Synthesis and characterization of Ni and Li - doped layered Manganese oxide as cathode material for Na ion batteries.

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 $Na_{0.84}Li_{0.1}Ni_{0.27}Mn_{0.63}O_2$ powders as cathode material for Na batteries have been synthesized by solid state method. Tailored synthesis conditions (temperature of calcination, quenching speed) and the control of the exposure to the air moisture allowed the materials to exhibit the O₃ or the O'₃ structure.

Cyclic voltammetry measurements evidenced the different electrochemical behavior of the two structures.