Crystallinity of Sacrificial Etch Layer Influences Resulting Structure During Simultaneous Deposition and Etching

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TiO₂ pads on Si

Figure 1: (a) Cross-sectional SEM image of starting substrate (i) consisting of 100 nm thick TiO₂ lines on Si. (b) HAADF STEM and STEM EDS elemental map of substrate (i) exposed to 10 W ASD cycles at 220°C. (c) Bright field TEM image of starting substrate (ii). (d) HAADF STEM image and STEM EDS elemental map of substrate (ii) after 10 W ASD cycles.