SiO_2 film by a thermal oxidation method or an aluminum oxide film by an atomic layer deposition method,

wherein the SiNx film serves as a treatment mask during the texture formation in step (iii), and as an oxidation mask during the formation of the SiO_2 film or the aluminum oxide film in step (iv).

5. The method according to claim 4, wherein a thickness of the SiNx film is at least 50 nm.

6. The method according to any one of claims 4 to 5, further comprising a step of forming an anti-reflection film over the passivation film.

~~7. A solar cell comprising:~~

~~an n-type semiconductor substrate having a texture only on a light receiving surface;~~

~~an SiNx film formed over a back surface of the n-type semiconductor substrate;~~

~~a p-type diffusion layer formed over the light receiving surface of the n-type semiconductor substrate; and~~

~~a passivation film formed over the p-type diffusion layer and composed of an SiO_2 film or an aluminum oxide film,~~

~~the solar cell being manufactured by the solar cell manufacturing method according to any one of claims 1 to 3.~~

~~8. A solar cell comprising:~~

~~a p-type semiconductor substrate having a texture only on a light receiving surface;~~

~~an n-type diffusion layer formed over a back surface of the p-type semiconductor substrate;~~

~~an SiNx film formed over the n-type diffusion layer; and~~

~~a passivation film formed over the light-receiving surface of the p-type semiconductor substrate and composed of an SiO_2 film or an aluminum oxide film,~~

~~the solar cell being manufactured by the solar cell manufacturing method according to any one of claims 4 to 6.~~