

**SINGLE CRYSTAL MICROPUMP FOR STR ANALYSIS MADE FROM
MAGNETIC SHAPE MEMORY (MSM) ALLOY**

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We have developed a single crystal micropump that is compatible with STR analysis. The Magnetic Shape Memory pump has no mechanical parts, requires no electrical contact or electricity, is biocompatible, and can be incorporated as a stand alone component in lab-on-a-chip applications. We have demonstrated that pumping over the crystal does not interfere with subsequent forensic DNA analysis.