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### ACCEPTED MANUSCRIPT

# Sulphides of the cobalt doped Ni<sub>7</sub>S<sub>6</sub> type for glucose, hydrogen peroxide and nitrite sensing platform

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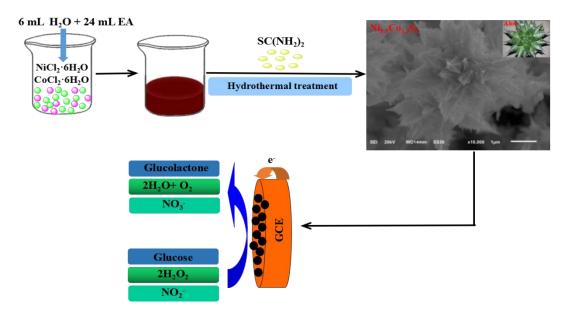
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#### **Graphical Abstract**

Cobalt doped Ni<sub>7</sub>S<sub>6</sub> (Ni<sub>5.5</sub>Co<sub>1.5</sub>S<sub>6</sub>) was synthesized by a hydrothermal method, using NiCl<sub>2</sub>·6H<sub>2</sub>O, CoCl<sub>2</sub>·6H<sub>2</sub>O, and thiourea as the precursors, ethanolamine (EA) as structure-guiding auxiliary agent. The resulting aloe-like Ni<sub>5.5</sub>Co<sub>1.5</sub>S<sub>6</sub> was applied in amperometric sensors to detect glucose, H<sub>2</sub>O<sub>2</sub>, and nitrite in 0.1 M NaOH solution.



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