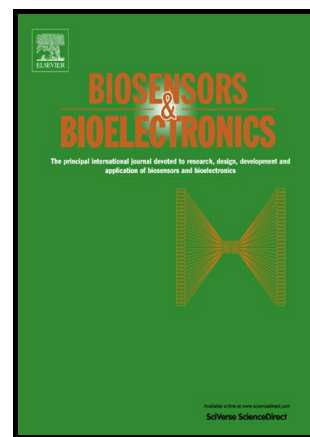


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Impedimetric antimicrobial peptide-based sensor for the early detection of periodontopathogenic bacteria

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Abstract

Peri-implantitis, an inflammation caused by biofilm formation, constitutes a major cause of implant failure in dentistry. Thus, the detection of bacteria at the early steps of biofilm growth represents a powerful strategy to prevent implant-related infections. In this regard, antimicrobial peptides (AMPs) can be used as effective biological recognition elements to selectively detect the presence of bacteria. Thus, the aim of the present study was to combine the use of miniaturized and integrated impedimetric transducers and AMPs to obtain biosensors with high sensitivity to monitor bacterial colonization. *Streptococcus sanguinis*, which is one of

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