

B08

SiO<sub>2</sub> 액상이 계재된 BaTiO<sub>3</sub>의 분위기에 따른 입성장 양상

**Effect of Oxygen Partial Pressure on the Growth Behavior of BaTiO<sub>3</sub> Grains in SiO<sub>2</sub>-Rich Liquid**

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Abnormal grain growth phenomena in a liquid matrix have been extensively studied in recent years. Yoon et. al. suggested that the grain growth mode is governed by the interfacial structure, which is related to step free energy. When the equilibrium shape of a crystal is faceted in a matrix, a step growth mechanism was predicted to be operative for crystal growth. In this work, the effect of the oxygen partial pressure on crystal growth of the BaTiO<sub>3</sub> in SiO<sub>2</sub>-rich liquid phase was studied. As oxygen partial pressure reduced, the grain growth mode was dramatically changed from stagnant, abnormal, to normal.