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Sommario/riassunto	This book presents a comprehensive introduction to fermiology, with a focus on quantum oscillations and angle-dependent magnetoresistance oscillations. By exploring the intricate structure of Fermi surfaces in conductors, it offers a detailed understanding of the electronic states that govern their electronic properties in a material. Core concepts such as Landau quantization, the Lifshitz–Kosevich formula and Berry phase are carefully examined, providing insight into the quantum behavior of electrons in magnetic fields. The book outlines experimental techniques for probing Fermi surfaces, emphasizing the importance of quantum oscillation measurements and angle-dependent

magnetoresistance as powerful tools for revealing microscopic electronic structures. Through a balanced integration of theoretical models and experimental data, readers are guided toward a deeper understanding of phenomena such as superconductivity and density wave transitions. Intended for advanced undergraduate and graduate students in solid-state physics, this book bridges the gap between foundational knowledge and advanced topics in fermiology. It serves as a valuable resource for those with an elementary background in solid-state physics including quantum mechanics and statistical mechanics.
