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| Nota di contenuto       | Preface -- Hydrogen -- Hydrogen Production Methods -- Solar Energy Aspects -- Solar Hydrogen Production -- Thermodynamic Analysis -- Environmental Impact and Sustainability Assessment -- Case Studies -- Concluding Remarks -- Nomenclature -- References -- Appendix.  |
| Sommario/riassunto      | Solar Based Hydrogen Production Systems deals with various hydrogen production systems in general and solar hydrogen production systems in particular and their energy and exergy analyses. It also covers the various chemical processes involved in hydrogen production, the primary energy sources conventional and non-conventional, that are used to produce hydrogen. In addition, various other hydrogen production methods such as photovoltaic based, photoelectrolysis, and bio-photolysis are also covered. This book provides quality analyses of solar thermal hydrogen production systems and solar photovoltaic based hydrogen production system, and will be useful for researchers, scientists, engineers and practitioners working in the field of solar hydrogen production. |