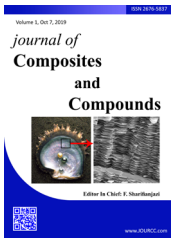

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Nickel sulfide-based composite as electrodes in electrochemical sensors: A review

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A B S T R A C T

Nickel sulfide (NiS) is an extremely promising transition metal sulfide for use as a sensor material because of its exceptional conductivity and stability. Herein, we present first, the all of synthesis of NiS into sensor and biosensor. Electrochemical sensor, Due to the fact that exposure to electrolyte during electrochemical impact can rapidly deform NiS, lowering its electroactivity and measurement repeatability, a method for effectively integrating NiS into sensors is crucial. Then, this review focuses on innovations over the past decade in sensor systems based on NiS and their composites. The relationships between the electrode construction strategies and sensing performance are discussed, in addition to shortcomings and limitations in the applications of these sensors. On this basis, we discuss the future scope and propose further directions for NiS-based sensors. This study focused on developments in NiS-based sensor systems and their composites throughout the past articles. Relationships between electrode fabrication methods and sensing performance are examined, along with drawbacks and limitations of these sensors' applications. On this basis, we discuss the scope for future of NiS-based sensors and offer additional directions.

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