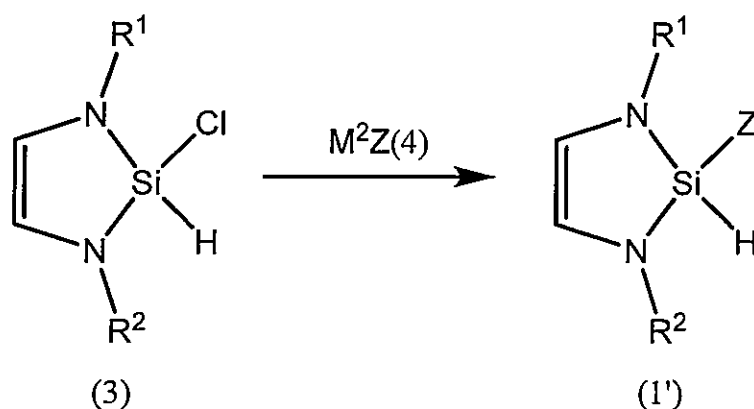


ABSTRACT

This invention aims at providing a material from which a silicon-containing thin film can be efficiently produced at a low temperature of 500°C or less without using plasma or the like. The invention relates to produce a hydrosilane derivative represented by the general formula (1') by reacting a chlorosilane derivative (3) with a compound M^2Z (4) and produce the silicon-containing thin film by using the hydrosilane derivative as the material.

[Chem. 1]



(In the formulae, each of R^1 and R^2 independently represents an alkyl group having a carbon number of 3 to 12; M^2 represents a sodium atom or the like when Z is an isocyanato group or an isothiocyanato group; M^2 represents a hydrogen atom or the like when Z is an amino group, a mono-substituted amino group represented by NHR^3 or a disubstituted amino group represented by NR^4R^5 ; R^3 represents an alkyl group having a carbon number of 1 to 12, which may be substituted by a fluorine atom; each of R^4 and R^5 independently represents an alkyl group having a carbon number of 1 to 4; and M^2 represents a magnesium halide group when Z is an alkenyl group having a carbon number of 2 to 6.)