THERMOSTIMULATED PHENOMENA IN THE OXIDE FILMS ON ALUMINUM

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S u m m a r y

The investigation of thermostimulated luminescence (TSL), thermostimulated exoemission (TSE), thermostimulated conductivity (TSC), and thermostimulated capacity (TSCap) in the oxide films on aluminum is carried out. The phenomenon of secondary thermostimulated light emission is observed. That phenomenon is caused by adsorption traps formation, based on Cl ions as a result of chemical treatment in a 0.1 N aq. solution of NaCl. Energetical levels of the adsorption nature are determined from the TSE curves as follows: 0.67 eV for Na^+, 0.6 eV for K^+ and 0.86 eV for Cd^+. The concentration of centers of the adsorption nature, 10^{26} m^{-3}, is determined from the TSP and TSCap curves as well as the contribution of every type of carriers to thermostimulated capacity and thermostimulated conductivity.