FORMATION OF SILICIDED SHALLOW JUNCTIONS USING IMPLANT THROUGH METAL TECHNOLOGY AND LASER ANNEALING PROCESS

ABSTRACT

A method for producing MOS type transistors with deep source/drain junctions and thin, silicided contacts with desireable interfacial and electrical properties. The devices are produced by a method that involves pre-amorphization of the gate, source and drain regions by ion-implantation, the formation of a metal layer, ion implantation through the metal layer, the formation of a capping layer and a subsequent laser anneal.

Fig. 10