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Titolo	Biomarkers and Biosensors for Cervical Cancer Diagnosis [[electronic resource] /] / edited by John Bosco Balaguru Rayappan, Jung Heon Lee
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Descrizione fisica	1 online resource (IX, 115 p. 18 illus., 15 illus. in color.)
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Soggetti	Cancer Tumor markers Medical screening Materials Detectors Cancer Biology Tumour Biomarkers Cancer Screening Sensors and biosensors Càncer de coll uterí Biosensors Marcadors bioquímics Diagnòstic Llibres electrònics
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Nota di contenuto	Chapter 1. An Introduction to Cancer Biomarkers -- Chapter 2. Cervical Cancer -- Chapter 3. Potential Biomarkers for Early Diagnosis of Cervical Cancer -- Chapter 4. Methods for Screening of Cervical Cancer: State of Art -- Chapter 5. Electrochemical DNA Biosensors for Cervical Cancers -- Chapter 6. Optical DNA based Sensors for Cervical Cancers -- Chapter 7. Other Biosensors for Cervical Cancer Detection.
Sommario/riassunto	This book highlights both conventional and nanomaterials-based

biosensors for the detection of cervical cancers. It describes developments in the selective and sensitive electrochemical biosensors based on DNA for the early diagnosis of cervical cancer. Further, this book covers other nano-biosensing systems such as nano-thermometry-based sensing platforms, mechanical sensing platforms encompassing piezoelectric-based sensors, electrochemical impedance spectroscopy based on PEGylated arginine functionalized magnetic nanoparticles, and field-effect transistor-based platforms for the early detection of cervical cancer. Also, it presents conventional platforms such as vibrational spectroscopy and polymerase chain reaction techniques for the diagnosis of cervical cancer. Finally, it reviews currently available biomarkers for the early diagnosis of cervical cancer and presents strategies for developing novel biomarkers based on cellular and molecular approaches. As such, this book is a comprehensive resource for researchers and clinicians working in cervical cancer diagnostics.
