

||||| 小特集 1 : マランゴニ対流 |||||  
(解説)

## シリコン液柱内マランゴニ対流に関する研究

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### Study on Marangoni Flow in Liquid Bridge of Silicon

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#### Abstract

Studies on the Marangoni flow of molten silicon are reviewed. Marangoni flow of low  $Pr$  number fluids, such as molten silicon, have been carried out mainly experimentally from the viewpoint of application. Since, for molten silicon, it is rather difficult to attain small Marangoni number, a partially confined structure has been employed both for experimental and numerical studies. The critical Marangoni number  $Ma_{c3}$  is an important criterion from the application viewpoint. Flow instability has been studied experimentally; basic relationship between an aspect ratio and azimuthal wave number is sustained even under the large Marangoni number case.