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Nota di contenuto	Part 1. Challenges and Strategies -- Chapter 1. Challenges of Big Data and Discovery Sciences in Psychiatry -- Chapter 2. Challenges and Strategies for the Classification of Psychiatric Disorders -- Chapter 3. Genetic markers of Alzheimer's disease -- Chapter 4. Genetic markers in Psychiatry -- Chapter 5. Recent advances in Neuroimaging of Small Vessel Disease in Late-life Depression -- Part 2. Advances in artificial intelligence technologies -- Chapter 6. Artificial Intelligence in Psychiatry -- Chapter 7. Machine Learning in Neural Networks: Clinical Opportunity of a Paradigm Shift -- Chapter 8. Imaging Connectomics: A new insights for understanding brain diseases -- Chapter 9. Development of Neuroimaging-based Biomarkers in Psychiatry: back to the future -- Part 3. Research methods for Precision Medicine -- Chapter 10. Precision Psychiatry: Biomarker guided Tailored Therapy for Effective Treatment and Prevention -- Chapter 11. Women Psychiatry: Do we need a New Paradigm? -- Chapter 12. CHILD PSYCHIATRY: What We Know and What We Don't Know on Mood

Disorders -- Chapter 13. The frontiers of suicide -A global threat or global phenomenon -- Part 4. Ongoing paradigm shifts -- Chapter 14. Animal Research in psychiatry: a paradigm shift -- Chapter 15. Modeling psychiatric diseases with induced pluripotent stem (iPS) cells -- Chapter 16. Paradigm Shift in Psychopharmacology and Psychotherapy Research -- Chapter 17. More integrated Bio-Psychosocial approach to Psychiatric Disorders -- Chapter 18. Early Identification of Psychiatric Disorders: do we need a paradigm shift? -- Part 5. New Theoretical frameworks for Research -- Chapter 19. Theoretical psychiatry: Missing link between academic and clinical psychiatry for further scientific and professional maturation of psychiatry -- Chapter 20. Theoretical psychiatry and transdisciplinary integrative approach: Stepping stones to precision and person-centered psychiatry -- Chapter 21. Developmental Psychopathology: Application to Psychiatry -- Chapter 22. Emotion: Concepts and Dysfunctions in Neuropsychiatric Research -- Chapter 23. Resilience: A Psychopathological Construct for Psychiatric Disorders -- Chapter 24. Inflammation for psychiatric disorders: Fact or Hypothesis -- Chapter 25. Smart Healthcare System and Precision Medicine: through the Brain Mechanisms of the Smartphone and Internet Game Addiction -- Part 6. Novel interventions -- Chapter 26. Telomere-telomerase system in psychiatric disorders and it's role in treatment -- Chapter 27. Neuromodulation on Cognitive Control of Emotion: a paradigm shift -- Chapter 28. Psychobiotics: A paradigm shift in Psychopharmacology -- Chapter 29. Digital Interventions for Mental Disorders: Key Features, Efficacy, and Potential for Artificial Intelligence Applications -- Chapter 30. Cognitive behavioral therapy for insomnia using internet, mobile application, and wearable devices.

Sommario/riassunto

This book reviews key recent advances and new frontiers within psychiatric research and clinical practice. These advances either represent or are enabling paradigm shifts in the discipline and are influencing how we observe, derive and test hypotheses, and intervene. Progress in information technology is allowing the collection of scattered, fragmented data and the discovery of hidden meanings from stored data, and the impacts on psychiatry are fully explored. Detailed attention is also paid to the applications of artificial intelligence, machine learning, and data science technology in psychiatry and to their role in the development of new hypotheses, which in turn promise to lead to new discoveries and treatments. Emerging research methods for precision medicine are discussed, as are a variety of novel theoretical frameworks for research, such as theoretical psychiatry, the developmental approach to the definition of psychopathology, and the theory of constructed emotion. The concluding section considers novel interventions and treatment avenues, including psychobiotics, the use of neuromodulation to augment cognitive control of emotion, and the role of the telomere-telomerase system in psychopharmacological interventions.
