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| Nota di contenuto | Introduction -- Positron Annihilation Techniques -- Fate of Energetic Positrons in Matter -- Positron Implantation Profile -- Positron in Inhomogeneous Matter. |
| Sommario/riassunto | This book provides a comprehensive overview of positron profilometry, specifically focusing on the analysis of defect depth distribution in materials. Positron profilometry plays a crucial role in understanding and characterizing defects in a wide range of materials, including metals, semiconductors, polymers, and ceramics. By analyzing the depth distribution of defects, researchers can gain insights into various material properties, such as crystal structure, defect density, and diffusion behavior. The author's extensive research spanning a period of two decades has primarily centered on subsurface zones. These regions, located beneath the surface and subjected to various surface processes, play a crucial role in generating defect distributions. Three |

experimental techniques and their data analysis are described in detail: a variable-energy positron beam (VEP) called sometimes a slow positron beam, a technique called implantation profile depth scanning (DSIP), and a sequential etching (SET) technique. The usability of these techniques is illustrated by many examples of measurements by the author and others.
