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REFERENCES; RECOVERABLE PERFORMANCE OF PLASMA-SPRAYED METAL-SUPPORTED SOLID OXIDE FUEL CELL; ABSTRACT; INTRODUCTION; EXPERIMENTAL; RESULTS AND DISCUSSION; CONCLUSION; ACKNOWLEDGMENT; REFERENCES; INVESTIGATION OF CARBON DEPOSITION BEHAVIOR ON FERRITIC ALLOYS IN LOW S/C RATIO USING DIRECT HEATING METHOD; ABSTRACT; INTRODUCTION; EXPERIMENTAL; Sample preparation; Direct heating in a low S/C environment without pre-oxidation; Direct heating in a low S/C environment with pre-oxidation
 Sample analysisRESULTS AND DISCUSSION; Cr₂O₃-forming alloy; Al₂O₃-forming alloy; CONCLUSION; REFERENCES; INTERACTION OF PEROVSKITE TYPE LANTHANUM-CALCIUM-CHROMITES-TITANATES La_{1-x}Ca_xCr_{1-y}Ti_yO₃- WITH SOLID ELECTROLYTE MATERIALS; ABSTRACT; INTRODUCTION; EXPERIMENTAL; Materials; Sample preparation;; Thermodynamic calculations and reference samples;; Electrical characterization;; RESULTS AND DISCUSSION; Synthesis and phase stability; Electrical characterization of stoichiometric DCTs; Reactions in binary 8YSZ/Perovskite and ternary 8YSZ/Ni/Perovskite phase mixtures; Thermodynamic calculations
 CONCLUSIONSACKNOWLEDGEMENT; REFERENCES; SYNTHESIS OF SmBa_{0.5}Sr_{0.5}Co₂O₅+ POWDER AND ITS APPLICATION AS COMPOSITE CATHODE FOR INTERMEDIATE TEMPERATURE SOLID OXIDE FUEL CELL; ABSTRACT; INTRODUCTION; EXPERIMENTAL; RESULTS AND DISCUSSION; CONCLUSION; ACKNOWLEDGEMENT; REFERENCES; CHARACTERIZATION AND PERFORMANCE OF A HIGH-TEMPERATURE GLASS SEALANT FOR SOLID OXIDE FUEL CELL; ABSTRACT; INTRODUCTION; EXPERIMENTAL; RESULTS AND DISCUSSION; CTE and Characteristic Temperatures; Isothermal and Non-isothermal Crystallization Behaviors; Interfacial Compatibility and Chemical Stability
 High-temperature Leakage RateCONCLUSION; ACKNOWLEDGMENT; REFERENCES; ADJUSTMENT OF PROCESS PARAMETERS FOR ATTAINING A DENSE GADOLINIUM-DOPED CERIA LAYER FOR THE PRODUCTION OF MICROTUBULAR SOFC CELLS; ABSTRACT; INTRODUCTION; EXPERIMENTAL; RESULTS AND DISCUSSION; Powder A, GDC suspension with originally broad PSD; Powder B, GDC suspension with originally narrow PSD; CONCLUSION; ACKNOWLEDGMENTS; REFERENCES; STABILITY TESTING BEYOND 1000 HOURS OF SOLID OXIDE CELLS UNDER STEAM ELECTROLYSIS OPERATION; ABSTRACT; INTRODUCTION; EXPERIMENTAL; RESULTS AND DISCUSSION
 Long-term evolution of the cell voltage

Sommario/riassunto

This issue contains 13 papers from The American Ceramic Society's 38th International Conference on Advanced Ceramics and Composites, held in Daytona Beach, Florida, January 26-31, 2014 presented in Symposium 3 - 12th International Symposium on Solid Oxide Fuel Cells: Materials, Science, and Technology.