

Crystallization of calcium phosphates from solutions simulating the composition of human blood plasma

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Abstract

This paper presents the results of studies on the kinetics of nucleation and crystal growth in solutions simulating the composition of human blood plasma. The results of X-ray phase analysis and optical microscopy are presented. It has been found that when supersaturation changes the composition of the deposit varies – octocalcium phosphate is transferred into hydroxyapatite. The effect of some inorganic (magnesium ion) and organic (alanine and glucose) additives on the crystallization kinetics has been shown.