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Numerical Estimation of the Radiation Hardness of Bipolar Integrated Circuits in Various Irradiation Conditions of Space Environment

A.S. Bakerenkov, V.S. Pershenkov, A.S. Rodin, V.A. Felitsyn and
A.G. Miroshnichenko

National Research Nuclear University MEPhI (Moscow Engineering Physics Institute)/Department of Micro- and nanoelectronics, Moscow, Russian Federation

The conversion model of low dose rate effect in bipolar devices was used for numerical simulation of total dose effects in bipolar devices for various radiation conditions of space environment. The numerical simulation was performed for cyclic temperature irradiation, which is typical for space applications, and for solar flare impact.