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Titolo	Non-negative matrix factorization techniques : advances in theory and applications / / edited by Ganesh R. Naik
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ISBN	3-662-48331-9
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (200 p.)
Collana	Signals and Communication Technology, , 1860-4862
Disciplina	512.9434
Soggetti	Signal processing Image processing Speech processing systems Optical data processing Computer science - Mathematics Artificial intelligence Biomedical engineering Signal, Image and Speech Processing Computer Imaging, Vision, Pattern Recognition and Graphics Computational Mathematics and Numerical Analysis Artificial Intelligence Biomedical Engineering and Bioengineering
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	From Binary NMF to Variational Bayes NMF: A Probabilistic Approach -- Non Negative Matrix Factorizations for Intelligent Data Analysis -- Automatic extractive multi-document summarization based on Archetypal Analysis -- Bounded Matrix Low Rank Approximation -- A Modified NMF-based Filter Bank Approach for Enhancement of Speech Data in Non-stationary Noise -- Separation of stellar spectra based on non-negativity and parametric modelling of mixing operator -- NMF in MR Spectroscopy -- Time-Scale Based Segmentation for Degraded PCG Signals Using NMF.
Sommario/riassunto	This book collects new results, concepts and further developments of

NMF. The open problems discussed include, e.g. in bioinformatics: NMF and its extensions applied to gene expression, sequence analysis, the functional characterization of genes, clustering and text mining etc. The research results previously scattered in different scientific journals and conference proceedings are methodically collected and presented in a unified form. While readers can read the book chapters sequentially, each chapter is also self-contained. This book can be a good reference work for researchers and engineers interested in NMF, and can also be used as a handbook for students and professionals seeking to gain a better understanding of the latest applications of NMF.