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Titolo	Pathological Voice Analysis / / by David Zhang, Kebin Wu
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Descrizione fisica	1 online resource (X, 174 p. 44 illus., 41 illus. in color.)
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Soggetti	Pattern perception Signal processing Image processing Speech processing systems Biomedical engineering Speech disorders Pattern Recognition Signal, Image and Speech Processing Biomedical Engineering and Bioengineering Speech Pathology
Lingua di pubblicazione	Inglese
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Note generali	Includes index.
Nota di contenuto	CHAPTER 1 INTRODUCTION -- CHAPTER 2 PATHOLOGICAL VOICE ACQUISITION -- CHAPTER 3 PITCH ESTIMATION -- CHAPTER 4 GLOTTAL CLOSURE INSTANTS DETECTION -- CHAPTER 5 FEATURE LEARNING -- CHAPTER 6 JOINT LEARNING FOR VOICE BASED DISEASE DETECTION -- CHAPTER 7 ROBUST MULTI VIEW DISCRIMINATIVE LEARNING FOR VOICE BASED DISEASE DETECTION -- CHAPTER 8 BOOK REVIEW AND FUTURE WORK.
Sommario/riassunto	While voice is widely used in speech recognition and speaker identification, its application in biomedical fields is much less common. This book systematically introduces the authors' research on voice analysis for biomedical applications, particularly pathological voice analysis. Firstly, it reviews the field to highlight the biomedical value of voice. It then offers a comprehensive overview of the workflow and aspects of pathological voice analysis, including voice acquisition

systems, voice pitch estimation methods, glottal closure instant detection, feature extraction and learning, and the multi-audio fusion approaches. Lastly, it discusses the experimental results that have shown the superiority of these techniques. This book is useful to researchers, professionals and postgraduate students working in fields such as speech signal processing, pattern recognition, and biomedical engineering. It is also a valuable resource for those involved in interdisciplinary research. .
