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Aluminium surface grain size analysis on RIE treatment

Abstract

Reactive Ion Etch (RIE) has been an important process in the world of microelectronic fabrication. Focus of this preliminary study is on how RIE affects the grain size of aluminium film which is fabricated on substrates. RIE parameters are varied to obtain 16 different recipes which are done using Design of Experiment. Grain size of the samples is recorded for all 16 samples before and after RIE treatment. This produces results that can be compared to obtain the effect of RIE on the aluminum film. Results show that RIE affects the mean grain size of the aluminum film as it increases after RIE treatment.

Keywords

Aluminium; Grain size; Reactive ion etching