

## 저온에서 (Ba,Sr)TiO<sub>3</sub> 박막의 UV를 이용한 RTP에 관한 연구

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### Low temperature UV-assisted rapid thermal processing of (Ba,Sr)TiO<sub>3</sub> thin films

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**Abstract :** Chemically homogeneous Ba<sub>0.6</sub>Sr<sub>0.4</sub>TiO<sub>3</sub> (BST) sols were synthesized using barium acetate, strontium acetate, and titanium isopropoxide as starting materials. BST thin films of thickness 340 nm were deposited on Pt/TiO<sub>2</sub>/SiO<sub>2</sub>/Si and alumina substrates using spin coating method. The technique used for the processing of these films was Ultraviolet (UV) sol-gel photoannealing, using photo-sensitivity precursor solutions and UV-assisted rapid thermal processing(UV-RTP). The crystallization behaviour of the BST sols and thin films was studied by differential thermal analysis (DTA) and X-ray diffraction (XRD). Variation of permittivity and dielectric loss were measured in LCR-meter, model HP 4394A.