

||||| 特集：蛋白質宇宙実験の最近の動きと今後の展望 |||||
(原著論文)

結晶成長実験のための微小重力での溶液注入

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Bubble-free Injection of Solution into a Glass Cell under Microgravity

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Abstract

Bubble-free injection of solution into a glass cell is necessary for appropriate crystal growth and in situ observation under the microgravity environment. The injection experiments under microgravity environment were performed with the parabolic flight using MU-300 aircraft. The optimum requirements of inside coating patterns and the injecting speeds were found. In this paper, we discuss the influence of laminar-turbulent flow of injecting condition and the air-water interfacial shape of injecting into the glass cell on successful bubble-free injection.