

ABSTRACT

There is provided a corrosion-resistant member in which a corrosion-resistant coating is difficult to peel off from a base material even when subjected to a thermal history. A corrosion-resistant member includes: a metal base material (10); and a corrosion-resistant coating (30) formed on the surface of the base material (10). The corrosion-resistant coating (30) is a stack of a magnesium fluoride layer (31) and an aluminum fluoride layer (32) in order from the base material (10) side. The aluminum fluoride layer (32) has a first crystalline region (32A) and a second crystalline region (32B) containing crystalline aluminum fluoride. The first crystalline region (32A) is a region in which diffraction spot arrays having regularity are observed in an electron beam diffraction image obtained by irradiation with electron beams having a beam diameter of 10 nm or more and 20 nm or less. The second crystalline region (32B) is a region in which a plurality of diffraction spots is observed but diffraction spot arrays having regularity are not observed in an electron beam diffraction image obtained by irradiation with the above-described electron beams.

FIG. 1