



Figure 8.26 XRD spectrum of a 3- μm -thick HWCVD a-Si film, deposited on Al/Cr/glass at about 100°C (a) before optical processing; and (b) after optical processing at $\sim 480^\circ\text{C}$ for 3 min

crystallization front propagates away from the interface converting a-Si into crystalline Si. These features can be seen in Figure 8.29(a), which is a TEM cross-section of a partially crystallized Si film on a glass substrate. The film, 6 μm thick, was deposited at 250°C and processed for 3 min at 460°C . The various regions of the structure are identified in the figure. The largest grain size near the Al interface is about 0.1 μm and decreases