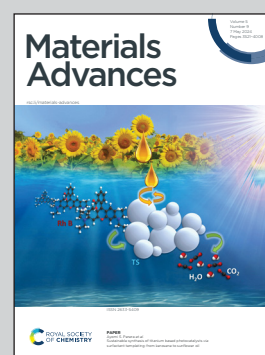


Showcasing research from Professor Ignas Kenfack Tonlé's laboratory, Electrochemistry and Chemistry of Materials, Research Unit of Noxious Chemistry and Environmental Engineering, Department of Chemistry, University of Dschang, West Region, Cameroon.

Evaluation of two core-shell ($\text{Ag}_2\text{S}@-$ and $\text{Bi}_2\text{S}_3@-$) sensors based on a metal-organic framework (NH_2 -MIL-125-Ti)/ polyaniline for the electroanalysis of uric acid in urine samples

This work reports the potential of titanium-based metal organic framework (MOF, NH_2 -MIL-125(Ti)) as sensing materials based on its properties, such as high surface area, high porosity, good stability, and good electrocatalytic ability. This MOF has been improved through coating with core-shells of silver (Ag) and Bismuth (Bi) in the presence of a conducting polymer (polyaniline, PANI) to form two composites on the glassy carbon surface $\text{Ag}_2\text{S}@-\text{NH}_2$ -MIL-125(Ti)/PANI/GCE and $\text{Bi}_2\text{S}_3@-\text{NH}_2$ -MIL-125(Ti)/PANI/GCE, which were used for the electrochemical detection of uric acid.

As featured in:



See Gullit Deffo, Cyrille Ghislain Fotsop *et al.*, *Mater. Adv.*, 2024, 5, 3683.