

## Supplementary Material

### **Extremely bulky $\beta$ -diketiminato complexes of calcium(II) and ytterbium(II)**

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**Table S1.** Crystal data for compounds **1-4**.

	<b>1</b> ·(hexane)	<b>2</b> ·(benzene) <sub>6</sub>	<b>3</b> ·(toluene)	<b>4</b> ·(hexane)
empirical formula	C <sub>77</sub> H <sub>75</sub> CaIN <sub>2</sub>	C <sub>107</sub> H <sub>97</sub> IN <sub>2</sub> Yb	C <sub>156</sub> H <sub>136</sub> Ca <sub>2</sub> N <sub>4</sub>	C <sub>83</sub> H <sub>91</sub> BN <sub>2</sub> Yb
formula weight	1195.37	1710.80	2146.84	1300.42
crystal system	triclinic	triclinic	monoclinic	monoclinic
space group	<i>P</i> -1	<i>P</i> -1	<i>C</i> 2/ <i>c</i>	<i>P</i> 2 <sub>1</sub> / <i>n</i>
a (Å)	12.7462(3)	12.9219(3)	17.862(4)	11.6382(3)
b (Å)	14.3054(3)	13.4569(3)	25.995(5)	31.1049(10)
c (Å)	17.3946(4)	25.4495(7)	25.089(5)	18.5341(7)
α (°)	99.900(2)	79.664(2)	90	90
β (°)	94.512(2)	83.898(2)	93.01(3)	100.871(3)
γ (°)	99.256(2)	75.878(2)	90	90
V (Å <sup>3</sup> )	3065.32(12)	4214.92(18)	11633(4)	6589.0(4)
Z	2	2	4	4
T (K)	123(2)	123(2)	100(2)	123(2)
ρ <sub>calcd</sub> (g·cm <sup>3</sup> )	1.295	0.1.349	1.226	1.311
μ (mm <sup>-1</sup> )	0.652	1.527	0.156	1.467
F(000)	1248	1752	4560	2712
reflns collected	28547	37518	47897	42923
unique reflns	14772	16534	12635	12829
R <sub>int</sub>	0.0270	0.0319	0.0614	0.0519
R1 [I > 2σ(I)]	0.0430	0.0307	0.0563	0.0507
wR2 (all data)	0.1198	0.0646	0.1595	0.1391
largest peak and hole (e·Å <sup>-3</sup> )	0.92, -0.83	1.23, -0.80	0.55, -0.39	0.95, -1.28
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