

## **ABSTRACT**

A semiconductor structure includes a gate structure region; a source region and a drain region disposed on two sides of the gate structure respectively. The gate structure region includes a channel region and a gate region disposed from inside to outside. The channel region is surrounded inside an inner cavity of the gate region and attached to the source region, the drain region, and the gate region, and an ion doping type of the drain region, an ion doping type of the source region and an ion doping type of the channel region are same.

(Fig.3)