

**Supplementary data for Paper Ref: B417389A**

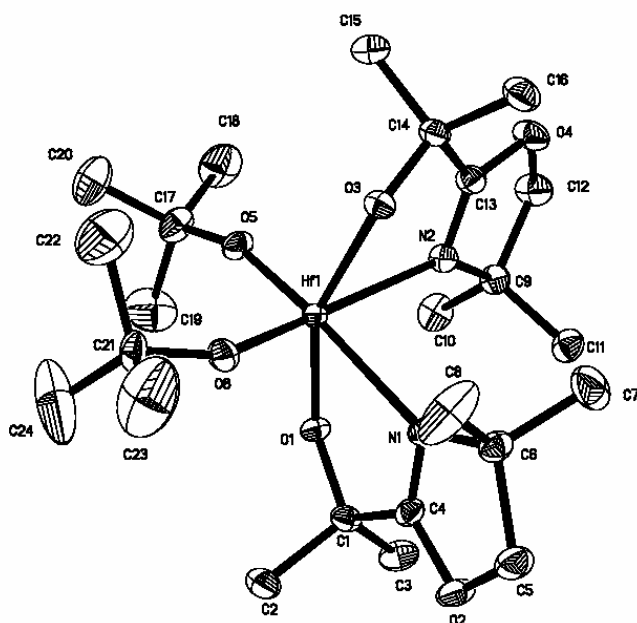
**Deposition of HfO<sub>2</sub> and ZrO<sub>2</sub> films by liquid injection MOCVD using new monomeric alkoxide precursors**

Crystal data for [Hf(OBu<sup>t</sup>)<sub>2</sub>(dmop)<sub>2</sub>] (2)

Empirical formula	C <sub>24</sub> H <sub>46</sub> N <sub>2</sub> O <sub>6</sub> Hf (2)
Formula weight	637.12
a [Å]	10.2341(4)
b [Å]	18.9036(8)
c [Å]	15.6521(6)
β [°]	105.0110(10)°
V [Å <sup>3</sup> ]	2924.7(2)
Crystal system	Monoclinic
Space group	P 21/n
Z	4
ρ (calcd., g cm <sup>-3</sup> )	1.447
μ [mm <sup>-1</sup> ]	3.602
Refl. collected	18033
Refl. unique ( <i>R</i> <sub>int</sub> )	6731 (0.0244)
<i>R</i> 1 [ <i>I</i> > 2σ( <i>I</i> )]	0.0277
<i>wR</i> 2 (all data)	0.0719

Selected bond lengths and angles for [Hf(OBu<sup>t</sup>)<sub>2</sub>(dmop)<sub>4</sub>] (2)

Hf(1)-O(5)	1.930(2)
Hf(1)-O(6)	1.940(3)
Hf(1)-O(1)	2.052(2)
Hf(1)-O(3)	2.061(2)
Hf(1)-N(1)	2.364(3)
Hf(1)-N(2)	2.388(3)
O(5)-Hf(1)-O(6)	102.37(11)
O(5)-Hf(1)-O(1)	94.63(10)
O(6)-Hf(1)-O(1)	101.37(10)
O(5)-Hf(1)-O(3)	100.92(9)
O(6)-Hf(1)-O(3)	95.05(10)
O(1)-Hf(1)-O(3)	154.40(9)
O(5)-Hf(1)-N(1)	165.00(10)
O(6)-Hf(1)-N(1)	85.89(10)
O(1)-Hf(1)-N(1)	71.28(9)
O(3)-Hf(1)-N(1)	90.66(9)
O(5)-Hf(1)-N(2)	88.30(10)
O(6)-Hf(1)-N(2)	163.98(10)
O(1)-Hf(1)-N(2)	89.47(9)
O(3)-Hf(1)-N(2)	70.96(9)
N(1)-Hf(1)-N(2)	86.50(10)



Molecular structure of  $[\text{Hf}(\text{OBu}^t)_2(\text{dmop})_4]$  (2)