WHAT IS CLAIMED IS:

1. A method of processing a substrate, the method comprising:

exposing the substrate to a boron-containing precursor to adsorb over the substrate, the substrate comprising a dielectric layer formed over a conductive layer, the conductive layer being exposed at a bottom of a recess formed in the dielectric layer,

exposing the adsorbed boron-containing precursor to a plasma; and

filling the recess with a conductive fill material bottom up by a vapor deposition process, wherein a vertical deposition rate of the conductive fill material is greater than a lateral deposition rate of the conductive fill material.

2. The method of claim 1, wherein the boron-containing precursor comprises a boron halide or a borane.

3. The method of claim 1, wherein the boron-containing precursor comprises B_2H_6, BF_3, BCl_3, or BBr_3.

4. The method of claim 1, wherein the conductive layer comprises ruthenium (Ru), tungsten (W), or titanium (Ti).

5. The method of claim 1, wherein the plasma comprises argon and hydrogen.

6. The method of claim 1, wherein the dielectric layer comprises silicon oxide, and wherein the exposing to the plasma inducing boron doping in the silicon oxide.

7. The method of claim 1, wherein the conductive fill material comprises ruthenium (Ru), tungsten (W), or molybdenum (Mo).

8. The method of claim 1, wherein the exposing to the plasma removes boron from the conductive layer.

9. A method of processing a substrate, the method comprising:

exposing the substrate to BCl_3 to adsorb over a surface of the substrate, the surface comprising a dielectric layer and a conductive layer;

exposing the adsorbed BCl_3 to a plasma comprising argon and hydrogen, the exposing to the plasma incorporating boron into the dielectric layer; and

depositing a metal over the surface, wherein a deposition rate of the metal is greater over the conductive layer than over the dielectric layer.

10 The method of claim 9, further comprising, prior to the depositing, repeating the steps of the exposing to BCl_3 and the exposing to the plasma.

11. The method of claim 9, wherein the substrate comprises a recess, the conductive layer being exposed at a bottom of the recess and the dielectric layer comprising sidewalls of the recess.

12. The method of claim 9, wherein the exposing to BCl_3 is performed in the absence of plasma.

13. The method of claim 9, wherein the metal comprises ruthenium (Ru), tungsten (W), or molybdenum (Mo).

14. The method of claim 9, wherein the conductive layer comprises titanium nitride or tantalum nitride.

15. A method of forming a metal interconnect for a semiconductor device, the method comprising:

exposing a substrate comprising a via to a boron-containing precursor to adsorb over sidewalls of the via, the via having a critical dimension of 20 nm or less, a conductive

material being exposed at a bottom of the via;

exposing the substrate to a plasma to induce boron doping to the sidewalls; and

filling the via with ruthenium (Ru) by a vapor deposition process, the Ru being deposited preferentially from the bottom of the via than from the sidewalls.

16. The method of claim 15, wherein the via has an aspect ratio between 5:1 and 100:1.

17. The method of claim 15, wherein the via is filled with Ru without a void.

18. The method of claim 15, wherein the boron-containing precursor comprises BCl_3, and wherein the plasma comprising argon and hydrogen.

19. The method of claim 15, wherein the conductive material comprises titanium nitride.

20. The method of claim 15, wherein the sidewalls comprise an oxide.