



**Figure 1.** Growth per cycle (GPC) of CsI as a function of (a) deposition temperature, (b) Cs(btsa) pulse, (c) HI pulse, and (d) purge duration. The thickness and GPC as functions of the number of deposition cycles are shown in (e). (f) GIXRD patterns of CsI films deposited at different temperatures. The ICDD 6-311 CsI XRD pattern is shown for reference. (g) shows a photograph of a 160 nm CsI film deposited at 160 °C on a 5 × 5 cm silicon substrate. (h) TOF-ERDA compositions of CsI films deposited at different temperatures. Unless otherwise evident, the depositions were performed at 160 °C, with 380 cycles using 1.5 s Cs(btsa) and 0.5 s HI pulses separated by 1.0 s purges.