Mechanically Flexible PZT thin films on Plastic Substrates
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Abstract: We have investigated the fabrication and properties of bendable PZT film formed on plastic substrates for the application in flexible memory. These devices used the PZT active layer formed on SiO$_2$/Si wafer by sol-gel method with optimized device layouts and Pt electrodes. After etching Pt/PZT/Pt layers patterned by photolithography process, these layers were transferred on PET plastic substrate using elastomeric stamp. The level of performance that can be achieved approaches that of traditional PZT devices on rigid bulk wafers.

Key Words: PZT, transfer-printing, flexible device, flexible memory