Disposable microsensor for detecting acetone

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Technology description

Acetone is a metabolite of fat catabolism and is considered to be a biomarker or indicator related to ketosis, such as diabetes, low carbohydrate diet and weight loss. Thus, the detection of acetone in human breath (air) is very attractive for the detection can provide an alternative to blood glucose monitoring and assessment of fat consumption. This technology provides for a single-use, non-invasive and simple process in an economical form factor. The technology is based on a thin-film, printable electrode structure that provides for a single-use, disposable economical biosensor for detecting volatile organic compounds (VOCs) in bodily fluids, such as blood, urine, saliva or exhaled breath. For instance, acetone can be used to measure the progression of a disease or disorder, such as chronic kidney disease and/or diabetes.

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