

A method for carrying out a surface plasmon resonance measurement

This technology is a method used for determining the dielectric function of a material or the thin films of metals.

Salient Features

The apparatus highlights a new system architecture that allows for a simpler and low cost design for scanning section of the spr instrument.

The data processing and interpretation is also based on a new analytical formalism for the input-output relationship in a SPR experiment.

From the apparatus point of view, the goniometer required for scanning the angle is less bulky, of low cost and does not call for high resolution.

From measurement point of view, the complex dielectric function of the metal films can be estimated without needing the thickness of the film.

Major Application / End Users

Specialists in biomedicine (biosensor), semiconductor device fabrication and thin-film devices and diagnostics.