

ABSTRACT

METHOD FOR MONITORING ION IMPLANT DOSES

Both the sensitivity and the reproducibility of processes for measuring low density ion implant doses near a semiconductor surface have been improved by first forming a thermal oxide layer on the surface and then adjusting the implant profile so that it peaks at the semiconductor-oxide interface. Additionally, variations in the initial wafer surface condition have been minimized by controlling the charging dose and sequence prior to performing the measurements.

(Fig. 6)