Detection of mercury ion (Hg2+) on chitosan film using microstrip interdigital capacitor

ABSTRACT

The use of interdigitated capacitor (IDC) for detection of mercury ion (Hg2+) absorbed by the chitosan film is presented in this paper. The effect of the ion concentration on the transmission coefficient (S21) value and the capacitance value is presented. The results show that the capacitance value as well as the S21 increased with increasing concentration of the metal ion absorbed.

Keyword: IDC; Metal ions+; Chitosan; Capacitance; Transmission coefficient