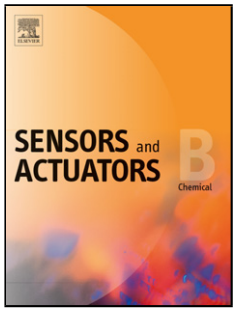

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Sulphides of the cobalt doped Ni_7S_6 type for glucose, hydrogen peroxide and nitrite sensing platform

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Graphical Abstract

Cobalt doped Ni_7S_6 ($Ni_{5.5}Co_{1.5}S_6$) was synthesized by a hydrothermal method, using $NiCl_2{\cdot}6H_2O$, $CoCl_2{\cdot}6H_2O$, and thiourea as the precursors, ethanolamine (EA) as structure-guiding auxiliary agent. The resulting aloe-like $Ni_{5.5}Co_{1.5}S_6$ was applied in amperometric sensors to detect glucose, H_2O_2, and nitrite in 0.1 M NaOH solution.