

Synthesis of hydroxyapatite by varying the parameters of human synovial fluid

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Abstract

It is shown that on varying the content of carbonate ions in synovial fluid it is possible to obtain carbonate materials with different crystallinity. By varying the concentration of sulfate ions it has been found that these anions inhibit the formation of solid phase. As a result, the synthesis of hydroxyapatite was obtained with the mixture of sulfate ions, the most optimal conditions, providing the desired output and the crystallinity of the product correspond to the concentration of sulfate ions, which lies in the range of 5-8 mmole/L.