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   Titolo   Voice Biomarkers : Current Status and Issues in the Development / /
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   Disciplina   616.075

   Soggetti   Diagnosis
                       Psychodiagnostics
                       Medicine, Preventive
                       Health promotion
                       Engineering - Data processing
                       Mental health
                       Jungian psychology
                       Psychological Diagnostics
                       Health Promotion and Disease Prevention
                       Data Engineering
                       Mental Health
                       Analytical Psychology

   Lingua di pubblicazione   Inglese

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   Nota di contenuto   1 Overview of Voice Biomarkers -- 2 Stress and Depressive Symptoms:
                       Development of Psycho-analyzer -- 3 Stress and Depressive
                       Symptoms: Development of MIMOSYS (Mind Monitoring System) -- 4
                       Stress and Depressive Symptoms: Validation of MIMOSYS (engineering)
                       -- 5 Stress and Depressive Symptoms: Validation of MIMOSYS (clinical)
                       -- 6 Stress and Depressive Symptoms: Utilization of MIMOSYS -- 7
                       Depression: Jitter, Shimmer, HNR, Pitch Rate -- 8 Depression: Our
                       Original Features -- 9 Depression: Machine learning -- 10 Depression:
                       Logistic regression -- 11 Depression: Multiple regression -- 12 Bipolar
                       disorder -- 13 PTSD -- 14 Parkinson's disease -- 15 Dementia -- 16
                       Differential Diagnosis -- 17 Sleep Apnea Syndrome -- 18 ADEL

(Ankyloglossia with Deviation of the Epiglottis and Larynx) -- 19 USV (Ultrasonic Vocalization) -- 20 Driving -- 21 COVID- 19.

Sommario/riassunto	This book presents the latest research on speech biomarkers and demonstrates the benefits of quantitative measurement technology for emotion and stress in clinical settings. It begins with an introduction and details the validation of a technique for assessing emotions using voice biomarkers. This technology evaluates stress levels, which affect emotional expression and lead to changes in certain voice qualities. It further explains how a voice emotion recognition system can effectively detect illnesses such as anxiety disorders, depression, bipolar disorder, PTSD, Parkinson's disease, dementia, and more. Beyond clinical applications, it is also useful for the mental care of athletes and assessing driving skills. Voice biomarkers can be easily, non-invasively, and remotely measured, offering excellent cost efficiency. This book lays the groundwork for addressing unresolved issues and advancing further. "Voice Biomarkers - Current Status and Issues in the Development" is an invaluable resource for healthcare professionals at all levels, especially those involved in pathophysiology, disaster psychology, mental health, and social medicine. Researchers in engineering will also find this book insightful.