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	Autore	Giordani Paolo (Writer on statistics.
	Titolo	An Introduction to Clustering with R [[electronic resource] /] / by Paolo Giordani, Maria Brigida Ferraro, Francesca Martella
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	Nota di contenuto	Section: Introduction -- 1.1 Introduction to clustering -- 1.2 R software -- 2. Section: Standard algorithms -- 2.1 Introduction -- 2.2 Distances and dissimilarities -- 2.3 Hierarchical methods -- 2.4 Non-hierarchical methods -- 2.5 Cluster validity -- 3. Section: Fuzzy algorithms -- 3.1 Introduction -- 3.2 Fuzzy K-means -- 3.3 Fuzzy K-medoids -- 3.4 Other fuzzy variants -- 3.5 Cluster validity -- 4. Section: Model-based algorithms -- 4.1 Introduction -- 4.2 Mixture of Gaussian distributions -- 4.3 Mixture of non-Gaussian distributions -- 4.4 Parsimonious mixture models.
	Sommario/riassunto	The purpose of this book is to thoroughly prepare the reader for applied research in clustering. Cluster analysis comprises a class of statistical techniques for classifying multivariate data into groups or clusters based on their similar features. Clustering is nowadays widely used in several domains of research, such as social sciences, psychology, and marketing, highlighting its multidisciplinary nature. This book provides an accessible and comprehensive introduction to clustering and offers practical guidelines for applying clustering tools

by carefully chosen real-life datasets and extensive data analyses. The procedures addressed in this book include traditional hard clustering methods and up-to-date developments in soft clustering. Attention is paid to practical examples and applications through the open source statistical software R. Commented R code and output for conducting, step by step, complete cluster analyses are available. The book is intended for researchers interested in applying clustering methods. Basic notions on theoretical issues and on R are provided so that professionals as well as novices with little or no background in the subject will benefit from the book.