

## List of Tables

Table	Title	page
1.1	A benchmark table for the performance comparison on various parameters of emerging and existing memory technologies.	8
2.1	Comparative analysis of various high-performance RRAMs reported on flexible and rigid substrates in previous six years. Subs: Substrate; $I_{cc}$ : Compliance current; Memory Window: $I_{on}/I_{off}$ or $R_{off}/R_{on}$ ; Endure: Endurance; Ret: Retention.	24
4.1	Thickness and roughness of top and bottom surfaces of samples fabricated with different deposition schemes.	41
4.2	Comparison of electrical characteristics of samples in terms of performance parameters.	43
5.1	Comparison of electrical characteristics of samples in terms of following parameters	54
6.1	Summary of switching parameters of Ag/PVP:GO/HfO <sub>x</sub> /ITO RRAM device.	61
6.2	Summary of RRAM devices reported with GO or GO based composite based activelayers.	67
6.3	Performance comparison of some recently reported flexible RRAMs.	67
7.1	Performance comparison of recently reported memory devices in terms of power consumption.	77

