CLAIMS

1. A method for treating a substrate, the method including bringing a substrate into contact with a colloidal solution containing metal particles in order to support the metal particles that serve as a catalyst for forming a plating layer on the substrate,

wherein the colloidal solution contains metal particles formed of Pd and having a particle size of 0.6 nm to 4.0 nm and a face-to-face dimension of the (111) plane of 2.254 Å or more.

2. The method for treating a substrate according to claim 1, wherein the method comprising a step of forming an organic layer formed from an organic substance, on a surface of the substrate before the contacting with the colloidal solution.

3. The method for treating a substrate according to claim 2, wherein a self-assembled monolayer (SAM) is formed as the organic layer.

4. The method for treating a substrate according to claim 3, wherein the step of forming a self-assembled monolayer is applying a silane coupling agent on the substrate.

5. The method for treating a substrate according to any of claims 2 to 4, wherein a film comprising a polyimide, polyethylene terephthalate, or polyethylene naphthalate is formed as the organic layer.

6. The method for treating a substrate according to any of claims 1 to 5, wherein the concentration of the metal particles in the colloidal solution is adjusted to 9.3×10^{-6} to 3.8×10^{-1} mol/L.

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7. The method for treating a substrate according to any of claims 1 to 6, wherein the substrate is a substrate having one or more via holes formed therein, and at least one aspect ratio of the via holes is 3 to 50.

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wherein the colloidal solution contains metal particles formed of Pd and having a particle size of 0.6 nm to 4.0 nm and a face-to-face dimension of the (111) plane of 2.254 Å or more.

2. The method for treating a substrate according to claim 1, wherein the method comprising a step of forming an organic layer formed from an organic substance, on a surface of the substrate before the contacting with the colloidal solution.

3. The method for treating a substrate according to claim 2, wherein a self-assembled monolayer (SAM) is formed as the organic layer.

4. The method for treating a substrate according to claim 2, wherein a film comprising a polyimide, polyethylene terephthalate, or polyethylene naphthalate is formed as the organic layer.

5. The method for treating a substrate according to claim 2, wherein the method comprising the steps of: forming an organic layer comprising a polyimide, polyethylene terephthalate, or polyethylene naphthalate; and forming on said organic layer an organic layer having a two layer structure for forming a self-assembled monolayer.

6. The method for treating a substrate according to claim 3 or 5, wherein the step of forming a self-assembled monolayer is applying a silane coupling agent on the substrate.

7. The method for treating a substrate according to any of claims 1 to 5, wherein the concentration of the metal particles in the colloidal solution is adjusted to 9.3×10^{-6} to 3.8×10^{-1} mol/L.

8. The method for treating a substrate according to any of claims 1 to 5, wherein the substrate is a substrate having one or more via holes formed therein, and at least one aspect ratio of the via holes is 3 to 50.