#### 图书基本信息

书名:《线性及非线性抛物型复方程LINEAR AND NONLINEAR PARABOLIC COMPLEX EQUATIONS》

13位ISBN编号: 9789810238568

10位ISBN编号:9810238568

出版时间:1999-12

出版社:world sceintific

作者: 闻国椿

页数:246

版权说明:本站所提供下载的PDF图书仅提供预览和简介以及在线试读,请支持正版图书。

更多资源请访问:www.tushu111.com

#### 内容概要

This book deals mainly with linear and nonlinear parabolic equations and systems of second order. It first transforms the real forms of parabolic equations and systems into complex forms, and then discusses several initial boundary value problems and Cauchy problems for quasilinear and nonlinear parabolic complex equations of second order with smooth coefficients or measurable coefficients. Parabolic complex equations are discussed in the nonlinear case and the boundary conditions usually include the initial irregular oblique derivative. The boundary value problems are considered in multiply connected domains and several methods are used.

#### 书籍目录

Preface I Properties of Solutions for Parabolic Complex Equations of Second Order 1. Complex Forms of Linear and Nonlinear Parabolic Equations of Second Order 2. Extremum Principles of Solutions for Parabolic Complex Equations of Second Order 3. Uniqueness and Stability of Solutions for Some Initial-Boundary Value Problems for Parabolic Equations 4. Representation Theorem and Compactness Theorem of Solutions for Parabolic Equations II Quasilinear Parabolic Complex Equations of Second Order with Smooth Coefficients 1. Conditions of Quasilinear Parabolic Equations of Second Order 2. A Priori Estimates of Solutions of Dirichlet Boundary Value Problem for Complex Equations of Second Order 3. Existence of Solutions of Dirichlet Boundary Value Problem for Complex Equations of Second Order 4. Initial-Regular Oblique Derivative Problem for Complex Equations of Second Order III Nonlinear Parabolic Complex Equations of Second Orderwith Smooth Coefficients 1. Conditions of Nonlinear Parabolic Complex Equations of Second Orde with Smooth Coefficients 2. A Priori Estimates of Solutions for the Dirichlet Boundary Value Problem 3. Solvability of Dirichlet Boundary Value Problem for Complex Equations of Second Order 4. Initial-Regular Oblique Derivative Problem for Complex Equations of Second Order 5. Initial-Irregular Oblique Derivative Problem for Complex Equations IV Nonlinear Parabolic Complex Equations of Second Order with Measurable Coefficients 1. Formulation of Initial-Boundary Value Problems for Nonlinear Parabolic Equations 2. Inner Estimates of Solutions for Initial-Boundary Value Problems .. 3. A Priori Estimates of Solutions and Solvability of the Dirichlet Boundary Value Problem 4. A Priori Estimates of Solutions and Solvability of the Initial-Regular Derivative Problem 5. Initial-Mixed Boundary Value Problem for Parabolic Complex Equations of Second Order 6. Initial-Irregular Oblique Derivative Problems for Parabolic Equations of Second Order V Nonlinear Parabolic Complex Systems of Second Order Equations with Measurable Coefficients 1. Formulation and Uniqueness of Initial-General Boundary Value Problems for Nonlinear Parabolic Systems 2. The First Boundary Value Problem for Parabolic Systems of Second Or- der Equations 3. Initial-Regular Oblique Derivative Problems for Parabolic Systems of Sec- ond Order Equations 4. Initial-Irregular Oblique Derivative Problems for Parabolic Systems of Second Order Equations 5. Initial-Mixed Boundary Value Problems for Parabolic Systems of Second Order Equations VI Cauchy Problems for Nonlinear Parabolic Equations and Systems of Second Order 1. Cauchy Problem for Nonlinear Parabolic Equations of Second Order with Measurable Coefficients 2. Cauchy Problem for Nonlinear Parabolic Systems of Second Order Equa-Measurable Coefficients .....ReferencesIndex

#### 版权说明

本站所提供下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问:www.tushu111.com