

ABSTRACT

The present invention relates to a selective thin-film deposition using an area-selective atomic layer deposition, and substrates having thin films selectively formed thereon, and more specifically to a selective thin film deposition method using an area-selective atomic layer deposition, and substrates having thin films selectively formed thereon, the method using an organothiol small molecule inhibitor so as to form thin films having different thicknesses on the surfaces of a substrate comprising a metal such as copper (Cu), a substrate comprising silicon dioxide (SiO₂), and a substrate comprising a nitride such as titanium nitride (TiN).

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Fig. 1