1. Record Nr. UNINA9910687988803321

Titolo	Clean energy technologies : hydrogen and gasification processes / / edited by Murat Eyvaz, Yongseung Yun, Ahmed Albahnasawi
Pubbl/distr/stampa	London : , : IntechOpen, , 2022
Descrizione fisica	1 online resource (168 pages)
Disciplina	665.81
Soggetti	Hydrogen as fuel Renewable energy sources
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introductory Chapter: Hydrogen Energy -- 2. Organic Semiconductor for Hydrogen Production -- 3. Production of Hydrogen via Water Splitting Using Photocatalytic and Photoelectrocatalytic Route -- 4. Conversion of Gas Turbine Combustors to Operate with a Hydrogen-Air Mixture: Modifications and Pollutant Emission Analysis -- 5. Hydrogen Oxyfuel Combustion for Energy-Intensive Industries -- 6. Refractories for Ammonia Production in Fertilizer Unit -- 7. Recent Advances in Supercritical Water Gasification of Pulping Black Liquor for Hydrogen Production -- 8. Minimising CO2 Emissions from Coal Gasification -- 9. Improving Hydrogen Production Yield in Hydrothermal Gasification Processes through Novel Metal Catalysts.
Sommario/riassunto	Increasing urbanization, population growth, and climate change require responsible consumption of all resources, primarily energy. Worldwide energy efficiency applications, renewable energy, and related technologies will be the driving force in the energy sector. It is envisaged that large amounts of carbon emissions can be prevented by changing the electricity production and consumption habits of societies and transforming them into renewable energy and related technologies in energy systems. This book presents valuable scientific studies on clean energy technologies and analyzes hydrogen production processes in detail.