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**ABSTRACT**

The present invention provides an active electrode material comprising a mixture of (a) at least one niobium oxide and (b) at least one mixed niobium oxide; wherein the mixed niobium oxide has the composition  $M1_a M2_{1-a} M3_b Nb_{12-6O_{33-c-d} Q_d}$ , wherein: M1 and M2 are different; M1 is selected from Mg, Ca, Sr, Y, La, Ce, Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Mn, Fe, Co, Ni, Cu, Zn, Cd, B, Al, Ga, In, Si, Ge, Sn, Pb, P, Sb, Bi and mixtures thereof; M2 is Mo or W; M3 is selected from Mg, Ca, Sr, Y, La, Ce, Ti, Zr, Hf, V, Ta, Cr, Mo, W, Mn, Fe, Co, Ni, Cu, Zn, Cd, B, Al, Ga, In, Si, Ge, Sn, Pb, P, Sb, Bi, and mixtures thereof; Q is selected from F, Cl, Br, I, N, S, Se, and mixtures thereof;  $0 \leq a < 0.5$ ;  $0 \leq b \leq 2$ ;  $-0.5 \leq c \leq 1.65$ ;  $0 \leq d \leq 1.65$ ; one or more of a, b, c and d does not equal zero; and when a, b, and d equal zero, c is greater than zero. Such materials are of interest as active electrode materials in lithium-ion or sodium-ion batteries.

