Abstract:

A Novel electrical method, using charge-pumping (CP) technique under bias thermal stress (BTS), has been described in this work. This technique is based on the measurement of the flat-band voltage before and after an applied voltage at high temperature through the use of charge-pumping current. The measured flat band shift, that may be due to effect of certain types of the oxide charges, may be used to detect these types of oxide charges and to determine their densities.