

ABSTRACT

A gate all around field effect transistor (GAAFET) device may include a plurality of nanostructures that are spaced apart from one another in a channel region of the FET device above a substrate. A gate electrode can be in a GAA arrangement with the plurality of nanostructures and a semiconductor pattern can be on one side of the gate electrode. A contact in a contact trench in the semiconductor pattern and a silicide film can extend conformally on a side wall of the contact trench to a level in the channel region that is lower than an uppermost one of the plurality of nanostructures.

Fig. 2