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Facile synthesis of hydroxyapatite nanoparticles mimicking biological apatite from eggshells for bone-tissue engineering

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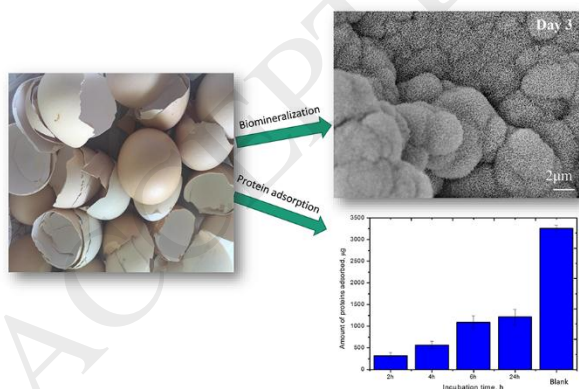
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Graphical Abstract



Research highlights:

- HAp particles mimicking biological apatite were synthesized using eggshells as a bio-calcium precursor.
- The HAp presents a rod-like shape with a mean diameter of 52 nm and a mean length of 161 nm.
- The HAp is carbonated with A- and B- type of CO_3^{2-} substitutions.
- The HAp induced a rapid formation of double layer of bone-like apatite after 3 days in SBF.

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