

ABSTRACT

THIN FILM-LIKE POLYMER STRUCTURE AND METHOD FOR PREPARING THE SAME

A thin film polymer structure having a functional substance on the face (A surface) and reverse face (B surface) of the film, obtained by the steps of:

- (a) causing polyfunctional molecules to adsorb to an area of an arbitrary shape in an interface between a substrate body and a liquid phase;
- (b) polymerizing and/or crosslinking the adsorbing polyfunctional molecules to form a polymer thin film;
- (c) bonding a functional substance to the A surface of the formed thin film and then
- (d) forming a soluble support film thereon; exfoliating the thin film and the soluble support film from the substrate body;
- (e) bonding to the B surface of the thin film a functional substance identical to or different from the abovementioned functional substance and then dissolving the soluble support film with a solvent.

A method for preparing a thin film molecular structure having a functional substance on the face (A surface) and reverse face (B surface) of the film is offered through the above process.

FIG. 1

