

Fig.1

Hall measurement at room temperature on pure and doped ZnO deposited on a glass substrate. The graph shows the values of resistivity, mobility and carrier density as function of the Al concentration inside the AZO films.

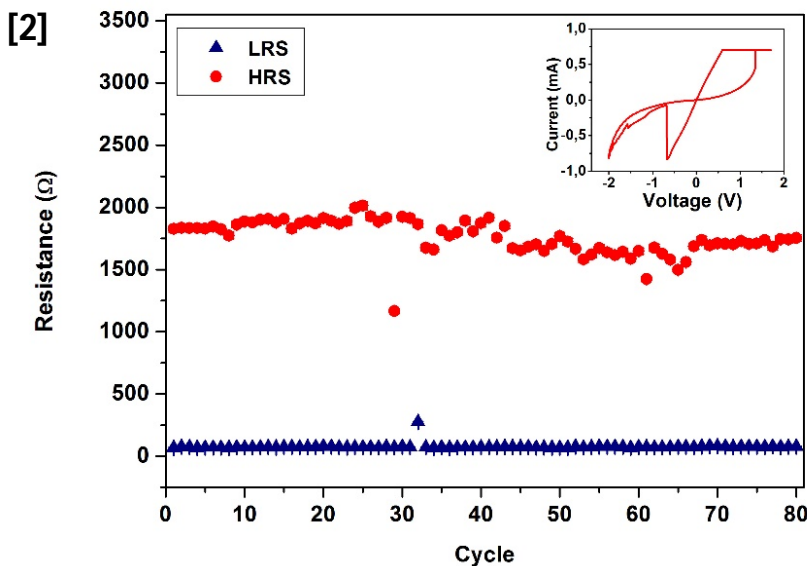


Fig.2

Endurance for ZnO pure MIM structure. The device exhibits a bipolar switching behavior with set in positive polarity and reset in negative (VCM mechanism), as reported in the inset on the right.

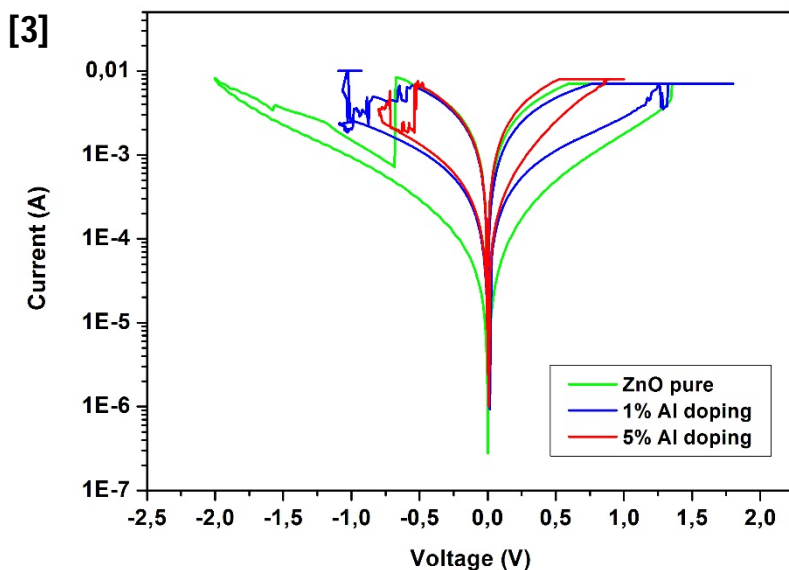


Fig.3

Comparison of IV characteristics for pure and doped ZnO samples; the decrease of the OFF resistance value and the variation in switching voltages are visible. The measurements were done with comparable compliance current values and same forming parameters.