عنوان مقاله:

Novel Drain Recessed Oxide SOI-MOSFET For Reduction of Short-Channel-Effects

محل انتشار:

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خلاصه مقاله:

Since the device performance is degraded with the elapsed time, it is essential to develop the novel device for enhancing the reliability. Hence, a modification inside the drain region of the SOI-MOSFET structure has been performed. A region oxide has been recessed in the drain in order to modify the electric field owing to dielectric permittivity change. The simulation results obtained by SILVACO showed the improvement of the short-channel .effects in the terms of drain-induced barrier lowering, hot-carrier effects and threshold voltage fluctuation as compared to the conventional structure

کلمات کلیدی:

SOI-MOSFET, Short channel effect, Threshold voltage, Recessed oxide

لینک ثابت مقاله در پایگاه سیویلیکا: