

Influence of Biomacromolecules on Calcium Phosphate Formation on TiO₂ Nanomaterials

Content of listed material

Figure S1. FTIR spectra and corresponding first- and second-order derivatives of bovine serum albumin (BSA), chitosan (Chi), calcium-deficient hydroxyapatite (CaDHA), and CaDHA formed in the presence of BSA or Chi.

Figure S2. FTIR spectra and corresponding first- and second-order derivatives of calcium-deficient hydroxyapatite (CaDHA) formed in the control system and in the presence of bovine serum albumin or chitosan and TiO₂ nanoparticles.

Figure S3. FTIR spectra and corresponding first- and second-order derivatives of calcium-deficient hydroxyapatite (CaDHA) formed in the control system and in the presence of bovine serum albumin or chitosan and TiO₂ nanoplates.

Figure S4. FTIR spectra and corresponding first- and second-order derivatives of calcium-deficient hydroxyapatite (CaDHA) formed in the control system and in the presence of bovine serum albumin or chitosan and titanate nanotubes.

Figure S5. FTIR spectra and corresponding first- and second-order derivatives of calcium-deficient hydroxyapatite (CaDHA) formed in the control system and in the presence of bovine serum albumin or chitosan and TiO₂(B) / titanate nanowires.

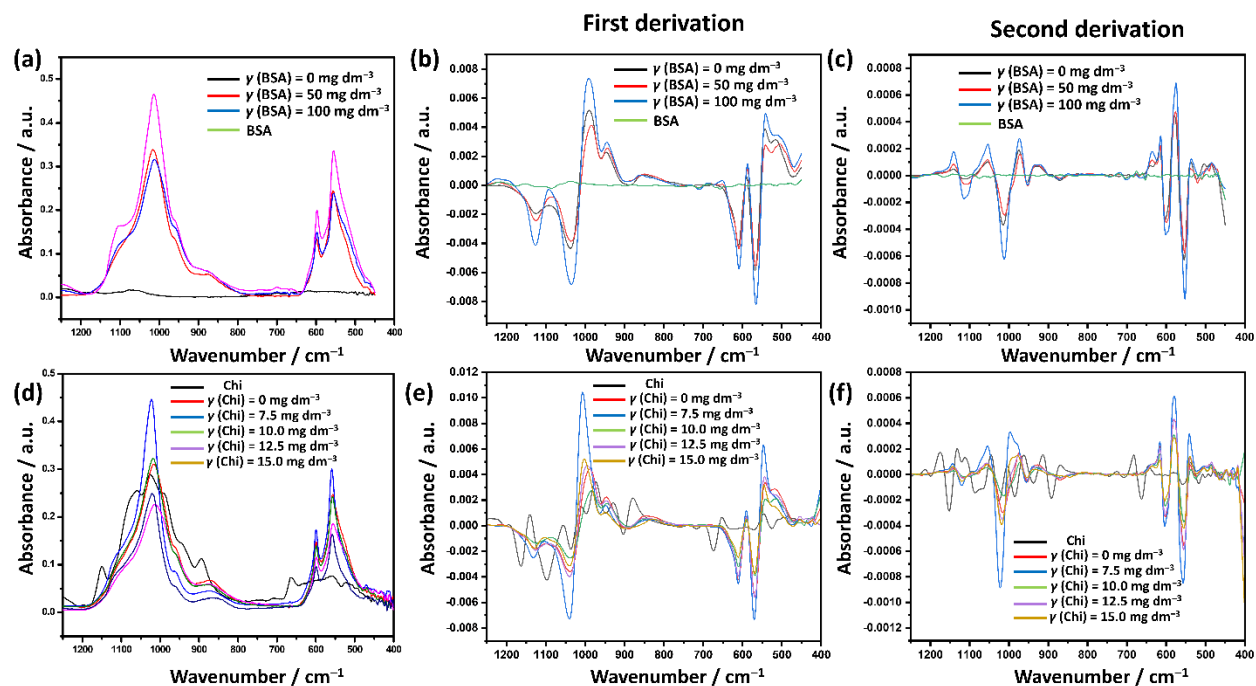


Figure S1. (a,d) FTIR spectra and corresponding (b,e) first-order and (c,f) second-order derivatives of the same FTIR spectra of bovine serum albumin (BSA), chitosan (Chi), calcium-deficient hydroxyapatite (CaDHA), and CaDHA formed in the presence of different concentrations of (a–c) BSA and (d–f) Chi.

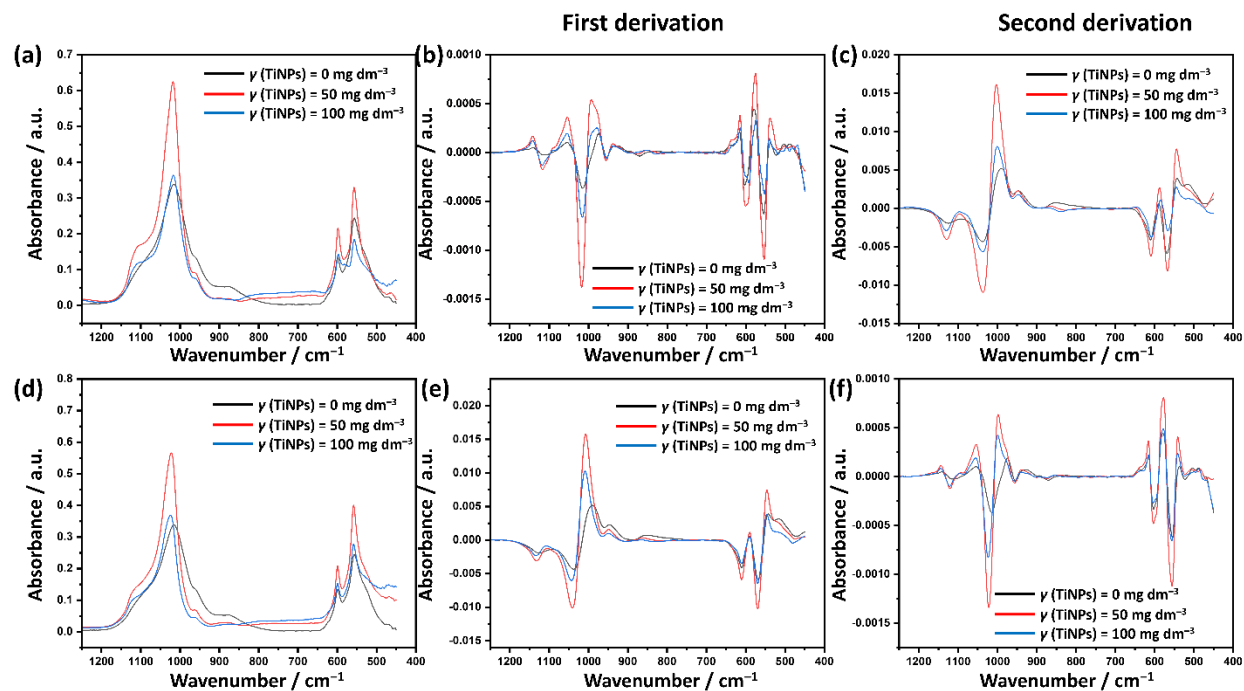


Figure S2. (a,d) FTIR spectra and corresponding (b,e) first-order and (c,f) second-order derivatives of the same FTIR spectra of bovine serum albumin (BSA), chitosan (Chi), calcium-deficient hydroxyapatite (CaDHA), and CaDHA formed in the presence of different concentrations of TiO_2 nanoparticles (TiNPs) and (a–c) BSA and (d–f) Chi.

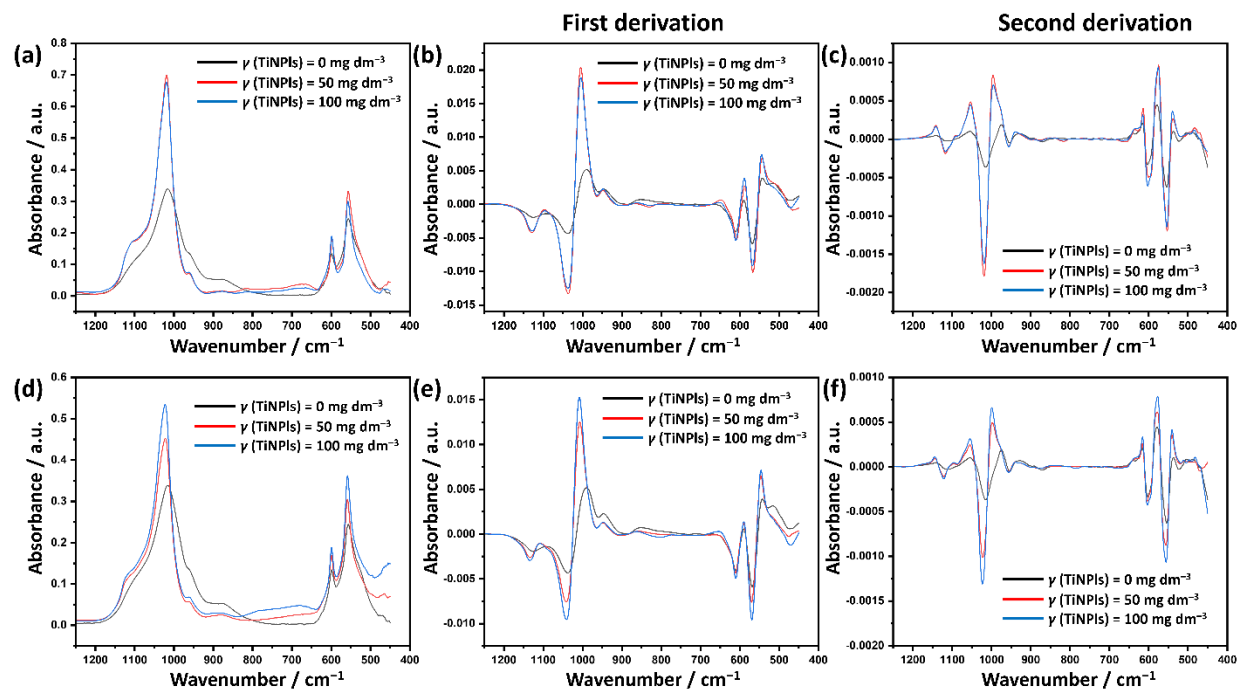


Figure S3. (a,d) FTIR spectra and corresponding (b,e) first-order and (c,f) second-order derivatives of the same FTIR spectra of bovine serum albumin (BSA), chitosan (Chi), calcium-deficient hydroxyapatite (CaDHA), and CaDHA formed in the presence of different concentrations of TiO₂ nanoplates (TiNPLs) and (a–c) BSA and (d–f) Chi.

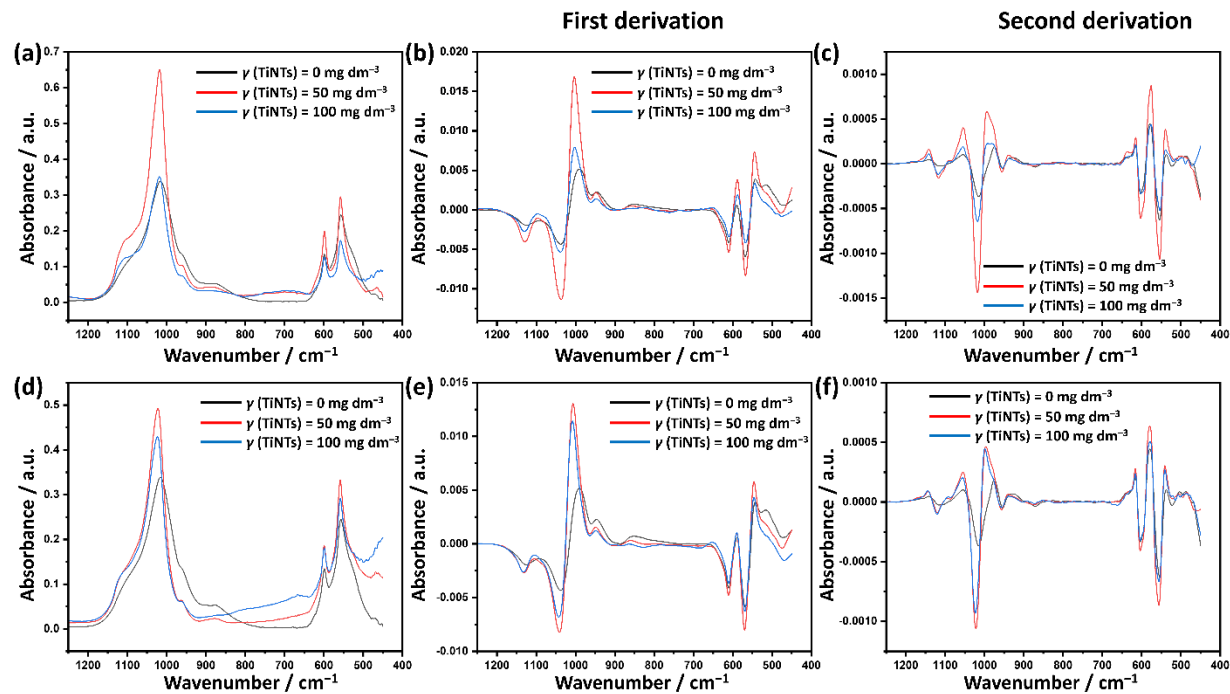


Figure S4 (a,d) FTIR spectra and corresponding (b,e) first-order and (c,f) second-order derivatives of the same FTIR spectra of bovine serum albumin (BSA), chitosan (Chi), calcium-deficient hydroxyapatite (CaDHA), and CaDHA formed in the presence of different concentrations of titanate nanotubes (TiNTs) and (a–c) BSA and (d–f) Chi.

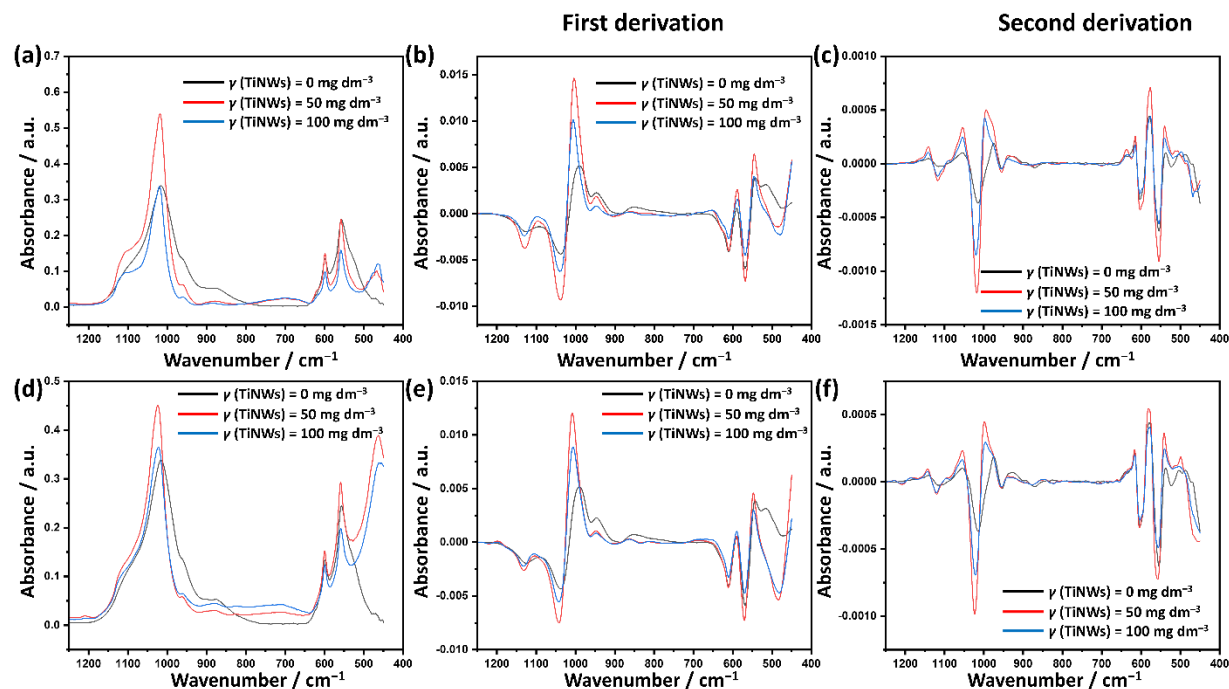


Figure S5. (a,d) FTIR spectra and corresponding (b,e) first-order and (c,f) second-order derivatives of the same FTIR spectra of bovine serum albumin (BSA), chitosan (Chi), calcium-deficient hydroxyapatite (CaDHA), and CaDHA formed in the presence of different concentrations of $\text{TiO}_2(\text{B})$ / titanate nanowires (TiNWs) and (a–c) BSA and (d–f) Chi.