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Measurement of oblique ion-induced secondary electron emission coefficient on the MgO thin film

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Oblique ion-induced secondary electron emission coefficient(γ) has been measured by γ -FIB(Focused Ion Beam) system. The MgO thin film has been deposited from sintered material under electron beam evaporation method. The energy of Ne+ ions used has been ranged from 80eV to 200eV. Oblique ion beam has been chosen to be 10 degree, 20 degree and 30 degree. The oblique ion beams have been approached to MgO protective layer by using the tilted MgO substrate The MgO thin film with oblique ion beams is found that the higher ion-induced secondary electron emission coefficient(γ) has been obtained than those for that with normal ions. It is found that the higher secondary electron emission coefficient(γ) has been achieved by the higher oblique ion beam up to inclination angle of 30 degree than the perpendicular incident ion beam.