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Edizione	[1st ed. 2009.]
Descrizione fisica	1 online resource (291 p.)
Collana	Lecture notes in mathematics ; ; 1978
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Soggetti	Endomorphisms (Group theory) Ergodic theory
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (pages [271]-274) and index.
Nota di contenuto	Preliminaries -- Margulis-Ruelle Inequality -- Expanding Maps -- Axiom A Endomorphisms -- Unstable and Stable Manifolds for Endomorphisms -- Pesin's Entropy Formula for Endomorphisms -- SRB Measures and Pesin's Entropy Formula for Endomorphisms -- Ergodic Property of Lyapunov Exponents -- Generalized Entropy Formula -- Exact Dimensionality of Hyperbolic Measures.
Sommario/riassunto	This volume presents a general smooth ergodic theory for deterministic dynamical systems generated by non-invertible endomorphisms, mainly concerning the relations between entropy, Lyapunov exponents and dimensions. The authors make extensive use of the combination of the inverse limit space technique and the techniques developed to tackle random dynamical systems. The most interesting results in this book are (1) the equivalence between the SRB property and Pesin's entropy formula; (2) the generalized Ledrappier-Young entropy formula; (3) exact-dimensionality for weakly hyperbolic diffeomorphisms and for expanding maps. The proof of the exact-dimensionality for weakly hyperbolic diffeomorphisms seems more

accessible than that of Barreira et al. It also inspires the authors to argue to what extent the famous Eckmann-Ruelle conjecture and many other classical results for diffeomorphisms and for flows hold true. After a careful reading of the book, one can systematically learn the Pesin theory for endomorphisms as well as the typical tricks played in the estimation of the number of balls of certain properties, which are extensively used in Chapters IX and X.
