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| ISBN | 1-4614-8893-1 |
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| Descrizione fisica | 1 online resource (238 p.) |
| Collana | Universitext, , 2191-6675 |
| Disciplina | 515.35 |
| Soggetti | Mathematical analysis Differential equations Analysis Differential Equations |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
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| Note generali | Description based upon print version of record. |
| Nota di contenuto | Introduction -- Shooting type methods -- The Banach Fixed Point Theorem.- Schauder's Theorem and applications.- Topological degree: an introduction -- Applications.- Basic facts on metric and normed spaces -- Brief review of ODE's.- Hints and Solutions to Selected Exercises. |
| Sommario/riassunto | This textbook is devoted to the study of some simple but representative nonlinear boundary value problems by topological methods. The approach is elementary, with only a few model ordinary differential equations and applications, chosen in such a way that the student may avoid most of the technical difficulties and focus on the application of topological methods. Only basic knowledge of general analysis is needed, making the book understandable to non-specialists. The main topics in the study of boundary value problems are present in this text, so readers with some experience in functional analysis or differential equations may also find some elements that complement and enrich their tools for solving nonlinear problems. In comparison with other texts in the field, this one has the advantage of a concise and informal style, thus allowing graduate and undergraduate students to enjoy some of the beauties of this interesting branch of mathematics. Exercises and examples are included throughout the |

book, providing motivation for the reader.
