

Bottom Electrode

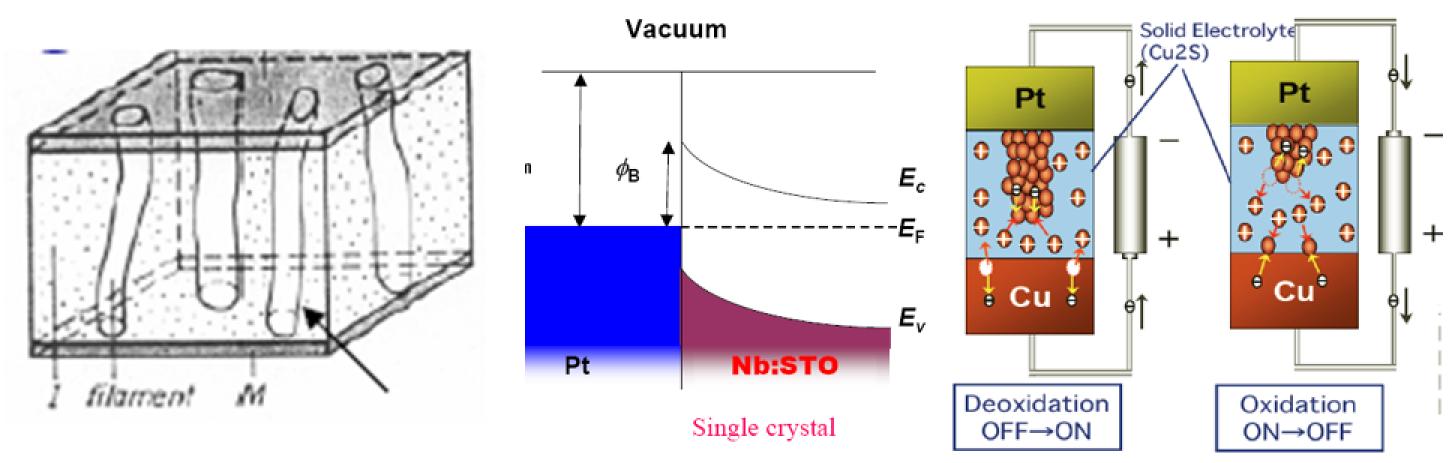
TiO_{2-x}

Doping Wall

TiO₂



Magnetic RAM (MRAM)



Domain wall motion in free layer
Pinned reference layer

Resistive RAM (RRAM)

From left to right: Filament-based, Interface-based and PMC

Top: thin-film device

Bottom: Spintronic material

Emerging Non-volatile Memory (NVM) Technologies