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Nota di contenuto	Coefficient Determination Problems with Local Boundary and Overdetermination Conditions -- Inverse Coefficient Problems with Nonlocal Initial and Integral Overdetermination Conditions -- Coefficient Determination Problems with Cauchy and Overdetermination Conditions -- Carleman Estimate Method in Inverse Problems for a Fractional Diffusion Equation -- Determination of Source and Initial Functions -- Convolution Kernel Determination Problems in Fractional Diffusion Equations -- Determining Two Unknown Functions in a Fractional Diffusion Equation.
Sommario/riassunto	This book discusses various inverse problems for the time-fractional diffusion equation, such as inverse coefficient problems (nonlinear problems) and inverse problems for determining the right-hand sides of equations and initial functions (linear problems). The study of inverse problems requires a comprehensive investigation of direct problems (such as representation formulas, a priori estimates and differential properties of the solution). This is particularly evident in nonlinear problems, where obtaining solvability theorems necessitates careful tracking of the exact dependence of the differential properties

of the solution to the direct problem on the smoothness of the coefficients and other problem data. Therefore, a significant portion of the book is devoted to direct problems, such as initial problems (Cauchy problems) and initial-boundary value problems with various boundary conditions.
