TITLE
Process for the colloidal synthesis of lithium iron phosphate

INVENTORS
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DESCRIPTION
Lithium Iron Phosphate nanocrystals are synthesized by a colloidal method; this synthesis permits to control very efficiently the shape and the size of the crystals. The size of the nanoparticles is below 100 nm. These nanocrystals can be used as a cathode in Li-ion battery. The process of lithiation and de-lithiation could be easier respect to the past due to the small size of the crystals that lead to high surface/volume ratio. LiFePO₄ is not a conductive material and it needs a carbon coating. Working with LiFePO₄ NCs this step is no more necessary because the electrical conductivity is increased in the nanosized material.

APPLICATIONS
Cathode material in Li-ion battery, all electronic portable devices makers

KEYWORDS
Lithium Iron Phosphate nanocrystals, colloidal synthesis, Li-ion battery

BIBLIOGRAPHIC DATA
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