Record Nr. UNINA9910634047303321 Hydrogen in Metals III [[electronic resource]]: Properties and **Titolo** Applications / / edited by Helmut Wipf Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 1997 **ISBN** 3-540-69988-0 Edizione [1st ed. 1997.] Descrizione fisica 1 online resource (XV, 351 p. 23 illus.) Collana Topics in Applied Physics, , 0303-4216; ; 73 Disciplina 669/.94 Soggetti Condensed matter **Condensed Matter Physics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Theory of tunneling and diffusion of light interstitials in metals --Diffusion of hydrogen in metals -- Nuclear magnetic resonance in metal hydrogen systems -- Neutron scattering studies of metal hydrogen systems -- Hydrogen related material problems -- Metal-Hydride technology: A critical review. Hydrogen in Metals III is the fifth book in the series Topics in Applied Sommario/riassunto Physics that discusses properties of metal-hydrogen systems. It considers results of both basic and application-oriented research, focusing on fields where recent progress was significant or where previous comprehensive reviews do not exist. The topics of the new volume are: the theoretical and the experimental status of hydrogen diffusion; nuclear magnetic resonance; neutron scattering; material problems caused by the hydrogen; application of metal hydrides for hydrogen storage and purification, for chemical engines, for hydrogen sensors, and for batteries and fuel cells.