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(54) SILICON CARBIDE WAFER AND SILICON CARBIDE SEMICONDUCTOR DEVICE INCLUDING THE SAME

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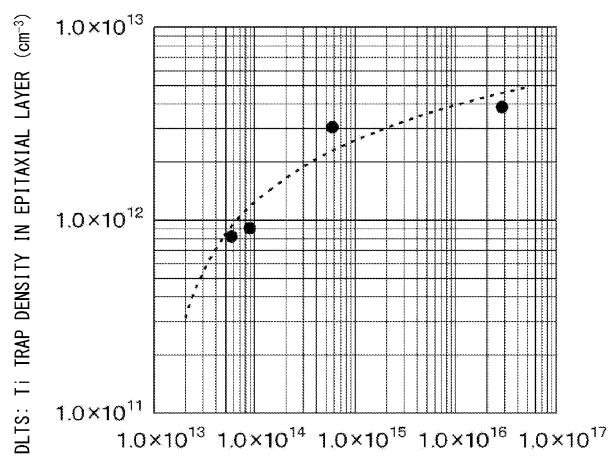
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(57)**ABSTRACT**

A silicon carbide wafer includes: a substrate made of silicon carbide; and an epitaxial layer made of silicon carbide and arranged on the substrate. A chip formation region is defined in which a semiconductor element is formed, and an outer peripheral region is defined to surround the chip formation region. The epitaxial layer has a trap density of 1.0×10^{13} cm⁻³ or less at an activation energy of 0.10 to 0.20 eV derived by a DLTS method in the chip formation region. The substrate has a Ti density of 1.0×10^{17} cm⁻³ or less measured by a SIMS method and a Cr density of 1.0×10^{17} cm⁻³ or less measured by a SIMS method.



SIMS: Ti DENSITY IN SUBSTRATE (cm⁻³)