

1. Record Nr.	UNINA9910784344203321
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Titolo	Riemannian geometry : a modern introduction / / Isaac Chavel [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2006
ISBN	1-107-15482-0 1-280-51593-7 9786610515936 0-511-22032-4 0-511-22120-7 0-511-21923-7 0-511-31459-0 0-511-61682-1 0-511-21991-1
Edizione	[Second edition.]
Descrizione fisica	1 online resource (xvi, 471 pages) : digital, PDF file(s)
Collana	Cambridge studies in advanced mathematics ; ; 98
Disciplina	516.3/73
Soggetti	Geometry, Riemannian
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references (p. 449-464) and indexes.
Nota di contenuto	; I. Riemannian manifolds -- ; II. Riemannian curvature -- ; III. Riemannian volume -- ; IV. Riemannian coverings -- ; V. Surfaces -- ; VI. Isoperimetric inequalities (constant curvature) -- ; VII. The kinematic density -- ; VIII. Isoperimetric inequalities (variable curvature) -- ; IX. Comparison and finiteness theorems.
Sommario/riassunto	This book provides an introduction to Riemannian geometry, the geometry of curved spaces, for use in a graduate course. Requiring only an understanding of differentiable manifolds, the author covers the introductory ideas of Riemannian geometry followed by a selection of more specialized topics. Also featured are Notes and Exercises for each chapter, to develop and enrich the reader's appreciation of the subject. This second edition, first published in 2006, has a clearer treatment of many topics than the first edition, with new proofs of some theorems and a new chapter on the Riemannian geometry of surfaces. The main themes here are the effect of the curvature on the

usual notions of classical Euclidean geometry, and the new notions and ideas motivated by curvature itself. Completely new themes created by curvature include the classical Rauch comparison theorem and its consequences in geometry and topology, and the interaction of microscopic behavior of the geometry with the macroscopic structure of the space.
