smaller than that between the sixth nitride semiconductor layer and the fourth nitride semiconductor layer.

11. The nitride semiconductor device of claim **5**, wherein the sixth nitride semiconductor layer includes a first p-type layer and a second p-type layer formed on the first p-type layer.

12. The nitride semiconductor device of claim **11**, wherein the first p-type layer has a band gap energy larger than that of the second p-type layer, and

a difference in lattice constant between the second p-type layer and the fourth nitride semiconductor layer is smaller than that between the first p-type layer and the fourth nitride semiconductor layer.

13. The nitride semiconductor device of claim **5**, wherein the sixth nitride semiconductor layer is of an n-type.

14. The nitride semiconductor device of claim **13**, wherein the sixth nitride semiconductor layer has a band gap energy smaller than that of the third nitride semiconductor layer.

15. The nitride semiconductor device of claim **1**, wherein the nitride semiconductor device is of a normally-off type.

16. A method for fabricating a nitride semiconductor device, the method comprising the steps of:

(a) epitaxially growing a first nitride semiconductor layer, a second nitride semiconductor layer having a band gap energy larger than that of the first nitride semiconductor layer and a third nitride semiconductor layer in sequence over a substrate;

(b) selectively removing the third nitride semiconductor layer to form an opening;

(c) epitaxially growing a p-type fourth nitride semiconductor layer to fill the opening therewith; and

(d) forming a gate electrode on the fourth nitride semiconductor layer.

17. The method of claim **16**, wherein in step (c), a fifth nitride semiconductor layer is epitaxially grown, and then the fourth nitride semiconductor layer is successively epitaxially grown.

18. The method of claim **16**, wherein in step (a), a sixth nitride semiconductor layer is epitaxially grown between the second nitride semiconductor layer and the third nitride semiconductor layer.

19. The method of claim **18**, wherein the epitaxial growth of the sixth nitride semiconductor layer is performed in such a manner that a first p-type layer is epitaxially grown and then a second p-type layer is epitaxially grown.

20. The method of claim **16**, wherein in step (b), the third nitride semiconductor layer is selectively removed by wet etching.

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