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| Soggetti | Superconductivity Superconductors Nuclear magnetic resonance Condensed matter Materials - Analysis Magnetic Resonance (NMR, EPR) Strongly Correlated Systems Characterization and Analytical Technique |
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| Nota di contenuto | Introduction -- UTe2 Paradise For Condensed matter Scientists -- Nuclear Magnetic Resonance -- Experimental -- NMR Measurements on UTe2 -- Summary and Future Works. |
| Sommario/riassunto | This book provides an insight into spin-triplet superconductivity, which rapidly becomes better understood in recent years, from the perspective of a microscopic measurement technique called nuclear magnetic resonance (NMR). The compound UTe2, the target material of this book, was confirmed to show superconductivity in 2018, and its peculiarity is very similar to that of other uranium-based ferromagnetic superconductors, ensuring spin triplet superconductivity. This book begins with the fundamentals of superconductivity and subsequently overviews research in spin-triplet superconductivity. The similarity between the high-field superconducting phase in UTe2 and the superconducting phase under pressure is particularly interesting |

among the various superconducting phenomena observed so far. This book provides a concise introduction to superconductivity, so that the book is also intended for wide readership including the beginners interested in the phenomenon of superconductivity and undergraduate and graduate students. It also cover the NMR measurement from the basic derivation, which is accessible for beginners. The target material UTe₂ is skillfully described, including a selection of related works to this book.
