

Development of iron thin films by electron beam physical vapour deposition (EBPVD): A Review

Abstract

This review paper study about the possibilities of results obtained from conducted experiment of iron (Fe) thin films by electron beam physical vapor deposition (EBPVD). Previous studies showed that by exposing the substrate of the thin film to pre-heat environment, the changes of morphology and adatom mobility is expected. Furthermore, annealed influence in the thin film also will give better-quality thin films as the surface are expected to be smoother and flat. Three different annealed temperature is conducted on the samples, which are 400 C, 800 C and 1200 C. Structural changes such as transition from alpha phase to beta phase, is possible due to the presence of high temperature.