

(75 words abstract)

## **Silicon Nitride Trap Memory with Double Tunnel Junction**

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It is experimentally shown that a novel SiN trap memory, which has double tunnel oxides separated by Si nano-crystalline layer, retains signal charge almost completely, keeping high-speed w/e in low write/erase voltage. It is proposed that double junction SiN memory with ultra-thin tunnel oxides and ultra-thin SiN layer is a promising future non-volatile memory with low-voltage high-speed w/e and reliability.