A Rapid Bacterial Determination by Using OWLS

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Abstract

The identification of bacteria is an important issue to the unknown transmission of pathogens
nowadays. Therefore, there is an intense interest in speeding up the determination of microbial
pathogens. The principles of bacterial identification are beginning to be understood at the kinetic
level in the past few years, nevertheless, the crucial aspects to be taken into consideration are the
spatial arrangements of molecules or atoms at the interacting surfaces and the profiles of the
interfacial forces. In this study, the dynamics of attachment and detachment of bacteria to ultra thin
film surface with precisely coated by sol-gel method is measured by using optical waveguide
lightmode spectroscopy (OWLS) are described.

Keyword：bacterial determination