POSTRADIATIVE STABILITY OF THIN $YBa_2Cu_3O_7 - x$ HTSC FILMS, IRRADIATED BY 4 MeV ELECTRONS

Yu.V. Fedotov, A.V. Bondar, S.M. Ryabchenko, V.V. Safronov, A.P. Shakhov

Institute for Physics, Nat. Asad. of Sci. of Ukraine (46, Nauky Prosp., Kyiv 03028, Ukraine)

Summary

It is obtained that explored YBa₂Cu₃O_{7 - x} HNSC films after their irradiating by quick 4 MeV electrons are in a non-equilibrium state. It is shown that the time of relaxation of irradiated films to the equilibrium state at room temperature can reach several hundred days. The equilibrium state has the characteristics (the value of J_c and the type of its temperature dependence), which are close to the initial state of non-irradiated films.