

Preparation of plumbum (Pb) thin film by using nitrogen laser ablation

Syamsir Dewang, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=81135&lokasi=lokal>

Abstrak

ABSTRACT

Laser induced thin film production (LITFP) technique was employed for making plumbum (Pb) thin film by nitrogen laser deposition in miniature scale. The energy of nitrogen laser operated at 12.5 kv, 90 torr was 3.5 mj with 5 ns pulse duration, thus producing peak power at around 0.7 MW. Pb plasma of 1 cm diameter was generated in each laser bombardment, producing thin film above the glass substrate.

The thin film characteristics were measured by means of their thickness and surface morphology using scanning electron microscope (SEM). It was proved that there was a linear relationship between the number of laser shots and film thickness.