WHAT IS CLAIMED IS:

1. A method of fabricating a semiconductor device, the method comprising:

forming a device isolation layer defining active regions on a substrate; and

forming gate lines intersecting the active regions and buried in the substrate,

wherein the forming of the gate lines includes:

forming a trench intersecting the active regions in the substrate;

forming a conductive layer filling the trench; and

performing a heat treatment process on the conductive layer,

wherein the conductive layer includes a nitride of a first metal,

wherein nitrogen atoms in the conductive layer are diffused toward an outer surface and a lower surface of the conductive layer by the heat treatment process,

wherein a part of the conductive layer in which the nitrogen atoms are diffused forms a first interface layer,

wherein the first interface layer includes the nitride of the first metal, and

wherein a nitrogen concentration in the first interface layer is higher than a nitrogen concentration in the conductive layer.

2. The method of claim 1, wherein, after the heat treatment process, a concentration of nitrogen atoms in the conductive layer decreases from the outer surface and the lower surface of the conductive layer toward an inside of the conductive layer.

3. The method of claim 1, wherein the first interface layer is formed adjacent to the outer surface and the lower surface of the conductive layer.

4. The method of any one of claims 1 to 3, wherein, after the heat treatment process, other part of the conductive layer in which the nitrogen atoms are diffused forms a second interface layer, and

wherein the second interface layer is formed adjacent to an upper surface of the conductive layer.

5. The method of any one of any one of claims 1 to 4, wherein a flat band voltage of a material constituting the first interface layer is lower than a flat band voltage of a material constituting the conductive layer.

6. The method of any one of claims 1 to 5, wherein a thickness of the first interface layer is from 5Å to 30Å.

7. The method of any one of claims 1 to 3, further comprising etching the first interface layer and the conductive layer,

wherein an upper surface of the first interface layer and an upper surface of the conductive layer are formed to be positioned at the same plane.

8. The method of any one of claims 1 to 7, wherein the forming of the conductive layer includes reacting a first precursor material including the first metal and a second precursor material including nitrogen, and

wherein the forming of the conductive layer is performed at a process temperature of 550 degrees or more.

9. The method of any one of claims 1 to 8, wherein the first metal includes molybdenum (Mo).

10. The method of any one of claims 1 to 9, further comprising forming a capping layer on the gate lines.

11. The method of any one of claims 1 to 10, further comprising forming a gate insulating pattern on a sidewall and a bottom surface of the trench before the forming of the conductive layer.

12. A method of fabricating a semiconductor device, the method comprising:

forming a device isolation layer defining active regions on a substrate;

forming trenches intersecting the active regions;

forming a conductive layer filling a lower portion of each of the trenches, the conductive layer including a nitride of a first metal;

forming a first interface layer adjacent to an outer surface and a lower surface of the conductive layer, the first interface layer including the nitride of the first metal; and

forming a capping layer filling an upper portion of each of the trenches,

wherein a nitrogen concentration in the first interface layer is higher than a nitrogen concentration in the conductive layer.

13. The method of claim 12, wherein the forming of the first interface layer includes:

performing a heat treatment process on the conductive layer; and

diffusing nitrogen atoms in the conductive layer toward the outer surface and the lower surface of the conductive layer through the heat treatment process, to form the first interface layer.

14. The method of claim 13, wherein a part of the nitrogen atoms in the conductive layer are diffused toward an upper surface of the conductive layer through the heat treatment, to form a second interface layer.

15. The method of any one of claims 12 to 14, wherein the forming of the conductive layer includes reacting a first precursor material including the first metal and a second precursor material including nitrogen, and

wherein the forming of the conductive layer is performed at a process temperature of 550 degrees or more.

16. The method of any one of claims 12 to 15, wherein a concentration of nitrogen atoms in the first interface layer decreases toward the conductive layer.

17. The method of claim 12 or claim 13, further comprising etching the first interface layer and the conductive layer,

wherein an upper surface of the first interface layer and an upper surface of the conductive layer are formed to be provided at the same plane.

18. The method of any one of claims 12 to 17, wherein a thickness of the first interface layer is from 5Å to 30Å.

19. The method of any one of claims 12 to 18, wherein the first metal includes molybdenum (Mo).