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Sommario/riassunto	This book highlights a high-density helicon plasma source produced by radio frequency excitation in the presence of magnetic fields, which has attracted considerable attention thanks to its wide applicability in various fields, from basic science to industrial use. Presenting specific applications such as plasma thrusters, nuclear fusion, and plasma processing, it offers a review of modern helicon plasma science for a broad readership. The book covers a wide range of topics, including the fundamental physics of helicon plasma and their cutting-edge applications, based on his abundant and broad experience from low to high temperature plasmas, using various linear magnetized machines and nuclear fusion ones such as tokamaks and reversed field pinches. It first provides a brief overview of the field and a crash course on the fundamentals of plasma, including miscellaneous diagnostics, for advanced undergraduate and early graduate students in plasma science, and presents the basics of helicon plasma for beginners in the field. Further, digesting advanced application topics is also useful for experts to have a quick overview of extensive helicon plasma science

research.