

Title (en)
FLUORINATED BINDER COMPOSITE MATERIALS AND CARBON NANOTUBES FOR POSITIVE ELECTRODES FOR LITHIUM BATTERIES

Title (de)
VERBUNDMATERIALIEN MIT FLUORIERTEN BINDERN UND KOHLENSTOFFNANORÖHRCHEN FÜR POSITIVE ELEKTRODEN FÜR LITHIUMBATTERIEN

Title (fr)
MATERIAUX COMPOSITES A BASE DE LIANTS FLUORES ET NANOTUBES DE CARBONE POUR ELECTRODES POSITIVES DE BATTERIES LITHIUM

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Application
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Abstract (en)
[origin: WO2010106292A1] The present invention relates to a positive electrode composite material for a Li-ion battery, to the preparation method thereof, and to the use thereof in a Li-ion battery. The composite material according to the invention includes: a) at least one conductive additive including carbon nanotubes at a content of between 1 and 2.5 wt %, preferably between 1.5 and 2.2 wt %, relative to the total weight of the composite material; b) an active electrode material capable of reversibly forming an insertion compound with lithium, having an electrochemical potential greater than 2V relative to the Li/Li+ couple, and selected from among compounds having LiMV(XOZ)_n polyanionic frameworks; and c) a polymer binder. The positive electrode composite material according to the invention imparts, to the Li-ion battery incorporating said electrode, high support for the cycling capacity, weak internal resistance, and strong charge and discharge kinetics for the moderate cost of the stored KW.

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