

Marcel Van de Voorde (Ed.)

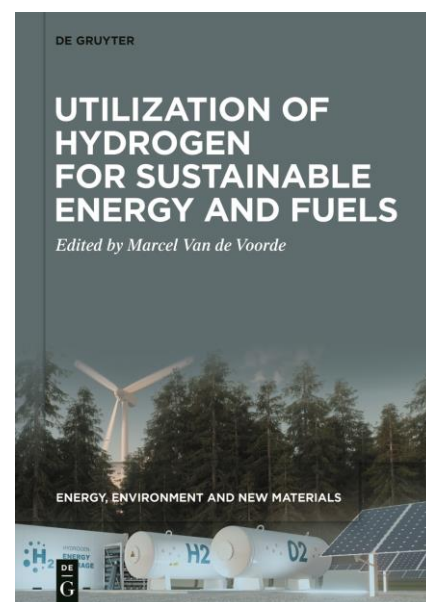
UTILIZATION OF HYDROGEN FOR SUSTAINABLE ENERGY AND FUELS

Energy, Environment And New Materials

Carbon neutral hydrogen technologies play a key-role in preventing climate change and hydrogen is really at the heart of the energy transition. As we can produce heat and power directly from hydrogen in a clean way, we will have many applications in the growing hydrogen economy. This book presents the current state and latest development trends of hydrogen economy with the focus on applications. It gives an overview of the hydrogen utilization as it relates to the transport technology, such as automobiles, heavy-duty vehicles, trains, ships, air, and space transport and industry. Large attention is given to structural and functional materials science, technologies and innovations with focus on the development of new materials and electrolytes for specific applications. Strictly related to mobility is the relation between vehicles and refuel stations, the safety analysis, risk assessment for both infrastructures and transport. Ideal book for students of materials science, chemistry, physics; for researchers and chemical- and mechanical engineers, for industrialists, policymakers, safety agencies and governments.

- Discusses the technologies that use hydrogen to produce energy for mobile and stationary applications
- Combines engineering fundamentals, commercially deployed technologies, with practical experience and proto-types development

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Of interest to:

Researchers, career starters, and advanced students in energy, materials science, chemistry, and physics

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