Electric Supplementary Information (ESI)

Morphological Variation of Hydroxyapatite in Aqueous Solution Based on Simulated Body Fluid

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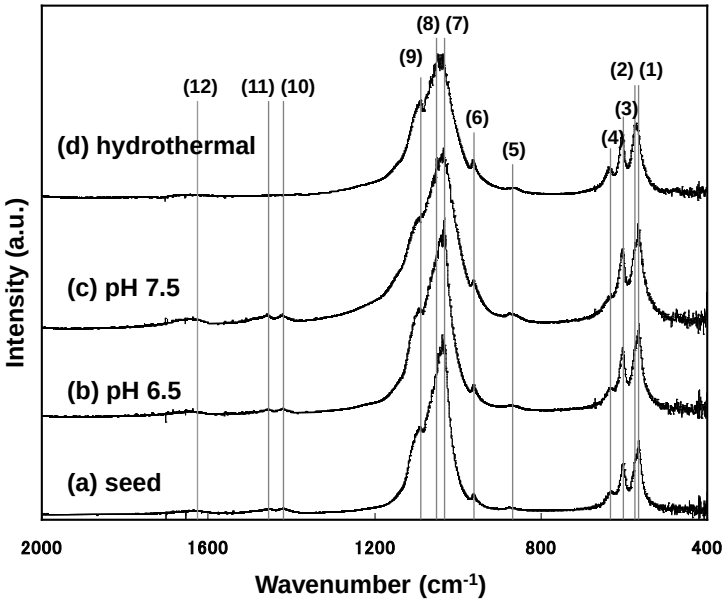

Figure S1. FTIR spectra of a seed (a) and HAp crystals prepared in the SBF-based solution (b,c,d). All the absorption bands are assigned to the vibration of HAp crystal.[35,36]

(1) 561 Triply degenerated bending mode, ν_{4c} , of the O−P−O bonds of the phosphate group

(2) 574 Triply degenerated bending mode, ν_{4b} , of the O−P−O bonds of the phosphate group

(3) 602 Triply degenerated bending mode, ν_{4a} , of the O−P−O bonds of the phosphate group

(4) 631 Librational mode, ν_L , of the hydroxyl group

(5) 875 Characteristic peak of hydrogen phosphate group (nondistinguishable peak)

(6) 962 Nondegenerated symmetric stretching mode, ν_L, of the P−O bonds of the phosphate group

(7) 1032 Triply degenerated asymmetric stretching mode, ν_{3c}, of the P−O bond of the phosphate group

(8) 1046 Triply degenerated asymmetric stretching mode, ν_{3b}, of the P−O bond of the phosphate group

(9) 1087 Triply degenerated asymmetric stretching mode, ν_{3a}, of the P−O bond of the phosphate group

(10) 1430 Stretching mode (ν_1) of the CO_3^{2-} group in B-type CAP

(11) 1465 Characteristic stretching mode (ν_1) of the CO_3^{2-} group in A-type CAP

(12) 1630 Bending mode, ν_2 for water associated with HAp