

1st ed. 2019, Approx. 475 p.

Printed book

Hardcover

Ca. 99,99 € | Ca. £89.99 | Ca.
\$119.99

^[1]Ca. 106,99 € (D) | Ca. 109,99 € (A)
| Ca. CHF 110,00

eBook

Available from your library or
springer.com/shop

MyCopy ^[3]

Printed eBook for just

€ | \$ 24.99

springer.com/mycopy

Nikolaos Papageorgiou, Vicentiu Radulescu, Dusan Repovs

Modern Nonlinear Analysis - Theory

Series: Springer Monographs in Mathematics

- Introduces the basic methods used in the qualitative mathematical analysis of nonlinear models
- Reveals a number of surprising interactions between several fields of mathematics, including topology, functional analysis, mathematical physics, and potential theory
- Can be used as supplementary reading in any course on elliptic PDEs at the graduate level or as a seminar text

This book emphasizes those basic abstract methods and theories that are useful in the study of nonlinear boundary value problems. The content is developed over six chapters, providing a thorough introduction to the techniques used in the variational and topological analysis of nonlinear boundary value problems described by stationary differential operators. The authors give a systematic treatment of the basic mathematical theory and constructive methods for these classes of nonlinear equations as well as their applications to various processes arising in the applied sciences. They show how these diverse topics are connected to other important parts of mathematics, including topology, functional analysis, mathematical physics, and potential theory. Throughout the book a nice balance is maintained between rigorous mathematics and physical applications. The primary readership includes graduate students and researchers in pure and applied nonlinear analysis.

Lifelong 40% discount for authors



Order online at springer.com / or for the Americas call (toll free) 1-800-SPRINGER / or email us at: customerservice@springernature.com. / For outside the Americas call +49 (0) 6221-345-4301 / or email us at: customerservice@springernature.com.

The first € price and the £ and \$ price are net prices, subject to local VAT. Prices indicated with [1] include VAT for books; the €(D) includes 7% for Germany, the €(A) includes 10% for Austria. Prices indicated with [2] include VAT for electronic products; 19% for Germany, 20% for Austria. All prices exclusive of carriage charges. Prices and other details are subject to change without notice. All errors and omissions excepted. [3] No discount for MyCopy.