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Nota di contenuto	Advances in Solid Oxide Fuel Cells V; Contents; Preface; Introduction; CELL AND STACK DEVELOPMENT/PERFORMANCE; Development of Novel Planar Nano-Structured SOFCs; Advanced Cell Development for Increased Direct JP-8 Performance in the Liquid Tin Anode SOFC; Fundamentals of Liquid Tin Anode Solid Oxide Fuel Cell (LTA-SOFC) Operation; A No Chamber Fuel Cell Using Ethanol as Flame; CHARACTERIZATION/TESTING; Surface Enhanced Raman Spectroscopy for Investigation of SOFC Cathodes; Characterization of an Anode-Supported Planar Solid Oxide Fuel Cell with a Porosity Concentration Gradient Impact of Protective and Contacting Layers on the Long-Term SOFC OperationCurvature Evolution and Control in Anode Supported Solid Oxide Fuel Cells; Phase-Boundary Grooving at Surfaces of Solid Oxide

Fuel Cell Materials; ELECTRODES; Mixed Proton-Oxide Ion-Electron Conducting Cathode for SOFCs Based on Oxide Proton Conductors; Permeation and Stability Investigation of Ba0,5 Sr 0,5 CO 0,8 Fe0,2 O3, Membranes for Oxy-Fuel Processes; Numerical Continuum Modeling and Simulation of Mixed- Conducting Thin Film and Patterned Electrodes
Laminar Flow and Total Pressure Effects in Solid Oxide Fuel Cell Electrode Pores and Their Effects on Voltage-Current CharacteristicsOXIDE/PROTON CONDUCTORS; Temperature and Pressure Assisted Cubic to Rhombohedral Phase Transition in Sc0.1 Ce0.01 ZrO2 by Micro-Raman; Synthesis and Activity of Cobalt-Doped Barium Cerium Zirconate for Catalysis and Proton Conduction; In Situ X-Ray Diffraction and Raman Spectroscopy of LiF-Added Ba(Zr0.7 Ce0.1 Y0.2)O2.9 Ceramics; SEALS; Sealing Glasses for SOFC - Degradation Behaviour; Determination of Fracture Strength of Glass-Ceramic Sealant Used in SOFC
Creep Behavior of Glass/Ceramic Sealant Used in Solid Oxide Fuel CellsThermal Cycle Durability of Glass/Ceramic Composite Gas-Tight Seals on Metal Substrates; MECHANICAL BEHAVIOR; Mechanical Properties of Cathode-Interconnect Interfaces in Planar SOFCs; MATERIALS SYNTHESIS; Synthesis and Characterization of Oxide Nanoparticles for Energy Applications; Glycine-Nitrate Synthesis and Characterization of Ba(Zr0.8.xCexY0.2)O2.9; FUEL REFORMING; Carbon Dioxide Reforming of Methane on Nickel-Ceria-Based Oxide Cermet Anode for Solid Oxide Fuel Cells; Author Index

Sommario/riassunto

This volume contains twenty four papers with contributions on various aspects of solid oxide fuel cells that were discussed at the symposium. You will gain insight into the current status of solid oxide fuel cells technology and the latest developments in the areas of fabrication, characterization, testing, performance, electrodes, electrolytes, seals, cell and stack development, proton conductors, fuel reforming, mechanical behavior, powder synthesis, etc.