1. Record Nr. UNINA9910877457203321 Autore Lehmann Volker Titolo The electrochemistry of silicon: instrumentation, science, materials and applications [Place of publication not identified], : Wiley VCH, 2002 Pubbl/distr/stampa 1-280-55771-0 **ISBN** 9786610557714 3-527-60027-2 Descrizione fisica 1 online resource (283 pages) Disciplina 546/.68357 Silicon - Electric properties Soggetti Inorganic Chemistry Chemistry Physical Sciences & Mathematics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Sommario/riassunto Silicon has been and will most probably continue to be the dominant material in semiconductor technology. Although the defect-free silicon single crystal is one of the best understood systems in materials science, its electrochemistry to many people is still a kind of "alchemy". This view is partly due to the interdisciplinary aspects of the topic: physics meets chemistry at the silicon-electrolyte interface. This book gives a comprehensive overview of this important aspect of silicon technology as well as examples of applications ranging from photonic crystals to biochips. It will serve materials scientists as well as engineers involved in silicon technology as a quick reference with its more than 150 technical tables and diagrams and ca. 1000 references

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