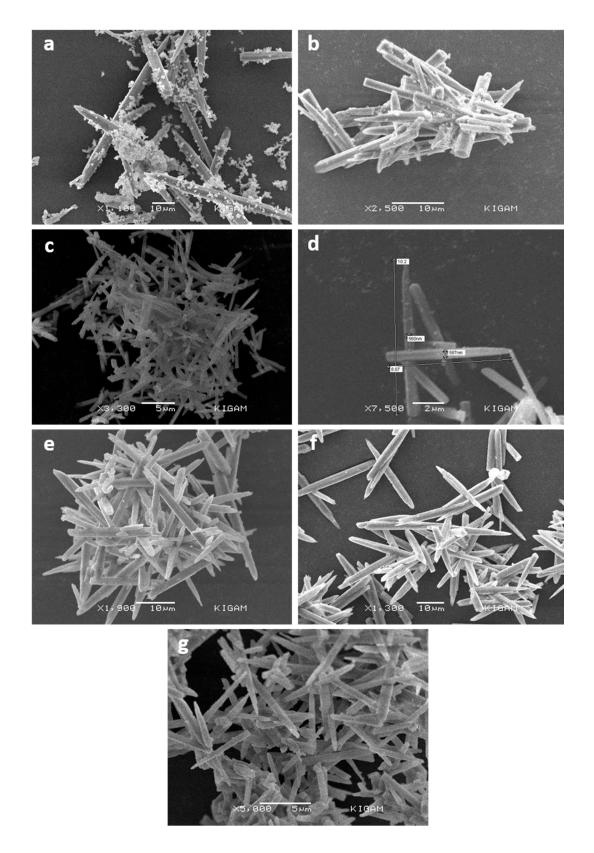


Figure S4. SEM images of synthesized green aragonite with different Mg to Ca molar ratio of a) 1.0, b) 1.4, c) 1.6, d) 1.8, e) 2.0, f) 2.4, g) 3.0.

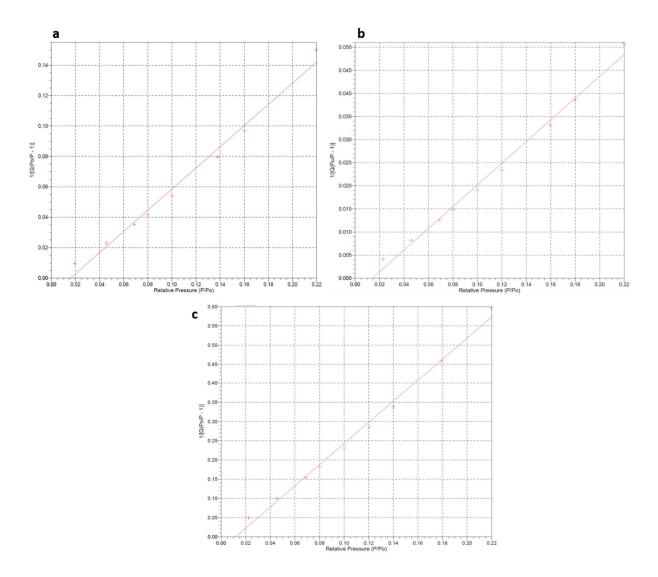


Figure S5. BET surface area plots of green aragonite synthesized from a) commercial grade calcium oxide, b) chicken eggshell, and c) bivalve seashell.