



Figure. Resistive switching (RS) loops for $\text{Fe}_2\text{O}_3\text{-SiO}_2$ (left column) and $\text{Nb}_2\text{O}_5\text{-SiO}_2$ (right column) nanolaminates. The upmost row represents defined current-voltage behavior obtained from direct current RS measurements. The 2nd row from top depicts the RS behavior in the films deposited with metal oxide to silicon oxide cycle ratios which increased the leakage and decreased LRS to HRS ratios. Current-voltage behavior measured in the latter, relatively leaky, films in low-reading-voltage mode are presented in the 3rd row and small-signal memory-maps for conductance are depicted in the bottom row. The film growth cycle sequences, thicknesses and metal to silicon ratios are given by labels.