

Title (en)

SELECTIVE DEPOSITION OF METAL SILICIDES AND SELECTIVE OXIDE REMOVAL

Title (de)

SELEKTIVE ABSCHIEDUNG VON METALLSILIZIDEN UND SELEKTIVE OXIDENTFERNUNG

Title (fr)

DÉPÔT SÉLECTIF DE SILICIURES MÉTALLIQUES ET ÉLIMINATION SÉLECTIVE D'OXYDE

Publication

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Application

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Abstract (en)

[origin: WO2020101806A1] Embodiments of the disclosure relate to selective metal silicide deposition methods. In one embodiment, a substrate having a silicon containing surface is heated and the silicon containing surface is hydrogen terminated. The substrate is exposed to sequential cycles of a MoF6 precursor and a Si2H6 precursor which is followed by an additional Si2H6 overdose exposure to selectively deposit a MoSix material comprising MoSi2 on the silicon containing surface of the substrate. Methods described herein also provide for selective native oxide removal which enables removal of native oxide material without etching bulk oxide materials.

IPC 8 full level

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