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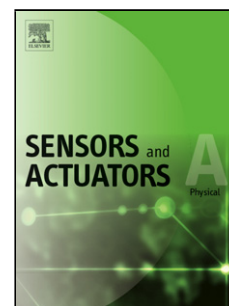
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Nanoindentation of crystalline silicon pillars fabricated by soft UV nanoimprint lithography and cryogenic deep reactive ion etching

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HIGHLIGHTS

- Determination of silicon nanomechanical properties by instrumented nanoindentation
- Top-down fabrication of silicon pillar structures by nanoimprint lithography
- Precise control of inductively coupled plasma cryogenic reactive ion etching
- Qualitative and quantitative analysis of indentation modulus and hardness on monocrystalline silicon with different crystal orientation
- Comparison of elastic-plastic response of bulk and micro-structured silicon materials

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