

1. Record Nr.	UNINA9910583087503321
Autore	Ball Michael
Titolo	Compendium of Hydrogen Energy : Hydrogen Use, Safety and the Hydrogen Economy
Pubbl/distr/stampa	Burlington, : Elsevier Science, 2015 Cambridge, UK : , : Woodhead Publishing is an imprint of Elsevier, , [2016] ©2016
ISBN	1-78242-386-9 1-78242-364-8
Descrizione fisica	1 online resource (386 p.)
Collana	Woodhead Publishing Series in Energy ; ; v.Volume 4
Altri autori (Persone)	BasileAngelo VezirogluT. Nejat
Disciplina	665.81
Soggetti	Hydrogen as fuel
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Compendium of Hydrogen Energy: Volume 4 Hydrogen Use, Safety and the Hydrogen Economy; Copyright; Contents; List of contributors; Woodhead Publishing Series in Energy; Part One: Hydrogen applications in transport and industry ; Chapter 1: Hydrogen-fueled road automobiles - Passenger cars and buses; 1.1 Introduction; 1.2 Comparison of different hydrogen-fueled drive systems; 1.3 Technical solutions for FCEVs; 1.3.1 Lean FCEV; 1.3.2 Hybridized FCEV; 1.3.3 Plug-in FCEV; 1.3.4 Range extender FCEV; 1.4 Technical approaches for the main components of FCEVs 1.4.1 Fuel cell stacks1.4.2 Air supply systems; 1.4.3 Hydrogen supply; 1.4.4 Electric motors and power electronics; 1.4.5 Batteries; 1.5 Challenges for FCEVs - Consideration of main markets; 1.6 Summary and future trends; 1.7 Sources of further information and advice; Books; Major trade/professional bodies; Websites; References; Chapter 2: Hydrogen-fueled motorcycles, bicycles, and industrial trucks; 2.1 Introduction; 2.2 Hydrogen motorcycles and bicycles; 2.3 Hydrogen industrial trucks; 2.4 Conclusions; References; Chapter 3: Hydrogen-fueled marine transportation

3.1 Market environment
3.1.1 Environmental requirements; 3.1.1.1 International environmental requirements; 3.1.1.2 European environmental requirements; 3.1.1.3 Further measures for the reduction of ship-based emissions; 3.1.2 Regulatory requirements; 3.1.3 Infrastructure requirements; 3.1.4 Market trends; 3.2 Requirements for marine FCs; 3.2.1 Operational concepts for marine FC systems; 3.2.1.1 Basic load coverage with parallel operation; 3.2.1.2 Auxiliary power supply with hybrid application; 3.2.1.3 Direct propulsion for small vessel with hybrid application
3.2.2 General requirements for maritime FC systems
3.2.2.1 Environmental conditions; 3.2.2.2 Power demand and efficiency; 3.2.2.3 System integration into a vessel; 3.2.2.4 Supply of essential consumers; 3.2.3 Pleasure craft; 3.2.4 Merchant vessels; 3.2.5 Navy vessels; 3.3 Suitable FC systems; 3.3.1 Required developments for maritime FC systems; 3.3.2 Hydrogen storage alternatives on board; 3.3.2.1 Suitable fuels for maritime FC systems; 3.3.2.2 Cost perspective; 3.4 FC integration in ships; 3.4.1 Possible markets; 3.4.1.1 Overview of the global ship market
3.4.1.2 Start markets for FC systems
3.4.1.3 Remaining merchant fleet; 3.4.2 Safety; 3.4.3 Fuel supply; 3.4.4 Engine room layout; 3.4.5 Operational aspects; 3.5 Marine FC projects; 3.5.1 Pleasure craft and small passenger vessels; 3.5.2 Merchant vessels; 3.5.3 Navy vessels; 3.5.3.1 Surface vessels; 3.5.3.2 Submarines; 3.6 Future trends; References; Chapter 4: Hydrogen-fueled aeroplanes; 4.1 Introduction to hydrogen vs. traditional technologies: Differences and similarities, advantages, and disadvantages ...; 4.2 Hydrogen fuel on aircraft- Challenges and requirements
4.3 Advantages and disadvantages of hydrogen storage methods in aeronautics

Sommario/riassunto

Compendium of Hydrogen Energy Volume 4: Hydrogen Use, Safety and the Hydrogen Economy focuses on the uses of hydrogen. As many experts believe the hydrogen economy will, at some point, replace the fossil fuel economy as the primary source of the world's energy, this book investigates the uses of this energy, from transport, to stationary and portable applications, with final sections discussing the difficulties and possibilities of the widespread adoption of the hydrogen economy. Written by both leading academics in the fields of sustainable energy and experts from the world of industryPart

2. Record Nr.	UNINA9910139796703321
Titolo	Journal of literature and science
Pubbl/distr/stampa	South Wales, UK, : University of Glamorgan Research Centre for Literature, Arts and Science, 2007- London : , : University of Westminster., : Centre for the Study of Science and Imagination., , 2013-
Descrizione fisica	1 online resource
Soggetti	Literature and science Medicine in Literature Periodical Periodicals.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Periodico
Note generali	Refereed/Peer-reviewed "The journal is dedicated to the publication of academic essays ... on the subject of literature and science, broadly defined."--Home page.