DRAM TRANSISTOR WITH A GATE BURIED IN THE SUBSTRATE AND METHOD OF FORMING THEREOF

ABSTRACT

The invention includes a transistor device (69) having a semiconductor substrate (12) with an upper surface. A pair of source/drain regions (41,59) are formed within the semiconductor substrate and a channel region (46) is formed within the semiconductor substrate and extends generally perpendicularly relative to the upper surface of the semiconductor substrate. A gate (54) is formed within the semiconductor substrate between the pair of the source/drain regions (41,59), and can surround the channel region (46) and /or one of the source/drain regions.

FIGURE 50