

Figure 1: TG-DTA (10 torr) of Yttrium aminoalkoxides

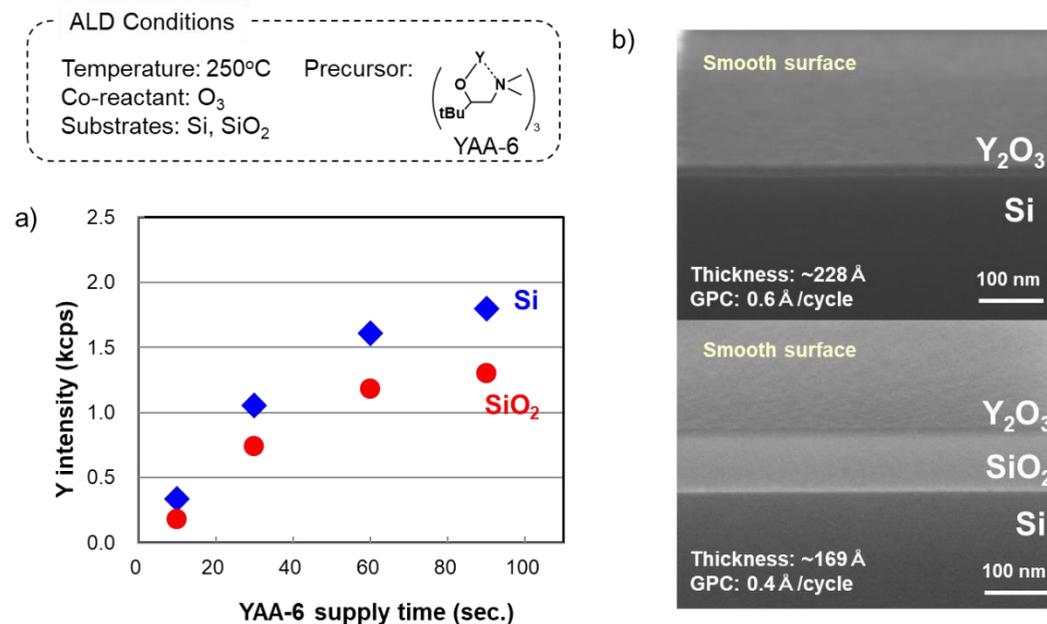


Figure 2: a) XRF intensity of YAA-6 supply time, b) XSEM of Y_2O_3 films

Table 1: Basic properties of various Yttrium aminoalkoxides

Code name	$Y(dmamp)_3$	YAA-4	YAA-5	YAA-6	YAA-8	YAA-10
Structure						
Melting point	Viscose liquid	Viscose liquid	Viscose liquid	120°C	High viscose liquid	Viscose liquid
TG50% (10 torr)	245°C	264°C	284°C	219°C	254°C	274°C
TG50% (760 torr)	334°C	355°C	N/A (dec.)	293°C	328°C	348°C
Vapor pressure* @1.0torr	234°C	253°C	N/A	196°C	228°C	247°C
DSC (onset)	371°C	294°C	331°C	335°C	319°C	331°C

* Calculation

Table 2: Basic properties of various rare earth aminoalkoxides

Code name	YAA-6	DAA-6	EAA-6	TAA-6	BAA-6	LAA-6
Structure						
Melting point	120°C	N/A	168°C	223°C	56°C	96°C
TG50% (10 torr)	219°C	206°C	206°C	198°C	193°C	202°C
TG50% (760 torr)	293°C	294°C	288°C	279°C	275°C	382°C
Vapor pressure* @1.0torr	196°C	197°C	191°C	183°C	180°C	186°C
DSC (onset)	335°C	335°C	326°C	319°C	324°C	277°C

* Calculation