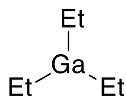
Catalog # 98-1862 Triethylgallium, elec. gr. (99.9999%-Ga) PURATREM



Thermal Behavior:

- Melting point: -82.3°C
- Boiling point: 143°C
- Vapor pressure: ~5.0 Torr/20 °C, ~16 Torr/43°C

Technical Notes:

1. ALD/CVD precursor and dopant for Ga thin film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
G_2O_3 α-Ga_2O_3 β-Ga_2O_3 ε-Ga_2O_3 β-Ga_2O_3 α-, β-, ε-Ga_2O_3	PEALD PEALD PEALD MOCVD MOCVD	RT 30°C RT RT RT RT	0.4 Torr 0.16 Torr - - 250 Torr 45 Torr	$^{PL}O_2$ $^{PL}O_2$ $^{PL}O_2$ H_2O O_2 O_2	250°C 120-450°C 150-240°C 600-640°C 800°C 600°C	1 2 3 4 5 6
Mg:Ga_2O_3	MOCVD	RT	250 Torr	Cp_2Mg, N_2O	800°C	7
GaN	PELAD PELAD	RT	-	$^{PL}N_2$/$^{PL}H_2$ NH_3, $^{PL}NH_3/H_2$	200°C 160-350°C	8 9
Ga:ZnO	ALD	RT	-	Et_2Zn, H_2O	300°C	10
$CuGaSe_2$	MOCVD	RT	-	$Cu(hfa)_2$; NEt_2 $Se(N^tBu)_2$	400-500°C	11
$In_xGa_yZn_zO$	ALD	RT	0.28 Torr	Et_2Zn, Me_3In, H_2O	200°C	12
$In_xGa_{1-x}N$	PEALD	RT	-	$^{PL}N_2/H_2$, N_2	200°C	13
AlGaN	ALD	RT	-	Me_3Al, NH_3/N_2	342°C	14

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