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| Nota di contenuto       | Lithium Iron Phosphate: A Promising Cathode-Active Material for Lithium Secondary Batteries; Dedication; Author; Preface; Table of Contents; Abbreviations; Table of Contents; 1. Introduction; 2. Characteristics of LiFePO <sub>4</sub> as a Cathode-Active Material; 3. Synthesis of LiFePO <sub>4</sub> : Different Methods; 4. Synthesis of LiFePO <sub>4</sub> /C; 5. Influence of Synthesis Parameters on the Properties of LiFePO <sub>4</sub> and LiFePO <sub>4</sub> /C; 6. Metal Ion-Doped LiFePO <sub>4</sub> : Synthesis and Properties; 7. LiFePO <sub>4</sub> -Based Cathode: Influence of Different Parameters on Properties<br>8. Lithium Cells with LiFePO <sub>4</sub> Cathode: Influence of Cell Components and Operating Temperature<br>9. Safety and Storage of Lithium Batteries with LiFePO <sub>4</sub> Cathodes; 10. Theoretical and Modeling Studies on LiFePO <sub>4</sub> ; 11. Phosphate Olivines as Cathode-Active Materials; 12. An Overview; References; Authors Index |
| Sommario/riassunto      | Since the first development of lithium-ion batteries in the early 1990's, there have been tremendous advances in the science and technology of these electrochemical energy sources. At present, lithium batteries dominate the field of advanced power sources and have almost entirely replaced their bulkier and less energetic counterparts such as nickel-cadmium and nickel-metalhydride batteries; especially in portable electronic devices. But lithium batteries are still the object of  |

continuing intense research aimed at making further improvements in performance and safety, at lower cost, so as to m

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