

## Ge-Se 이원계 화합물을 이용한 ReRAM 스위칭 특성 분석에 관한 연구

남기현, 김장한, 정홍배

광운대학교

Programmable Metallization Cell (PMC) is a ReRAM device based on the electrolytical characteristic of chalcogenide materials. In this study, we investigated the nature of thin films formed by photo doping of  $\text{Ag}^+$  ions into chalcogenide materials for use in solid electrolyte of programmable metallization cell devices. We were able to do more economical approach by using  $\text{Ag}^+$  ions which play an electrolyte ions role. The results imply that a Ag-rich phase separates owing to the reaction of Ag with free atoms from chalcogenide materials.

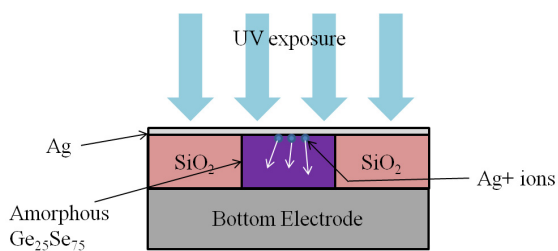


그림 1.

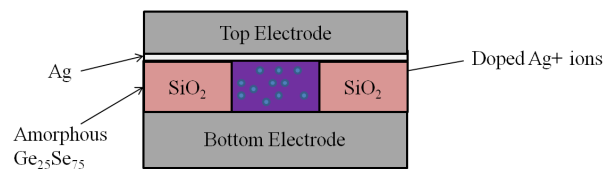


그림 2.

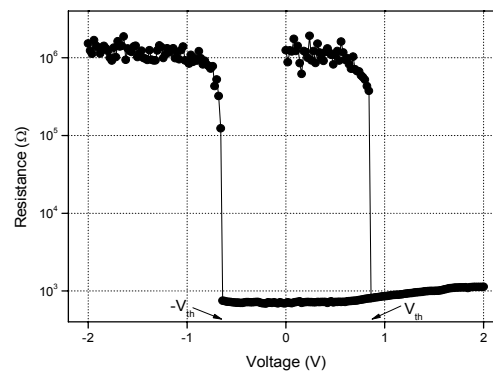


그림 3.

**Keywords:** chalcogenide, PMC, ReRAM, solid-electrode