

Supporting data

Unveiling Growth Mechanisms of PEALD In₂O₃ Thin Films with Amide-Based Versus Alkyl- Based Novel Indium Precursors

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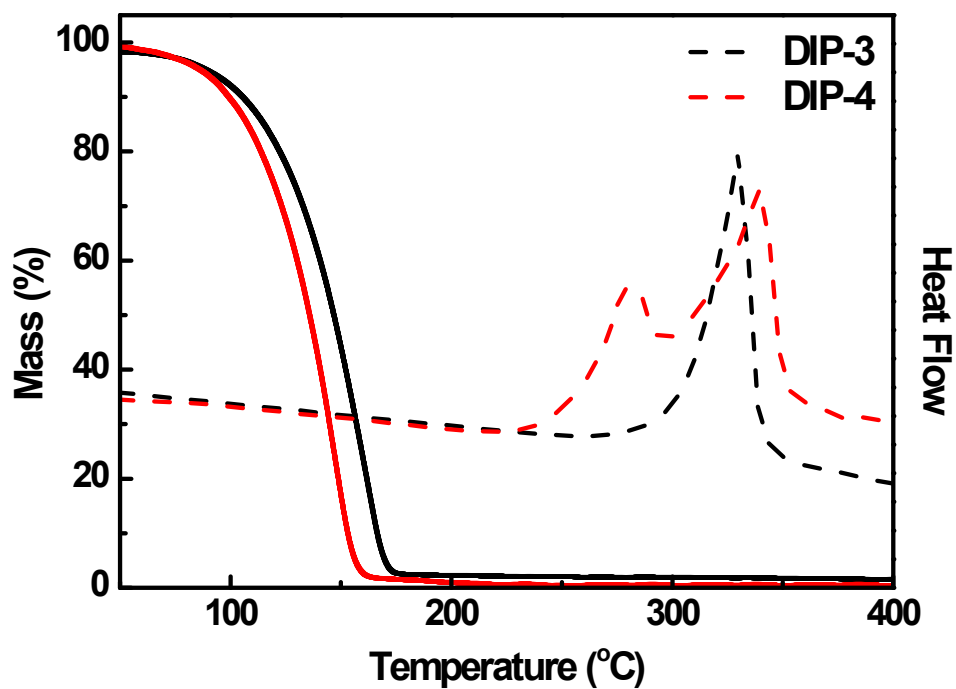


Figure S1. thermogravimetric analysis (TGA, solid line) and differential scanning calorimetry (DSC, dashed line) of the two precursors. These precursors are almost vaporized at 150°C. DIP-3 (black) shows one heat flow on 320°C, but DIP-4 (Red) shows two heat flow point at 250°C and 330°C.

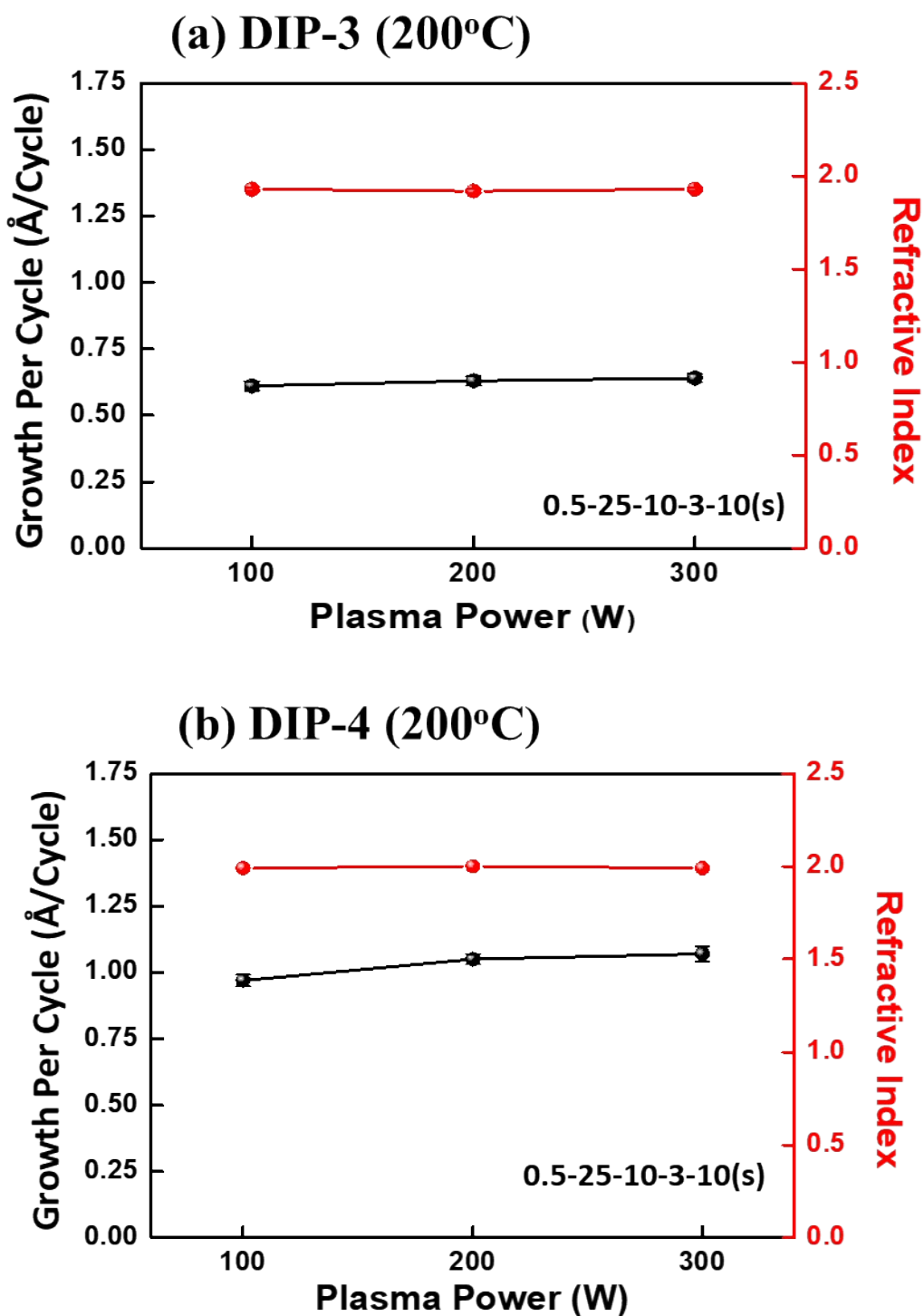
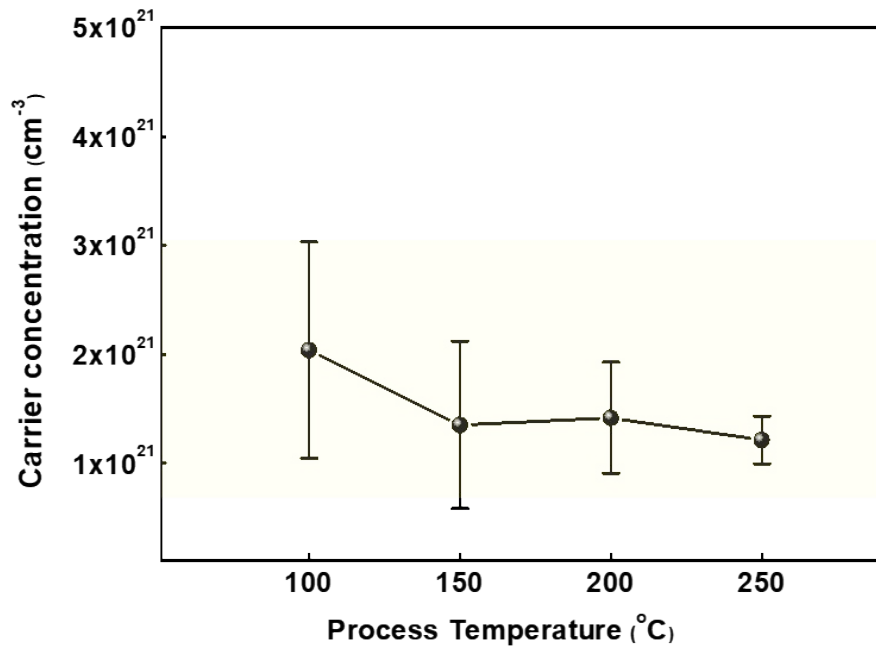


Figure S2. ALD process optimizing of In₂O₃ PEALD using DIP-3 and DIP-4. (a) plasma time for DIP-3, (b) plasma power for DIP-3, (c) plasma time for DIP-4, (d) plasma power for DIP-4

(a) DIP-3



(b) DIP-4

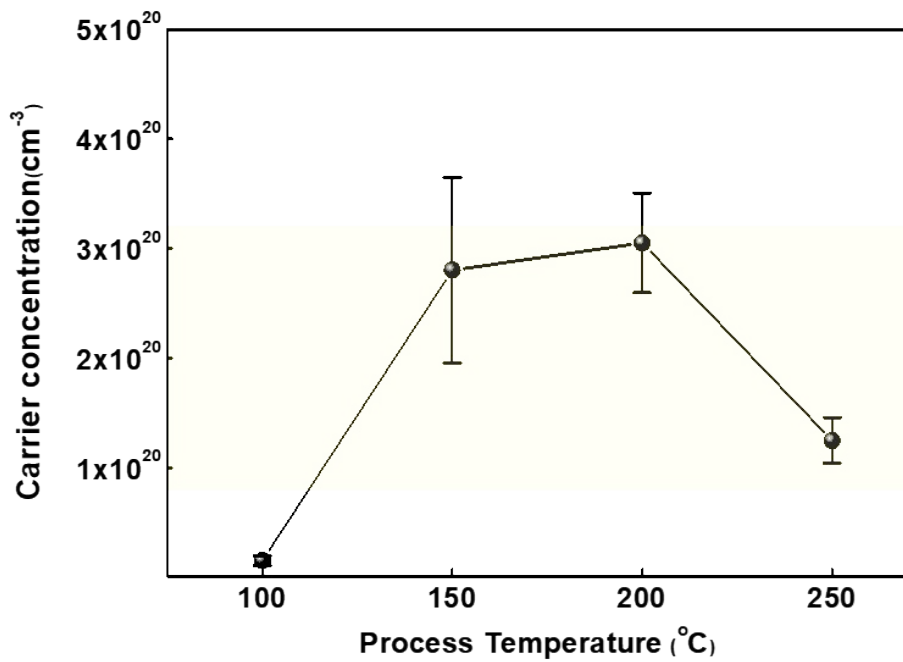


Figure S3. Carrier concentration variation in the Hall measurement result. (a) DIP-3 (range: $1 \times 10^{20} \sim 5 \times 10^{21}$) (b) DIP-4 (range: $1 \times 10^{19} \sim 5 \times 10^{20}$)