1. Record Nr. UNINA9910151661903321

Titolo	Compositional Data Analysis : CoDaWork, L'Escala, Spain, June 2015 / / edited by Josep Antoni Martín-Fernández, Santiago Thió-Henestrosa
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-44811-0
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (X, 209 p. 71 illus., 58 illus. in color.)
Collana	Springer Proceedings in Mathematics & Statistics, , 2194-1017 ; ; 187
Disciplina	519.535
Soggetti	Statistics Geochemistry Biometry Statistical Theory and Methods Statistics in Engineering, Physics, Computer Science, Chemistry and Earth Sciences Biostatistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Compositional Analysis of Species Composition - Pawlowsky-Glahn, Monreal-Pawlowsky, Egozcue -- Optimising Archaeologic Ceramics h-XRF Analyses - Bergman, Lindahl -- Relationship Between Popularity of Key Words on the Google Browser and the Evolution of Worldwide Financial Indexes - Ortells, Egozcue, Ortego, Garola -- Advances in Integrating Isotopic Data with Compositional Data Analysis: Applications for Deep Formation Brine Chemistry - Blondes, Engle, Geboy -- Space-time Compositional fields: An Introduction to Simplicial Partial Differential Operators - Jarauta-Bragulat, Egozcue -- A Compositional Approach to Allele Sharing Analysis - Galvan, Graffelman -- An Application of the Isometric Log-ratio Transformation in Relatedness Research -- Graffelman, Galvan -- Diagnostic Tools and Model Selection in Scaled-Dirichlet Regression - Monti, Mateu-Figueras, Pawlowsky-Glahn, Egozcue -- Toward the Concept of Background/Baseline Compositions: A Practicable Path? - Buccianti, Nisi, Raco -- Multi Element Geochemical Modelling for Mine Planning: Case Studies from Epithermal Gold Deposits – Caciagli, Warman --

	Recognizing and Validating Structural Processes in Geochemical Data - Grunsky, Kjarsgaard.
Sommario/riassunto	The authoritative contributions gathered in this volume reflect the state of the art in compositional data analysis (CoDa). The respective chapters cover all aspects of CoDa, ranging from mathematical theory, statistical methods and techniques to its broad range of applications in geochemistry, the life sciences and other disciplines. The selected and peer-reviewed papers were originally presented at the 6th International Workshop on Compositional Data Analysis, CoDaWork 2015, held in L' Escala (Girona), Spain. Compositional data is defined as vectors of positive components and constant sum, and, more generally, all those vectors representing parts of a whole which only carry relative information. Examples of compositional data can be found in many different fields such as geology, chemistry, economics, medicine, ecology and sociology. As most of the classical statistical techniques are incoherent on compositions, in the 1980s John Aitchison proposed the log-ratio approachto CoDa. This became the foundation of modern CoDa, which is now based on a specific geometric structure for the simplex, an appropriate representation of the sample space of compositional data. The International Workshops on Compositional Data Analysis offer a vital discussion forum for researchers and practitioners concerned with the statistical treatment and modelling of compositional data or other constrained data sets and the interpretation of models and their applications. The goal of the workshops is to summarize and share recent developments, and to identify important lines of future research.