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### Single Nanowire Nanosensors: A Case Study of the Effects of Metal Doping on ZnO

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Individual nanowire/nanorod sensors of semiconducting oxides are of great interest for science and engineering. In current work, the effects of metal doping on ZnO nanowire properties are presented. It is found that metal-doping greatly improved the performance of ZnO nanowire nanosensors. Experimental results and possible mechanisms of the improved performance are discussed.