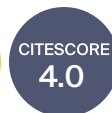




inorganics



Special Issue Reprint

State-of-the-Art and Progress in Metal-Hydrogen Systems

www.mdpi.com/books/reprint/8909

Edited by

Terry Humphries

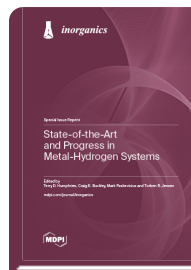
Craig Buckley

Mark Paskevicius

Torben Jensen

ISBN 978-3-7258-0357-6 (Hardback)

ISBN 978-3-7258-0358-3 (PDF)



Metal hydrides are a continuously expanding and diverse class of materials with a variety of properties. This reprint presents selected, original, and recent research within advanced studies and the utilisation of metal-hydrogen systems. Novel metal hydrides are presented along with nanocomposites systems, which have been investigated as solid-state hydrogen storage materials. Some metal hydrides have demonstrated fast cationic conductivity and can act as promising battery materials and as novel types of solid-state ionic conductors. A wide range of metallic hydrides have also been investigated for hydrogen purification and compression. Detailed investigations of their physical properties quickly move the research towards demonstration and industrial utilisation. This reprint supports the development of hydrogen as a clean energy solution, including stationary and portable storage, along with a variety of related technologies.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/8909

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.