

Table 1. Selected Bond Lengths (Å) and Angles (deg) for complex **1**, Ni^{II}₁₆Na^I₂

Ni(1)-Ni(2)	2.964(2)	Ni(2)-Ni(4)	3.866(3)
Ni(1)-Ni(3)	2.977(2)	Ni(2)-Ni(3)	3.826(6)
Ni(1)-Ni(4)	2.971(3)	Ni(4)-Ni(3)	3.841(6)
Ni(1)-O(1)	2.044(7)	Ni(2)-O(31)	2.058(8)
Ni(1)-O(73)	2.027(8)	Ni(2)-O(1)	2.070(8)
Ni(1)-O(51)	2.051(8)	Ni(2)-O(53)	2.060(7)
Ni(1)-O(63)	2.036(8)	Ni(2)-O(7)	2.091(8)
Ni(1)-O(11)	2.088(8)	Ni(2)-O(21)	2.093(8)
Ni(1)-O(21)	2.079(7)	Ni(2)-N(4)	2.131(9)
Ni(3)-O(11)	2.084(8)	Ni(4)-O(21)	2.079(8)
Ni(3)-O(401)	2.043(8)	Ni(4)-O(71)	2.036(8)
Ni(3)-O(61)	2.044(7)	Ni(4)-O(41)	2.119(9)
Ni(3)-N(14)	2.108(9)	Ni(4)-N(24)	2.134(9)
Ni(3)-O(1)	2.098(8)	Ni(4)-O(11)	2.096(8)
Ni(3)-O(17)	2.128(8)	Ni(4)-O(27)	2.133(8)
Ni(1)-O(1)-Ni(2)	92.2(3)	Ni(2)-O(1)-Ni(3)	133.0(3)
Ni(1)-O(21)-Ni(2)	90.50(3)	Ni(3)-O(11)-Ni(4)	133.3(4)
Ni(1)-O(1)-Ni(3)	91.90(3)	Ni(2)-O(21)-Ni(4)	135.5(4)
Ni(1)-O(11)-Ni(3)	91.0(3)		
Ni(1)-O(11)-Ni(4)	90.5(3)		
Ni(1)-O(21)-Ni(4)	91.2(3)		

Figure S1: Variable-temperature (1.9 - 5 K), variable-field (4 and 7 T) magnetization (VT VH) measurements.

