Radiation Effects in Low-Dielectric-Constant Methyl-Silsesquioxane Films

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Abstract

Low-k methyl-silsesquioxane films were irradiated by a 2 keV low-current (~30 fA) positron beam. Bond-breaking was observed at ~0.1 Gy cumulative doses, implying more significant effects upon electron irradiation in space or by electron microscope.