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Collana	Birkhäuser Advanced Texts Basler Lehrbücher, , 2296-4894
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Soggetti	Functional analysis Topology Mathematical optimization Calculus of variations Mathematics Functional Analysis Calculus of Variations and Optimization Applications of Mathematics Anàlisi matemàtica Llibres electrònics
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Degree Theory -- Fixed Point Theory -- Critical Point Theory -- Spectra of Differential Operators -- Elliptic Boundary Value Problems -- Evolution Equations -- Calculus of Variations -- Mathematical Economics and Game Theory -- References -- Index.
Sommario/riassunto	This book, the second of two volumes, presents significant applications for understanding modern analysis. It empowers young researchers with key techniques and applications to explore various subfields of this broad subject and introduces relevant frameworks for immediate deployment. The applications list begins with Degree Theory, a useful tool for studying nonlinear equations. Chapter 2 deals with Fixed Point Theory, and Chapter 3 introduces Critical Point Theory. Chapter 4 presents the main spectral properties of linear, nonlinear, anisotropic, and double-phase differential operators. Chapter 5 covers semilinear

and nonlinear elliptic equations with different boundary conditions, while Chapter 6 addresses dynamic systems monitored by ordinary and partial differential equations. Chapter 7 delves into optimal control problems, and Chapter 8 discusses some economic models, providing a brief presentation of Game Theory and Nash equilibrium. By offering a clear and comprehensive overview of modern analysis tools and applications, this work can greatly benefit mature graduate students seeking research topics, as well as experienced researchers interested in this vast and rich field of mathematics.

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