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

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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 $1.0 \times 10^{13} \text{ cm}^{-3}$ 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 $1.0 \times 10^{17} \text{ cm}^{-3}$ or less measured by a SIMS method and a Cr density of $1.0 \times 10^{17} \text{ cm}^{-3}$ or less measured by a SIMS method.

