METHOD OF IMPROVING THE DIFFUSION BARRIER PROPERTIES OF GATE OXIDES

ABSTRACT OF THE DISCLOSURE

A method of providing a MOSFET having improved gate oxide diffusion barrier properties, which comprises providing a partially fabricated MOSFET having an exposed gate oxide surface. During MOSFET fabrication, the surface of the exposed gate oxide is converted to an oxynitride by applying one or both of ions or free radicals of nitrogen to the exposed gate oxide surface. Fabrication of the MOSFET is then completed in standard manner.