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Nota di contenuto	Introduction -- Ring Theory -- MacWilliams Relations -- Families of Rings -- Self-Dual Codes -- Cyclic and Constacyclic Codes.
Sommario/riassunto	This book provides a self-contained introduction to algebraic coding theory over finite Frobenius rings. It is the first to offer a comprehensive account on the subject. Coding theory has its origins in the engineering problem of effective electronic communication where the alphabet is generally the binary field. Since its inception, it has grown as a branch of mathematics, and has since been expanded to consider any finite field, and later also Frobenius rings, as its alphabet. This book presents a broad view of the subject as a branch of pure mathematics and relates major results to other fields, including combinatorics, number theory and ring theory. Suitable for graduate students, the book will be of interest to anyone working in the field of coding theory, as well as algebraists and number theorists looking to apply coding theory to their own work.