

ABSTRACT

Embodiments of the present disclosure provide a semiconductor device and a manufacturing method therefor. The manufacturing method includes the following steps. A substrate and a stacked structure located on the substrate are provided. The stacked structure includes semiconductor layers and interlayer insulating layers that are alternately stacked. Multiple channel holes running through the stacked structure are formed. The semiconductor layers located between adjacent channel holes are configured to form back gates. Oxidation processing is performed on the semiconductor layers exposed at sidewalls of the channel holes to form first gate dielectric layers. A channel layer, a second gate dielectric layer, and a gate that cover sidewalls of each of the channel holes are sequentially formed. The channel layer, the second gate dielectric layer, and the gate jointly form a transistor, and each of the back gates is configured to regulate a threshold voltage of the transistor.

[Fig. 2]

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