

Abstract

[Problem to be solved] To achieve a higher-level reduction in surface metallic concentration of a corner junction of a gate-shaped silicon core wire for depositing polycrystalline silicon.

[Solution] A silicon core wire for depositing polycrystalline silicon is formed in a gate shape and includes a pair of vertical rod portions and a horizontal portion laterally connecting upper ends of the vertical rod portions, in which ends of the vertical rod portions and the horizontal portion are joined by welding, and a corner junction has a surface metallic concentration of 1 ppbw or less, more specifically, with an iron concentration of 0.2 ppbw or less, a chromium concentration of 0.1 ppbw or less, a nickel concentration of 0.05 ppbw or less, and a titanium concentration of 0.2 ppbw or less.

[Selected Drawing] Figure 1