CLAIMS

1. An SiC formed body that is formed by a chemical vapor deposition (CVD) method, the SiC formed body comprising 1 to 30 mass ppm of boron atoms, and more than 100 mass ppm and 1000 mass ppm or less of nitrogen atoms.

2. The SiC formed body according to claim 1, having a resistivity of more than 10 Ω·cm and 100,000 Ω·cm or less, and a light transmittance at a wavelength of 950 nm of 0 to 1%.

3. A method for producing an SiC formed body comprising introducing a feed gas, a boron compound gas, a nitrogen atom-containing compound gas, and a carrier gas into a reaction chamber to form an SiC film on a surface of a substrate using a chemical vapor deposition (CVD) method,

the volume ratio of the amount of the boron compound gas to the total amount of the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas, measured at a temperature of 20°C, being 5×10^{-4} to 0.02 vol%, the volume ratio of the amount of the nitrogen atom-containing compound gas to the total amount of the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas, measured at a temperature of 20°C, being 0.05 to 3.0 vol%, the volume ratio of the amount of the carrier gas to the total amount of the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas, measured at a temperature of 20°C, being 96.9800 to 99.9495 vol%,

the volume ratio of the amount of the feed gas to the total amount of the feed gas, the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas, measured at a temperature of 20°C, being 2 to 15 vol%, and the volume ratio of the total amount of the boron compound gas, the nitrogen atom-containing compound gas,

and the carrier gas to the total amount of the feed gas, the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas, measured at a temperature of 20°C, being 85 to 98 vol%.

CLAIMS

1. An CVD-SiC formed body comprising 1 to 30 mass ppm of boron atoms, and more than 100 mass ppm and 1000 mass ppm or less of nitrogen atoms.

2. The CVD-SiC formed body according to claim 1, having a resistivity of more than 10 Ω cm and 100,000 Ω cm or less, and a light transmittance at a wavelength of 950 nm of 0 to 1%.

3. A method for producing an CVD-SiC formed body comprising introducing a feed gas, a boron compound gas, a nitrogen atom-containing compound gas, and a carrier gas into a reaction chamber to form an SiC film on a surface of a substrate using a chemical vapor deposition (CVD) method,

   the CVD-SiC formed body comprises 1 to 30 mass ppm of boron atoms, and more than 100 mass ppm and 1000 mass ppm or less of nitrogen atoms,

   the volume ratio of the amount of the boron compound gas to the total amount of the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas, measured at a temperature of 20◦C, being 5×10^{-4} to 0.02 vol%, the volume ratio of the amount of the nitrogen atom-containing compound gas to the total amount of the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas, measured at a temperature of 20◦C, being 0.05 to 3.0 vol%, the volume ratio of the amount of the carrier gas to the total amount of the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas, measured at a temperature of 20◦C, being 96.9800 to 99.9495 vol%,

   the volume ratio of the amount of the feed gas to the total amount of the feed gas, the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas, measured at a temperature of 20◦C, being 2 to 15 vol%, and the volume ratio of the total amount of the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas to the total amount of the feed gas, the boron compound gas, the nitrogen atom-containing compound gas, and the carrier gas, measured at a temperature of 20◦C, being 85 to 98 vol%.