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. Includes bibliographical references and index. Nota di bibliografia 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: Hydrogenfueled 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

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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