Optimized Schottky junctions by Atomic Layer Deposition for piezotronic MEMS strain microsensors

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Figure 1: (a) Top view representation of a piezotronic strain sensor defined in polyimide flexible substrates. The dashed lines represent a zoom on the interdigitated electrodes. (b) Cross-section of a piezotronic strain sensor with its corresponding electromechanical transduction properties, where the current response is modulated under controlled compressive strain steps.



Figure 2: (a) Display of a piezotronic MEMS strain microsensor integrated in full polymer body and cantilevers. (b) Zoom on the micro-cantilever (on the left of the picture), where the Pt metal electrodes and the ZnO deposited by ALD are embedded within the polymer body. Its dimensions are comparable with a commercial Si cantilever (on the right of the picture).

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