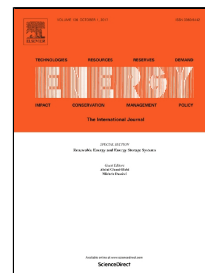


Accepted Manuscript

Electrochemical performance of solid oxide fuel cell: Experimental study and calibrated model

Abir Yahya, Domenico Ferrero, Hacen Dhahri, Pierluigi Leone, Khalifa Slimi, Massimo Santarelli



PII: S0360-5442(17)31793-0
DOI: 10.1016/j.energy.2017.10.088
Reference: EGY 11732
To appear in: *Energy*
Received Date: 19 May 2017
Revised Date: 15 October 2017
Accepted Date: 19 October 2017

Please cite this article as: Abir Yahya, Domenico Ferrero, Hacen Dhahri, Pierluigi Leone, Khalifa Slimi, Massimo Santarelli, Electrochemical performance of solid oxide fuel cell: Experimental study and calibrated model, *Energy* (2017), doi: 10.1016/j.energy.2017.10.088

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlight

- Electrochemical performance of solid oxide fuel cell is investigated with both H₂/H₂O and H₂/N₂ mixtures.
- Numerical model is calibrated and validated with experimental data.
- Effects of hydrogen molar fraction and fuel flow rate on the cell performance are investigated.
- Dependence of the ohmic, activation and concentration overpotentials on the operating temperature are performed

Download English Version:

<https://daneshyari.com/en/article/8072567>

Download Persian Version:

<https://daneshyari.com/article/8072567>

[Daneshyari.com](https://daneshyari.com)