Record Nr. UNINA9910993944603321 Autore Jaafar Mariatti Titolo Nanomaterials Based Printed Strain Sensor for Wearable Health Monitoring Applications / / by Mariatti Jaafar, Ye Zar Ni Htwe Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 Pubbl/distr/stampa 9789819957804 **ISBN** 981995780X Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (VIII, 73 p. 35 illus., 34 illus. in color.) Collana SpringerBriefs in Materials, , 2192-1105 Disciplina 620.19 Soggetti Materials Detectors Chemical detectors Sensors and biosensors Materials Engineering Sensors Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto 1. Printed Strain Sensor -- 2. Carbon conductive ink-based Printed Strain Sensor -- 3. Metal conductive ink -based Printed Strain Sensor -- 4. Composites and Hybrid conductive ink-based Printer Strain Sensor -- 5. Performance evaluation of Printed Strain Sensor. Sommario/riassunto This book reviews different types of nanomaterials-based-conductive inks used to develop printed strain sensors, printing fabrication methods, and applications such as wearable health monitoring. Printed

This book reviews different types of nanomaterials-based-conductive inks used to develop printed strain sensors, printing fabrication methods, and applications such as wearable health monitoring. Printed wearable electronic devices have recently drawn a lot of attention, as shown by the increasing number of publications and commercialized devices covering various facets in emerging fields. Many researchers are working toward optimizing nanoparticle-based-conductive inks for wearable electronics. However, issues related to its stability, dispersion, and annealing temperature often limit its applications. General important information and requirements of flexible electronics for health monitoring are covered in the book chapter. The target audiences are researchers and students who are involved in the development of printed wearable electronics.

Record Nr. UNINA9910970771703321 Reducing risks for mental disorders: frontiers for preventive **Titolo** intervention research // Committee on Prevention of Mental Disorders. Division of Biobehavorial Sciences and Mental Disorders, Institute of Medicine; Patricia J. Mrazek and Robert J. Haggerty, editors Pubbl/distr/stampa Washington, D.C., : National Academy Press, 1994 **ISBN** 9786610195923 9781280195921 1280195924 9780309568661 0309568668 Edizione [1st ed.] Descrizione fisica 1 online resource (635 p.) Altri autori (Persone) MrazekPatricia Beezley HaggertyRobert J Disciplina 362.2/0425/0973 Soggetti Mental illness - Prevention - Research - Government policy - United Mental health promotion - Research - Government policy - United States Mental illness - United States - Prevention Mental health promotion - United States Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Prepared at the request of the U.S. Congress. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto REDUCING RISKS FOR Mental Disorders; Copyright; Preface; Acknowledgments; Abstract; BUILDING THE INFRASTRUCTURE; EXPANDING THE KNOWLEDGE BASE: CONDUCTING WELL-EVALUATED INTERVENTIONS; Contents; OVERVIEW; 1 Introduction; A NEW EMPHASIS ON PREVENTION: OPPORTUNITIES AND STRENGTHS; OBSTACLES TO PROGRESS: LOOKING FORWARD: ORGANIZATION OF THIS REPORT: REFERENCES: 2 New Directions in Definitions: CLASSIFYING PREVENTIVE INTERVENTIONS FOR PHYSICAL ILLNESS: CLASSIFYING INTERVENTIONS FOR MENTAL DISORDERS; The Mental Health Intervention Spectrum for

Preventive Interventions for Mental DisordersMENTAL HEALTH

Mental Disorders

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PROMOTION; THE CLASSIFICATION SYSTEM IN PRACTICE; REFERENCES; LESSONS FROM HEALTH RESEARCH; 3 Prevention of Physical Illness; CARDIOVASCULAR DISEASE; SMOKING; INJURIES; FINDINGS AND LEADS; REFERENCES; 4 The Core Sciences: Contributions and Frontiers; NEUROSCIENCE; GENETICS; EPIDEMIOLOGY; DEVELOPMENTAL PSYCHOPATHOLOGY; FINDINGS AND LEADS; REFERENCES; 5 Description of Five Illustrative Mental Disorders; DATA SOURCES, CONCEPTS, AND METHODOLOGIES USED IN THE DISORDER DESCRIPTIONS; Epidemiologic Catchment Area Study

Conceptualization of OnsetMethods for Analyzing Onset; ILLUSTRATIVE DISORDERS; Conduct Disorder; Depressive Disorders; Alcohol Abuse and Dependence; Schizophrenia; Alzheimer's Disease; GAPS IN OUR KNOWLEDGE; Age-Specific Prevalence in Children; Child Psychiatric Nosology; Empirical Search for Prodromes; Co-morbidity; Transition to Adulthood: FINDINGS AND LEADS: REFERENCES: 6 Risk and Protective Factors for the Onset of Mental Disorders; ALZHEIMER'S DISEASE; Biological Risk Factors; Genetic Vulnerability; History of Head Trauma; Medical Risk Factors, Including Thyroid Disorders Maternal Age at Time of BirthPsychosocial Risk and Protective Factors; Educational Level; Smoking; Environmental Triggers; Future Directions in Identification of Risk and Protective Factors; Family Burden; Findings and Leads; SCHIZOPHRENIA; Biological Risk Factors; Genetic Vulnerability; Pregnancy and Birth Complications, Winter Births, and Viral Exposure: Biological Markers: Psychosocial Risk Factors: Low Socioeconomic Status; Disturbed Family Environment and Family Communicative Problems; Serious Behavioral and Emotional Problems in Childhood: Social Dysfunction: Substance Abuse Caregiver BurdenFindings and Leads; ALCOHOL ABUSE AND DEPENDENCE; Biological Risk Factors; Genetic Vulnerability; Biological Markers: Psychosocial Risk Factors: Personality: Contextual Factors: Psychosocial Aspects of Parental Alcoholism; Protective Factors; Positive Group Norms; Strong Attachments; Genetic Factors Modifying Expression of the Disorder: Findings and Leads: DEPRESSIVE DISORDERS: Biological Risk Factors: Genetic Vulnerability: Disease and Medication; Brain Injury; Psychosocial Risk Factors; Severe and Traumatic Life Events; Accumulation of Stresses at a Time of Transition Sociodemographic Factors

Sommario/riassunto

The understanding of how to reduce risk factors for mental disorders has expanded remarkably as a result of recent scientific advances. This study, mandated by Congress, reviews those advances in the context of current research and provides a targeted definition of prevention and a conceptual framework that emphasizes risk reduction. Highlighting opportunities for and barriers to interventions, the book draws on successful models for the prevention of cardiovascular disease, injuries, and smoking. In addition, it reviews the risk factors associated with Alzheimer's disease, schizophrenia, alcohol abuse and dependence, depressive disorders, and conduct disorders and evaluates current illustrative prevention programs. The models and examination provide a framework for the design, application, and evaluation of interventions intended to prevent mental disorders and the transfer of knowledge about prevention from research to clinical practice. The book presents a focused research agenda, with recommendations on how to develop effective intervention programs, create a cadre of prevention researchers, and improve coordination among federal agencies.