

## EBSD를 이용한 SrTiO<sub>3</sub>의 입자 크기 및 입자 배향 분포

박명범, Shao-Ju Shih, 조남희\*, David J.H. Cockayne  
옥스포드대 재료학과, 인하대 신소재공학과\*

### **EBSD studies of the grain size and grain orientation distribution of SrTiO<sub>3</sub>**

Myung-Beom Park, Shao-Ju Shih, Nam-Hee Cho\*, David J.H. Cockayne  
Department of Materials, University of Oxford  
Department of Materials Science and Engineering, Inha University\*

**Abstract** : SrTiO<sub>3</sub> was annealed at two different annealing times (1 h and 16 h) to investigate the annealing effect on the grain size and orientation distribution. Electron backscattered diffraction (EBSD) was used to analyze the grain size and grain orientation distributions of the SrTiO<sub>3</sub>. It is possible to understand the annealing effect on the microstructure evolution, by comparing the grain size and orientation distribution of the SrTiO<sub>3</sub> as a function of annealing time.

**Key Words** : SrTiO<sub>3</sub>; Annealing time; Grain size; Grain orientation; Electron backscattered diffraction (EBSD)

#### **Acknowledgment**

The authors thank Dr Angus Wilkinson for helpful discussions. The authors would like to thank the European Commission for financial support under contract Nr. NMP3-CT-2005-013862 (INCEMS). Dr Myung-Beom Park wishes to acknowledge the support of the Korea Research Foundation Grant funded by the Korean Government (MOEHRD) under contract No. KRF-2005-214-D00111.