

ABSTRACT

The present disclosure provides a wet etching method including pretreating a metal-containing film on a substrate with a surface modification liquid and etching the metal-containing film with an etching liquid, wherein the etching liquid is a solution containing: a β -diketone with a trifluoromethyl group bonded to a carbonyl group; and an organic solvent, wherein the metal-containing film contains a metal element capable of forming a complex with the β -diketone, wherein the surface modification liquid contains an acidic substance against the metal element, and wherein the wet etching method is carried out through: a first step of bringing the surface modification liquid into contact with the metal-containing film, thereby forming an oxide layer of the metal element at a surface of the metal-containing film; and a second step of bringing the etching liquid into contact with the metal-containing film on which the oxide layer has been formed.

FIG. 1