

ABSTRACT

A selective film deposition method includes exposing a substrate having a structure on which a first surface region containing a metal element and a second surface region containing a nonmetal inorganic material are both exposed, to a solution containing an organic substance represented by formula (1) shown below and a solvent to deposit a film of the organic substance on the first surface region selectively over the second surface region:
 $R^1(X)_m$ (1) wherein R^1 is a C4-C100 hydrocarbon group optionally containing a heteroatom or a halogen atom, and m hydrogen atoms of the hydrocarbon group are replaced with X; X is $-PO_3(R^2)_2$, $-O-PO_3(R^2)_2$, $-CO_2R^2$, $-SR^2$, or $-SSR^1$; each R^2 is a hydrogen atom or a C1-C6 alkyl group; and m is a positive integer, and m/r is 0.01 to 0.25 where r is the number of carbons of the hydrocarbon group.