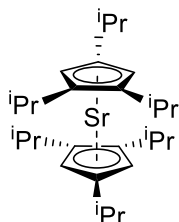


Catalog # 38-1200 Bis(tri-isopropylcyclopentadienyl)strontium 98%



Thermal Behavior:

- TGA available in [2]
- Decomposition in process ~250 °C [1, 7]
- Vapor pressure ~0.5 Torr at 120 °C [5]

Technical Notes:

1. Homoleptic strontium Cp precursor for ALD of Sr containing chalcogenide thin films.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
SrO	ALD	100 °C	7.5 Torr	H ₂ O	250 °C	[1]
SrO	ALD	140-145 °C	1 Torr	H ₂ O	150-390 °C	[7]
SrTiO ₃	ALD	100 °C	7.5 Torr	H ₂ O, Ti(O ⁱ Pr) ₄	250-325 °C	[1]
SrTiO ₃	ALD	150 °C	0.2 Torr	H ₂ O, Ti(NMe ₂) ₄	120-330 °C	[10]
SrTiO ₃	ALD	90 °C	0.7 Torr	O ₃ , H ₂ O, Ti(Me ₅ Cp)(OMe) ₃	370 °C	[6]
SrTiO ₃	ALD	90 °C	0.7 Torr	O ₃ , H ₂ O, Ti(O ⁱ Pr) ₂ (tmhd) ₂	370 °C	[6]
SrTiO ₃	ALD	130 °C		O ₃ , Ti(NEtMe) ₄	300 °C	[4]
SrTiO ₃	PEALD	120 °C		O ₂ plasma, Ti(O ⁱ Pr) ₂ (tmhd) ₂	250 °C	[5]
La _x Sr _{1-x} TiO ₃	ALD	130 °C	1 Torr	H ₂ O, Ti(O ⁱ Pr) ₄ , La(fmd) ₃	225 °C	[9]
SrSnO ₃	ALD	130 °C	1 Torr	Sn(NMe ₂) ₄ , H ₂ O	180 °C	[12]

SrZrO ₃	ALD	130 °C	1 Torr	H ₂ O, Zr(Nme ₂) ₄	225 °C	[11]
SrRuO ₃	CVD/ALD			O ₂ , RuO ₄	230 °C	[8]
SrS	ALD	100 °C	7.5 Torr	H ₂ S	120-460 °C	[2]
M:SrS (M=Cu, Pb, Ce, Mn, Eu)	ALD	100 °C	7.5 Torr	H ₂ S, Cu(Cp)(PEt ₃), Pb(^t Bu ₃ Cp) ₂ , Ce(Cp) ₃ , Mn(thmd) ₃ , Eu(thmd) ₃	120-380 °C	[3]

References:

1. [Chem. Vap. Deposition **2001**, *7*, 75.](#)
2. [Chem. Mater. **2002**, *14*, 1937.](#)
3. [J. Electrochem. Soc. **2004**, *151*, H221.](#)
4. [J. Appl. Phys. **2011**, *109*, 094101.](#)
5. [J. Electrochem. Soc. **2011**, *158*, G34.](#)
6. [Chem. Mater. **2013**, *25*, 953.](#)
7. [J. Phys. Chem. C **2013**, *117*, 11578.](#)
8. [ECS Trans. **2013**, *58*, 171.](#)
9. [J. Appl. Phys. **2014**, *115*, 224108.](#)
10. [Thin Solid Films **2014**, *550*, 53.](#)
11. [J. Appl. Phys. **2018**, *124*, 044102.](#)
12. [J. Vac. Sci. Technol. A, **2019**, *37*, 050902.](#)