

SEMICONDUCTOR STRUCTURE AND METHOD FOR MANUFACTURING SAME

ABSTRACT

Embodiments of the disclosure provide a semiconductor structure and a method for manufacturing the same. The semiconductor structure includes: a substrate; a semiconductor pillar located on the substrate and a gate pillar located on the semiconductor pillar, in which the semiconductor pillar and the gate pillar both extend in a direction perpendicular to a plane of the substrate; a first word line extending in a first direction parallel to the plane of the substrate and surrounding the semiconductor pillar; and a semiconductor layer located above the semiconductor pillar and at least surrounding a sidewall of the gate pillar.

[Fig. 1]