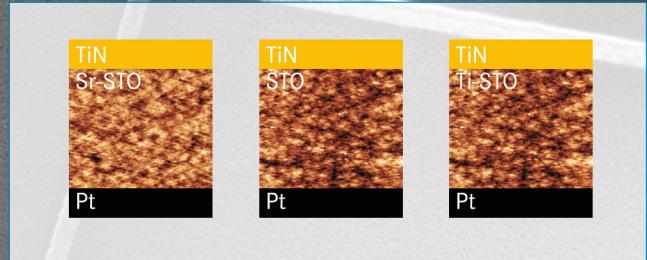
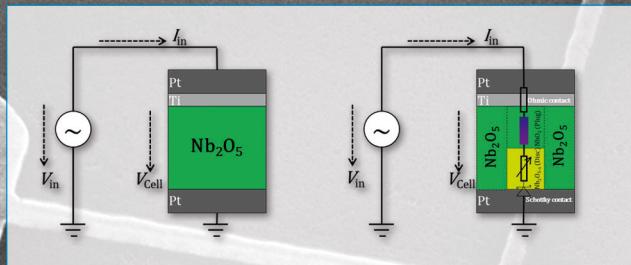


Resistive switching memory devices from atomic layer deposited binary and ternary oxide thin films

Nabeel Aslam

Nb_2O_5 after electro-forming

$$R_{\text{Filament}} \approx R_{(1\text{MS}+1\text{TS})} = [R_{\text{Disc } (\text{Nb}_2\text{O}_{5-x})} + R_{\text{Plug } (\text{NbO}_2)}]$$



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