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Nota di contenuto	Frontmatter -- Contents -- 1 Introduction -- 2 Nonlinear Landweber iteration -- 3 Modified Landweber methods -- 4 Newton type methods -- 5 Multilevel methods -- 6 Level set methods -- 7 Applications -- 8 Comments -- Backmatter
Sommario/riassunto	Nonlinear inverse problems appear in many applications, and typically they lead to mathematical models that are ill-posed, i.e., they are unstable under data perturbations. Those problems require a regularization, i.e., a special numerical treatment. This book presents regularization schemes which are based on iteration methods, e.g., nonlinear Landweber iteration, level set methods, multilevel methods and Newton type methods.