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Descrizione fisica	1 online resource (211 pages)
Collana	Lecture Notes in Electrical Engineering, , 1876-1119 ; ; 999
Disciplina	681.2
Soggetti	Electronic circuits Materials Detectors Biophysics Senses and sensation Electronic Circuits and Systems Sensors and biosensors Sensory Systems
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Note generali	Includes index.
Nota di contenuto	Albumin-Based Optical and Electrochemical Biosensors for PFAS Detection: A Comparison -- Quantitative Detection of Dopamine by SERS in Water Environment -- CORONAVIRUS LABEL-FREE IMMUNOSENSOR: PRELIMINARY RESULTS -- Characterization of Temperature Distribution in Microfluidic Chip for DNA Amplification -- Compliant Multi-Hinge Microgripper for Biomanipulation: Microbeads Grasping Feasibility Study -- 3D-Printed Face Mask with Integrated Sensors as Protective and Monitoring Tool -- Capacitive Gas Sensors with Porphyrinoids Coated SiO2 Hybrid Nanoparticles -- Detection of Volatile Organic Compounds by Using a Nanoporous Zeolite Layer -- Role of IR And UV-Vis Spectroscopies Combined with Electrical Measurements in Materials Relevant for Gas Sensing.
Sommario/riassunto	This book showcases the state of the art in the field of sensors and microsystems, revealing the impressive potential of novel methodologies and technologies. It covers a broad range of aspects, including: bio-, physical and chemical sensors; actuators; micro- and

nano-structured materials; mechanisms of interaction and signal transduction; polymers and biomaterials; sensor electronics and instrumentation; analytical microsystems, recognition systems and signal analysis; and sensor networks, as well as manufacturing technologies, environmental, food and biomedical applications. The book gathers a selection of papers presented at the 21st AISEM National Conference on Sensors and Microsystems, held in Rome, Italy, in February 2022, which brought together researchers, end users, technology teams and policymakers.