

Sputter Coating of High-Quality VO₂ Metal-Insulator Transition Films for Flexible Electronics

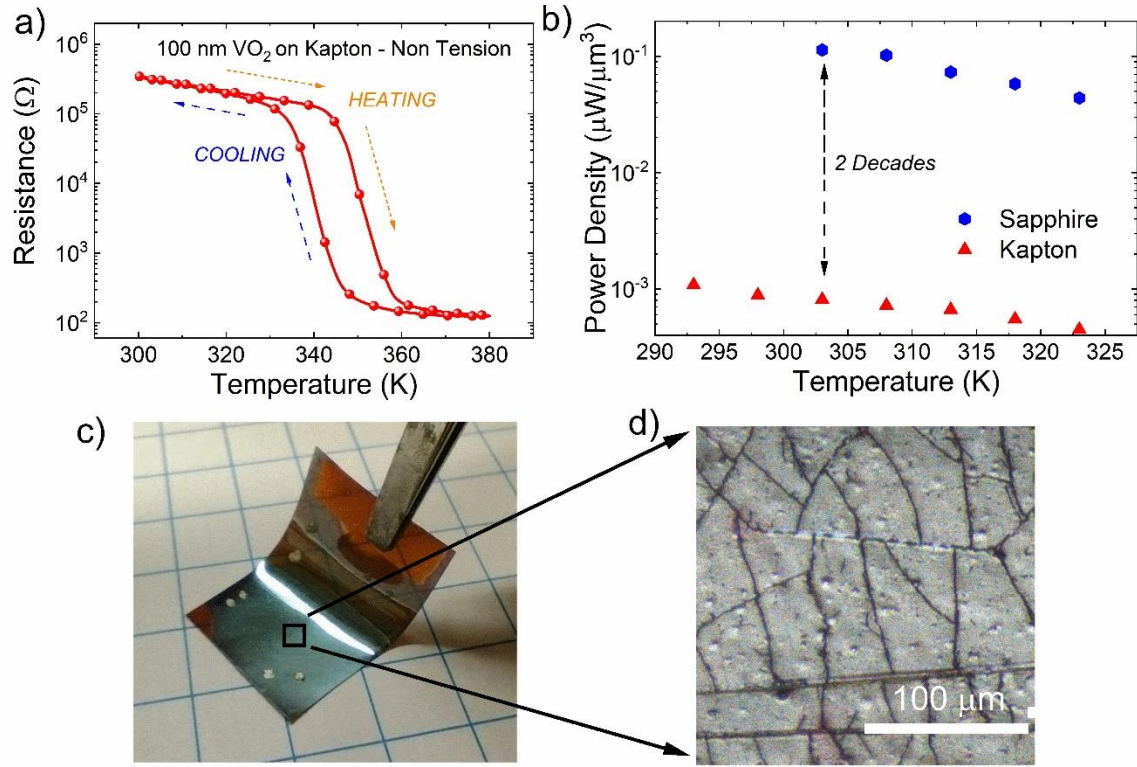


Figure 1. (a) Resistance vs Temperature across the Metal-Insulator Transition (MIT) for a 100 nm thick VO₂ film grown directly on flexible Kapton by magnetron sputtering. (b) The power consumption to induce the MIT has been decreased by two orders of magnitude for Kapton-based VO₂ devices compared to Sapphire. (c) Picture of an actual Kapton/VO₂ flexible sample. (d) Micrograph of the topography of the sample, showing microsize domains that allow the further tuning of the MIT on flexible devices.