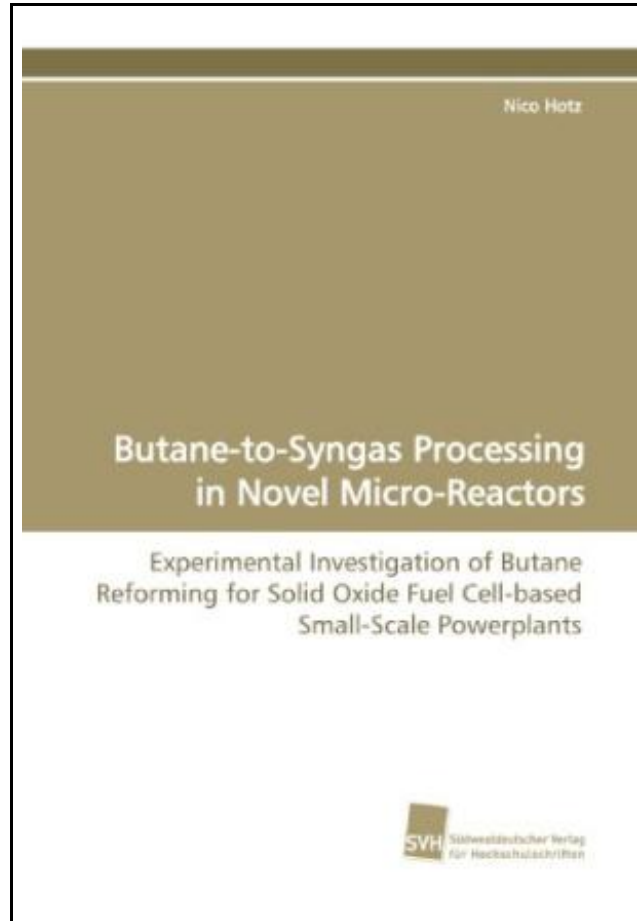


Butane-to-Syngas Processing in Novel Micro-Reactors



Filesize: 2.04 MB

Reviews

Very useful to any or all group of men and women. I am quite late in start reading this one, but better then never. You are going to like just how the blogger publish this book.

(Kristian Nader)

BUTANE-TO-SYNGAS PROCESSING IN NOVEL MICRO-REACTORS



To download **Butane-to-Syngas Processing in Novel Micro-Reactors** eBook, please follow the link below and save the file or have access to additional information which might be highly relevant to BUTANE-TO-SYNGAS PROCESSING IN NOVEL MICRO-REACTORS book.

Book Condition: New. Publisher/Verlag: Südwestdeutscher Verlag für Hochschulschriften | Experimental Investigation of Butane Reforming for Solid Oxide Fuel Cell-based Small-Scale Powerplants | This work investigates the production of syngas from butane by rhodium doped ceria/zirconia nanoparticles. The main issue of this study is to improve the catalytic performance at intermediate temperatures of 550°C. In the range of 500 to 600°C, a packed bed reactor with catalyst nanoparticles of 2.0 wt% Rh loading and silica-based plugs achieves nearly complete butane conversion with a hydrogen yield of 77%. In a next step, the production of syngas from butane is investigated by using a disk-shaped packed bed reactor containing Rh/ceria/zirconia nanoparticles at 550°C. Disk-shaped reactors achieve high hydrogen (92%) and carbon monoxide (82%) selectivities and complete butane conversion. This increased catalytic performance is due to a remarkably high contribution of Steam Reforming and Dry Reforming following Total Oxidation next to initial Partial Oxidation. Finally, a novel method is introduced to fabricate a ceramic foam containing catalytic nanoparticles by a direct and one-step sol-gelation procedure. The present dissertation proves that the catalyst is well suited to provide small portable butane processing units for applications in combination with micro fuel cells. | Format: Paperback | 150 gr | 220x150x5 mm | 100 pp.



[Read Butane-to-Syngas Processing in Novel Micro-Reactors Online](#)



[Download PDF Butane-to-Syngas Processing in Novel Micro-Reactors](#)

Other Books



[PDF] TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (3-5 years) Intermediate (3)(Chinese Edition)

Follow the link below to download and read "TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (3-5 years) Intermediate (3)(Chinese Edition)" document.

[Save Document »](#)



[PDF] Would It Kill You to Stop Doing That?

Follow the link below to download and read "Would It Kill You to Stop Doing That?" document.

[Save Document »](#)



[PDF] Violet Rose and the Surprise Party

Follow the link below to download and read "Violet Rose and the Surprise Party" document.

[Save Document »](#)



[PDF] Oxford Reading Tree Read with Biff, Chip and Kipper: Phonics: Level 2: A Yak at the Picnic (Hardback)

Follow the link below to download and read "Oxford Reading Tree Read with Biff, Chip and Kipper: Phonics: Level 2: A Yak at the Picnic (Hardback)" document.

[Save Document »](#)



[PDF] Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 2: The Fizz-buzz (Hardback)

Follow the link below to download and read "Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 2: The Fizz-buzz (Hardback)" document.

[Save Document »](#)



[PDF] Oxford Reading Tree Read with Biff, Chip and Kipper: Phonics: Level 2: Win a Nut! (Hardback)

Follow the link below to download and read "Oxford Reading Tree Read with Biff, Chip and Kipper: Phonics: Level 2: Win a Nut! (Hardback)" document.

[Save Document »](#)