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Nota di contenuto	Intro -- LITHIUM BATTERIES: RESEARCH, TECHNOLOGY AND APPLICATIONS -- LITHIUM BATTERIES: RESEARCH, TECHNOLOGY AND APPLICATIONS -- CONTENTS -- PREFACE -- Chapter 1 LIFEPO4 CATHODE MATERIALS FOR LITHIUM-ION BATTERIES -- 1. INTRODUCTION -- 2. SYNTHESIS METHOD OF LIFEPO4 CATHODE MATERIALS -- 2.1. Solid-State Reaction -- 2.2. Hydrothermal Method -- 2.3. Co-Precipitation -- 2.4. Emulsion-Drying Method -- 2.5. Sol-Gel Method -- 2.6. Mechanical Alloying -- 2.7. Microwave Processing -- 2.8. Other Synthesis Methods -- 3. HOW TO IMPROVE ELECTROCHEMICAL PERFORMANCE OF LIFEPO4 CATHODE MATERIALS -- 3.1. Effect of Particle Size and Morphology on Electrochemical Performance of LiFePO4 -- 3.2. Substitution of Li+ or Fe2+ with Cations -- 3.3. Effect of Carbon Coating and Metal or Metal Oxide Mixing on Charge/Discharge Performance of LiFePO4 -- 4. SUMMARY AND FUTURE PROSPECT -- 5. ACKNOWLEDGMENTS -- REFERENCES -- Chapter 2 INORGANIC CATHODE MATERIALS FOR LITHIUM ION BATTERIES -- 1. INTRODUCTION -- 2. LAYERED LITHIUM METAL OXIDES -- 2.1 Introduction -- 2.2 LiNiO2 -- 2.2.1 Problems with LiNiO2 -- 2.2.2 Synthesis of stoichiometric LiNiO2-based materials -- 2.2.3 Structural stability of delithiated LiNiO2-based materials -- 2.2.4 Thermal stability of delithiated LiNiO2-based materials -- 2.3 LiMnO2 -- 2.3.1 Challenges of LiMnO2 -- 2.3.2 Development of monoclinic LiMnO2 cathode materials -- 2.3.3 Development of orthorhombic

LiMnO₂ cathode materials -- 2.4 Mixed Transition Metal Dioxides -- 3
 SPINEL LITHIUM MANGANESE OXIDES -- 3.1 Introduction -- 3.2
 LiMn₂O₄ -- 3.2.1 Problems with LiMn₂O₄ -- 3.2.2 Modification of
 LiMn₂O₄ -- 4 OLIVINE LITHIUM METAL PHOSPHATES -- 4.1
 Introduction -- 4.2 LiFePO₄ -- 4.2.1 Problems with LiFePO₄ -- 4.2.2
 Synthesis methods for LiFePO₄ -- 4.2.3 Electrochemical performance
 upgrading of LiFePO₄ -- 4.3 LiMPO₄ (M = Mn, Co, Ni) -- 5
 CONCLUSION.
 REFERENCES -- Chapter 3 ANALYSIS OF CELL IMPEDANCE FOR THE
 DESIGN OF A HIGH-POWER LITHIUM-ION BATTERY -- ABSTRACT -- I.
 INTRODUCTION -- II. OVERVIEW OF HIGH POWER CELL DESIGN -- III.
 TIME-DEPENDENT CONTRIBUTION OF REACTION STEPS TO TOTAL
 POLARIZATION -- 1. Overview of the Approach -- 2. Model Case:
 Analysis on Hypothetical Electrode in LIB -- IV. IN-DEPTH DIAGNOSIS
 OF THE BATTERY WITH DEGRADED POWER -- 1. Cell Configuration and
 Electrochemical Test Procedures -- 2. Analysis Based on a Two-
 Electrode Electrochemical Cell and its Limitation -- 3. Analysis Based
 on a Three-Electrode Electrochemical Cell -- V. CRITICAL FACTORS FOR
 LOW-TEMPERATURE POWER DECLINE -- 1. Brief Description of
 Electrochemical Test Procedures -- 2. Effect of Temperature on Total
 and Elementary Polarizations -- 3. Power Performance of Hybrid
 Electrodes -- VI. CONCLUSION -- ACKNOWLEDGMENTS -- REFERENCES
 -- Chapter 4 CHEMICAL OVERCHARGE PROTECTION OF LITHIUM-ION
 CELLS -- ABSTRACT -- INTRODUCTION -- COMPARISON OF AVAILABLE
 TECHNOLOGIES -- HISTORICAL REVIEW -- STABILITY OF REDOX
 SHUTTLES -- Electronic Stability -- Structural Stability -- EXAMPLES OF
 STABLE REDOX SHUTTLES -- Aromatic Redox Shuttles -- Non-Aromatic
 Redox Shuttles -- CONCLUSION -- ACKNOWLEDGMENT -- REFERENCES
 -- Chapter 5 THERMAL STABILITY AND ELECTROCHEMICAL
 PERFORMANCE OF LiCoO₂ AND LiCo_{0.2}Ni_{0.8}O₂ IN LITHIUM-ION
 BATTERIES -- ABSTRACT -- 1. INTRODUCTION -- 2. MEASUREMENT OF
 THERMAL STABILITY -- 2.1. Differential Scanning Calorimetry -- 2.2.
 Accelerating Rate Calorimetry -- 3. HAZARD TRIGGERS -- 3.1.
 Temperature Coefficient of Cell Voltage -- 3.2. Cell Design -- 3.3.
 Electrolyte -- 3.4. Active Materials -- 4. LiCoO₂ -- 4.1. Coated LiCoO₂
 Cathodes -- 5. LiCo_{0.2}Ni_{0.8}O₂ -- 5.1. Substituted LiNi_yCo_{1-y}O₂
 Compositions -- 5.2. Coated LiNi_yCo_{1-y}O₂ Compositions -- 6.
 CONCLUSIONS -- REFERENCES.
 Chapter 6 COMPOSITIONAL AND STRUCTURAL EVOLUTION OF
 CATHODE PARTICLES OF THE CYCLED LITHIUM BATTERIES
 INVESTIGATED BY ANALYTICAL HIGH RESOLUTION TRANSMISSION
 ELECTRON MICROSCOPY (AHRTEM) -- 1. INTRODUCTION -- 1.1 The
 Cathode of Lithium Battery is the Li⁺ Source and Sinks -- 1.2 The
 Compositional and Structural Feature of Surface of a Cathode Particle
 -- 1.3 Fundamental Structural and Compositional Relationships
 between the NaFeO₂ and LiMO₂ (M=Co,Ni,Mn) -- 1.4 Analytical High
 Resolution Transmission Electron Microscopy (AHRTEM) is a Powerful
 Tool for Revealing Composition and Structure Variation of the Cathode
 Particles of a Cycled Lithium Battery at Atomic Scale -- 2. BASIC
 EXPERIMENT TECHNIQUES -- 2.1 Preparation of the Cycled Cathode
 Particles for AHRTEM -- 2.2 Micro-Diffraction and Micro-Analysis of
 the Cycled Cathode Particles -- 2.3 One- and Two- Dimension Lattices
 Images and Analysis -- 3. COMPOSITIONAL AND STRUCTURAL
 EVOLUTION OF THE CATHODE CYCLED PARTICLES OF THE LITHIUM
 BATTERIES -- 3.1 LiCoO₂ -- 3.2 LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂ -- 3.3 LiNi_{0.}
 8Co_{0.2}O₂ -- 4. DISCUSSION AND CONCLUSION --
 ACKNOWLEDGMENTS -- REFERENCES -- Chapter 7 SOFT SOLUTION
 PROCESSING OF NANOSCALED LITHIUM VANADIUM OXIDES AS

CATHODE MATERIALS FOR RECHARGEABLE LITHIUM ION BATTERIES --
ABSTRACT -- INTRODUCTION -- Li₁+XV₃O₈ -- Introduction --
Experimental Section -- Synthesis and characterization of LiV₃O₈ --
Electrochemical measurements -- Results and Discussion -- TGA result
-- The XRD and the Structure of LiV₃O₈ -- The morphology of the as-
synthesized LiV₃O₈ -- FTIR of the as-synthesized LiV₃O₈ --
Electrochemical properties of the as-synthesized LiV₃O₈ --
CONCLUSION -- -LiV₂O₅ -- Introduction -- Experimental Section --
Synthesis and characterization of -LiV₂O₅ -- Electrochemical
measurements -- Results and Discussion.
The XRD results and the kinetic processing of the formation of -
LiV₂O₅ -- FTIR of the as-synthesized -LiV₂O₅ -- XPS of the as-
synthesized -LiV₂O₅ -- The morphologies of the as-synthesized -
LiV₂O₅ -- Electrochemical properties of the as-synthesized -LiV₂O₅
-- CONCLUSION -- REFERENCE -- Chapter 8 ADVANCED LITHIUM-ION
BATTERIES FOR PLUG-IN HYBRID-ELECTRIC VEHICLES -- ABSTRACT --
1. INTRODUCTION -- 2. STATUS OF ADVANCED BATTERY
DEVELOPMENT -- 3. SPINEL-TITANATE BATTERY PERFORMANCE
MODELING -- 3.1 Approach -- 3.2 Experimental Data -- 3.3 Battery
Design Modeling -- 3.4 Impedance Modeling -- 4. VEHICLE
SIMULATION FOR HIGH-POWER BATTERIES -- 4.1 Approach -- 4.2
Vehicle Characteristics -- 4.3 Component Sizing Algorithm -- 4.4
Control Strategy Philosophy -- 4.5 Fuel Economy Results -- (1) Engine
started during the first cycle -- 5. CONCLUSIONS -- 6.
ACKNOWLEDGMENTS -- 7. REFERENCES -- INDEX -- Blank Page.
