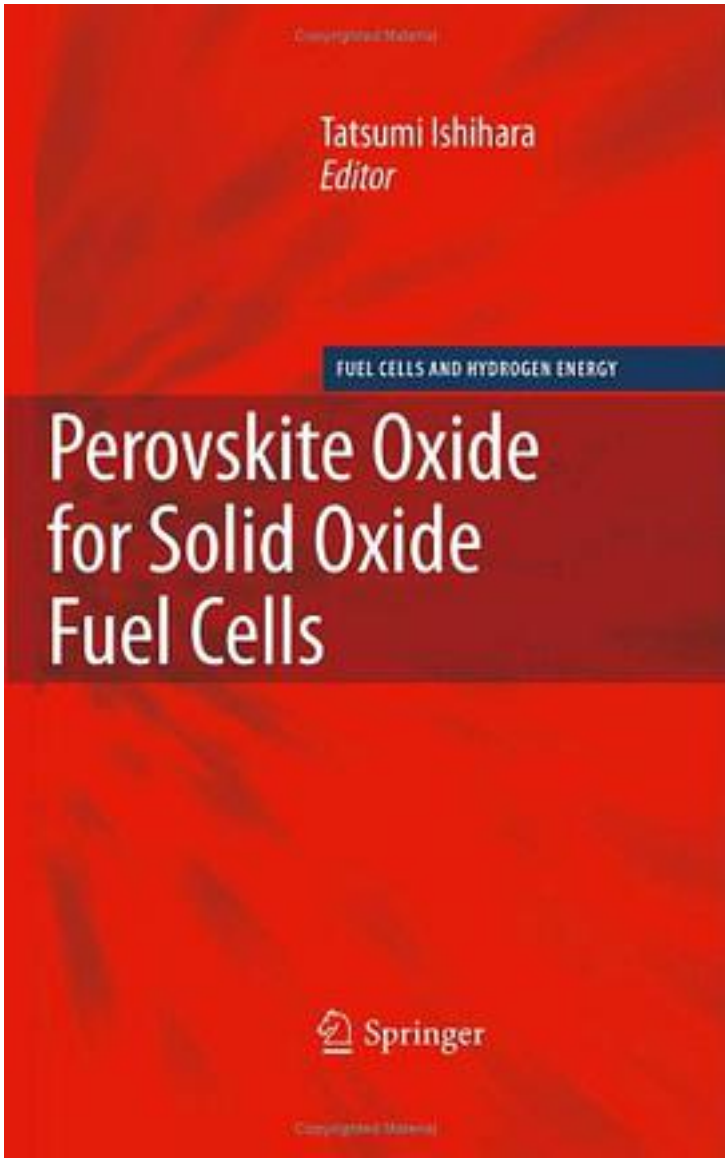
Perovskite Oxide for Solid Oxide Fuel Cells



Perovskite Oxide for Solid Oxide Fuel Cells_下载链接1_

著者:Ishihara, Tatsumi 编

出版者:

出版时间:2009-6

装帧:

isbn:9780387777078

The continuing development of fuel cells offers promising technologies for the conversion of chemical energy from hydrocarbon fuels into electricity without forming air pollutants. Perovskite Oxides for Solid Oxide Fuel Cells provides insight into the materials aspects of one of the most promising fuel cell types available. Solid Oxide Fuel Cells (SOFCs) have significant advantages over other fuel cell types, such as high efficiency, flexibility in fuel, high reliability, simple balance of plant (BOP) and a long history. Because of these advantages, SOFC technology is attracting a great deal of attention for use in power generation and for its potential in heat generation. Perovskite oxides are widely used for different SOFC components. Detailed description of various aspects of perovskite oxides are presented in this book. Each chapter in the book is written by leading international researchers and covers topics including: General Introduction of SOFC; Perovskite fast oxide ion conductors; High temperature perovskite proton conductors; Perovskite electrode catalyst and catalysis; SOFC stack development using perovskite oxide; The effects of decreasing SOFC operating temperatures to increase reliability, durability and stability. Perovskite Oxides for Solid Oxide Fuel Cells provides comprehensive and up-to-date information on the materials, properties, and performance for SOFCs and is appropriate for researchers and engineers in the field.

作者介绍:

目录:

标签

电化学

燃料电池

材料

评论

Perovskite Oxide for Solid Oxide Fuel Cells_下载链接1_

书评

Perovskite Oxide for Solid Oxide Fuel Cells_下载链接1_