

| | |
|-------------------------|--|
| 1. Record Nr. | UNINA9910840545603321 |
| Titolo | Materials for electrochemical energy conversion and storage [[electronic resource]] : papers from the Electrochemical Materials, Processes, and Devices symposium at the 102nd Annual Meeting of The American Ceramic Society, held April 29-May 3, 2000, in St. Louis, Missouri, and the Materials for Electrochemical Energy Conversion and Storage symposium at the 103rd Annual Meeting of The American Ceramic Society, held April 22-25, 2001, in Indianapolis, Indiana, USA // edited by Arumugam Manthiram ... [et al.] |
| Pubbl/distr/stampa | Westerville, Ohio, : American Ceramic Society, c2002 |
| ISBN | 1-280-58596-X 9786613615794 1-118-37085-6 1-118-37083-X |
| Descrizione fisica | 1 online resource (272 p.) |
| Collana | Ceramic transactions ; ; v. 127 |
| Altri autori (Persone) | ManthiramArumugam |
| Disciplina | 660.297 |
| Soggetti | Ceramic materials Electric batteries |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Oxygen Permeation Through Mixed Conducting Perovskite Oxide Membranes Oxygen Permeation Properties of Perovskite-Related Intergrowth Oxides in the Sr-Fe-Co-O System; Fe-Doped LaGaO ₃ -Based Perovskite Oxide as an Oxygen- Separating Membrane for CH ₄ Partial Oxidation; Synthesis and Oxygen Permeation Properties of Sr ₂ .7La _{0.3} Fe _{2-y} My O ₇ - (M = Mn, Co and Ni); Fuel Cells; Low-Cost Manufacturing Processes for Solid Oxide Fuel Cells; Manufacturing Routes and State of the Art of the Planar Julich Anode-Supported Concept for Solid Oxide Fuel Cells Materials and Microstructures for Improved Solid Oxide Fuel Cells Pulsed Laser Deposition and DC-Sputtering of Ytria- Stabilized Zirconia for Solid Oxide Fuel Cell Applications; Microstructure-Electrical Property Relationship in Nanocrystalline CeO ₂ Thin Films; Electrical |

Measurements in Doped Zirconia-Ceria Ceramics; Effects of Dissolution and Exsolution of Ni in YSZ; Multilayered Ceramic Reactor for the Steam Reforming of Methanol into Hydrogen-Enriched Gas; SiO₂-P₂O₅-ZrO₂ Sol-Gel/Nafion Composite Membranes for PEMFC
Study of Glass/Metal Interfaces Under an Electric Field: Low Temperature/High Voltage Lithium-Ion Batteries; Olivine-Type Cathodes for Lithium Batteries; Amorphous Manganese Oxide Cathodes for Rechargeable Lithium Batteries; Synthesis and Electrochemical Properties of Spinel LiCo₂O₄ Cathodes; Designing Structurally Stable Layered Oxide Cathodes for Lithium-Ion Batteries; Modeling and Design of Intermetallic Electrodes for Lithium Batteries; New Nanostructured Silicon and Titanium Nitride Composite Anodes for Li-Ion Batteries; Index

Sommario/riassunto

This new volume covers the latest developments in the field of electrochemistry. It addresses a variety of topics including new materials development, materials synthesis, processing, characterization, property measurements, structure-property relationships, and device performance. A broader view of various electrochemical energy conversion devices make this book a critical read for scientists and engineers working in related fields.
