

Effect of Solution Flow on the Protein Crystal Growth

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Abstract

Effect of forced solution flow ($25 \mu\text{m/s}$) equal to natural convection level on morphology and the step growth rate of tetragonal lysozyme crystals was investigated by temperature controlled AFM at 20°C . It was found that macro-step was enhanced when the solution flowed in the same direction of the step motion. The step growth rate reached a maximum and then decreased with experimental time although the protein concentration was kept constant.