We claim:

1. A titanium-containing film forming composition comprising a titanium bromide - containing precursor having one of the following formula:

$TiX_b:A_c$

with b=3 or 4; c=1-3; X = Br ; A= SR_2, SeR_2, TeR_2 or PR_3, and each R is independently H or a C1-C5 hydrocarbon, wherein the Ti bromide-containing precursor is a liquid at standard temperature and pressure.

2. The titanium-containing film forming composition of claim 1, further comprising a mixture of $TiBr_2(=O)$, $TiBr_3(OH)$, and TiO_2.

3. The titanium-containing film forming composition of claim 2, further comprising hydrogen bromide.

4. The titanium-containing film forming composition of claim 1, further comprising a mixture of $TiI_2(=O)$, $TiI_3(OH)$, and TiO_2.

5. The titanium-containing film forming composition of claim 1, further comprising hydrogen iodide.

6. The titanium-containing film forming composition of claim 1, wherein A is SR_2.

7. The titanium - containing film forming composition of claim 6, wherein each R is independently a C1 - C2 hydrocarbon when c = 2.

8. The titanium-containing film forming composition of claim 6, wherein the Ti bromide-containing precursor is $TiBr_4:S(nPr)_2$.

9. The titanium-containing film forming composition of claim 6, further comprising $TiX_4 : SR'_2$, wherein each R ' is independently H or a C_1 - C_5 hydrocarbon and R'≠R.

10. The titanium-containing film forming composition of claim 1, wherein A is SeR_2.

11. The titanium-containing film forming composition of claim 1, wherein A is TeR_2.

12. The titanium - containing film forming composition of claim 1, wherein A is PR_3.

13. The titanium-containing film forming composition of claim 1, further comprising a hydrocarbon solvent or of free adduct.

14. The titanium-containing film forming composition of claim 1, further comprising H_2O.

15. A method of depositing a Ti-containing film on a substrate, the method comprising introducing the Ti-containing film forming composition of claim 1 into a reactor containing the substrate and depositing at least part of the Ti bromide-containing precursor onto the substrate to form the Ti-containing film.

16. The method of claim 15, further comprising introducing a reactant into the reactor.

17. The method of claim 15, wherein the Ti-containing film is selectively deposited onto the substrate.