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Titolo	Fixed point theory and applications // Ravi P. Agarwal, Maria Meehan, Donal O'Regan [[electronic resource]]
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Descrizione fisica	1 online resource (x, 170 pages) : digital, PDF file(s)
Collana	Cambridge tracts in mathematics ; ; 141
Disciplina	514
Soggetti	Fixed point theory Mappings (Mathematics)
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Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references (p. 159-167) and index.
Nota di contenuto	Contractions -- Nonexpansive maps -- Continuation methods for contractive and nonexpansive mappings -- Theorems of brouwer, schauder and monch -- Nonlinear alternatives of leray-schauder type -- Continuation principles for condensing maps -- Fixed point theorems in conical shells -- Fixed point theory in hausdorff locally convex linear topological spaces -- Contractive and nonexpansive multivalued maps -- Multivalued maps with continuous selections -- Multivalued maps with closed graph -- Degree theory.
Sommario/riassunto	This book provides a clear exposition of the flourishing field of fixed point theory. Starting from the basics of Banach's contraction theorem, most of the main results and techniques are developed: fixed point results are established for several classes of maps and the three main approaches to establishing continuation principles are presented. The

theory is applied to many areas of interest in analysis. Topological considerations play a crucial role, including a final chapter on the relationship with degree theory. Researchers and graduate students in applicable analysis will find this to be a useful survey of the fundamental principles of the subject. The very extensive bibliography and close to 100 exercises mean that it can be used both as a text and as a comprehensive reference work, currently the only one of its type.
