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| 1. Record Nr.           | UNINA9910484712403321  |
| Titolo                  | Advances in compositional data analysis : festschrift in honour of Vera Pawlowsky-Glahn // Peter Filzmoser, Karel Hron, Josep Antoni Martín-Fernández, Javier Palarea-Albaladejo, editors  |
| Pubbl/distr/stampa      | Cham, Switzerland : , : Springer, , [2021]<br>©2021  |
| ISBN                    | 3-030-71175-7  |
| Descrizione fisica      | 1 online resource (XVIII, 404 p. 113 illus., 91 illus. in color.)  |
| Altri autori (Persone)  | Pawlowsky-GlahnVera  |
| Disciplina              | 519.5  |
| Soggetti                | Estadística matemàtica<br>Investigació quantitativa<br>Mathematical statistics<br>Quantitative research<br>Llibres electrònics   |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Nota di bibliografia    | Includes bibliographical references.   |
| Nota di contenuto       | Preface -- J.J. Egozcue and W.L. Maldonado: An interpretable orthogonal decomposition of positive square matrices -- Part I Fundamentals -- I. Erb and N. Ay: The information-geometric perspective of compositional data analysis -- D.R. Lovell: Log-ratio analysis of finite precision data: caveats, and connections to digital lines and number theory -- G. Mateu-Figueras, G.S. Monti and J.J. Egozcue: Distributions on the simplex revisited -- J. Graffelman: Compositional biplots: a story of false leads and hidden features revealed by the last dimensions -- Part II Statistical Methodology -- K. Faevicová, P. Kynlová and K. Mack: Geographically weighted regression analysis for two-factorial compositional data -- C. Barceló-Vidal and J.A. Martín-Fernández: Factor analysis of compositional data with a total -- M. Gallo, V. Simonacci and V. Todorov: A compositional three-way approach for student satisfaction analysis -- M. Templ: Artificial neural networks to impute rounded zeros in compositional data -- E. Saus-Sala, À. Farreras-Noguer, N. Arimany-Serrat, and G. Coenders: Compositional du pont analysis. A visual tool for strategic |

financial performance assessment -- A. Menaoglio: Spatial statistics for distributional data in Bayes spaces: from object-oriented kriging to the analysis of warping functions -- C. Thomas-Agnan, T. Laurent, A. Ruiz-Gazen, N. Thi Huong An, R. Chakir and A. Lungarska: Spatial simultaneous autoregressive models for compositional data: application to land use -- Part III Applications -- A. Buccianti, C. Gozzi: The whole versus the parts: the challenge of compositional data analysis (CoDA) methods for geochemistry -- M.A. Engle and J.A. Chaput: Groundwater origin determination in historic chemical datasets through supervised compositional data analysis: Brines of the Permian Basin, USA -- J.M. McKinley, U. Mueller, P.M. Atkinson, U. Ofterdinger, S.F. Cox, R. Doherty, D. Fogarty and J.J. Egozcue -- Chronic kidney disease of uncertain aetiology and its relation with waterborne environmental toxins: An investigation via compositional balances -- R. A. Olea, J.A. Martín-Fernández and W.H. Craddock: Multivariate classification of the crude oil petroleum systems in southeast Texas, USA, using conventional and compositional data analysis of biomarkers -- J.R. Wu, J.M. Macklaim, B.L. Genge and G.B. Gloor: Finding the centre: compositional asymmetry in high-throughput sequencing datasets -- L. Huang and H. Li: Bayesian balance-regression in microbiome studies using stochastic search -- D.E. McGregor, P.M. Dall, J. Palarea-Albaladejo and S.F.M. Chastin: Compositional data analysis in physical activity and health research. Looking for the right balance -- D. Dumuid, Ž. Pediši, J. Palarea-Albaladejo, J.A. Martín-Fernández, K. Hron and T. Olds: Compositional data analysis in time-use epidemiology.

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#### Sommario/riassunto

This book presents modern methods and real-world applications of compositional data analysis. It covers a wide variety of topics, ranging from an updated presentation of basic concepts and ideas in compositional data analysis to recent advances in the context of complex data structures. Further, it illustrates real-world applications in numerous scientific disciplines and includes references to the latest software solutions available for compositional data analysis, thus providing a valuable and up-to-date guide for researchers and practitioners working with compositional data. Featuring selected contributions by leading experts in the field, the book is dedicated to Vera Pawlowsky-Glahn on the occasion of her 70th birthday.

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