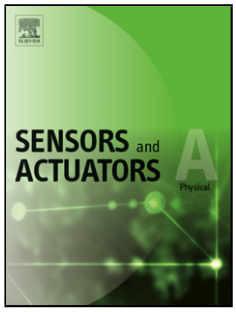

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Characterization of Impedance Properties of Metal Dry Bioelectrodes with Surface Microstructure Arrays

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Highlights

> A metal dry bioelectrode with surface microstructure arrays is fabricated. > The impedance properties of metal dry bioelectrode is analyzed. > The equivalent circuit of the electrode-skin contact model is developed. > The factors that influence the impedance properties of bioelectrode are investaged. > Our developed copper-based bioelectrode shows good impedance stability.

Abstract: A metal dry bioelectrode with surface microstructure arrays is fabricated using the laser direct micromilling technology with advantages of high efficiency and low cost. The impedance properties of the metal dry bioelectrode are then analyzed using the two-electrode measurement method. The equivalent circuit of the