图书基本信息

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内容概要

This book consists of select works of the author, which include most important results about complex analytic theory, methods and applications obtained by the author in recent 25 years, mainly properties of solutions and various boundary value problems for nonlinear elliptic equations and systems, parabolic equations and systems, hyperbolic and mixed complex equations with parabolic degeneracy. In other words, a large portion of the works is devoted to boundary value problems for general elliptic complex equations of first and second order, initial-boundary value problems for nonlinear parabolic complex equations and systems of second order including some equations and systems in higher dimensional domains, and properties of solutions for hyperbolic complex equations of second order. Moreover, some results about second order complex equations of mixed (elliptic-hyperbolic) type are introduced. Applications of nonlinear complex analysis to continuum mechanics, and approximate methods of elliptic complex equations axe also investigated.

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