

SURFACE-ENHANCED RAMAN SCATTERING FOR MICROORGANISM IDENTIFICATION

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There is a significant effort to utilize surface-enhanced Raman scattering (SERS) for medical and biomedical diagnosis in recent years. One of the areas where has been a substantial research effort to use SERS for microorganism detection and identification. The SERS spectra acquired from whole microorganisms can be used for their label-free detection and identification. Although a capture scheme utilizing an antibody or an aptamer is necessary in their detection, it may not be need at a clinical setting and only microorganisms collected from the culture media might be satisfactory for the microorganism identification. The primary goal in clinical microorganism identification is the speed and the reliability. In this presentation, the current status and potential of the technique for microorganism identification will be discussed.