A METHOD FOR IMPROVING TIME DEPENDENT DIELECTRIC BREAKDOWN LIFETIMES

ABSTRACT

[0037] The present disclosure provides a method for increasing a time dependent dielectric breakdown lifetime of a semiconductor device and a structure fabricated using this method. The method includes depositing a first layer and then forming a glue layer on the first layer. A treatment process, which may use a plasma or an electron beam, is performed on the glue layer. The treatment process improves an interface between the glue layer and the first layer. The treatment process may also affect electrical properties of the glue layer. A second layer may then be deposited onto the treated glue layer.

(FIG. 1)