

||||| 特集：微小重力環境を利用した磁性材料の創製 |||||
(解説)

短時間微小重力環境を利用する均質 Ne-Fe-B 系磁性合金の創製

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Synthesis of Uniform Ne-Fe-B Magnetic Alloy in Short-duration Microgravity

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Abstract

Splat solidification experiments in microgravity were performed for Nd-Fe-B permanent magnet materials to produce high performance magnet. $(BH)_{\max}$ of 58.3 kJ/m^3 was obtained on the composition of $\text{Nd}_2\text{Fe}_{10.8}\text{B}$ sample by splat solidification in 13.6 m drop tube facility.