1. Record Nr. UNINA9910688131703321

Titolo	BRCA1 and BRCA2 mutations : diagnostic and therapeutic implications / / Mani T. Valarmathi, editor
Pubbl/distr/stampa	London : , : IntechOpen, , [2023]
Descrizione fisica	1 online resource (134 pages)
Disciplina	616.99449
Soggetti	Ovaries - Cancer Breast - Cancer - Genetic aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface. Section 1 Hereditary Breast and Ovarian Cancer Syndrome. Chapter 1 Introductory Chapter: The Influence of BRCA1/2 Genes Mutations on Hereditary Breast and Ovarian Cancer Syndrome Is it in your Genes? by Mani T. Valarmathi Section 2 BRCA Discovery. Chapter 2 Discovery of BRCA Mutations: Historical Perspective of Its Scientific, Clinical and Social Impact by Natalia B. Burachik, Ana Laura Ortiz and Edith C. Kordon Section 3 BRCA Structure and Function. Chapter 3 BRCA Biological Functions by Divya Bhargavi Pulukuri, Vijaya Babu Penke, Divya Jyothi Palati, Prudvi Raj Pulla, Shanker Kalakotla and Siddhartha Lolla. Chapter 4 The Fundamental Role of BARD1 Mutations and Their Applications as a Prognostic Biomarker for Cancer Treatment by Yousef M. Hawsawi and Anwar Shams. Section 4 BRCA-Associated Cancers. Chapter 5 BRCA Gene Mutations and Prostate Cancer by Gvantsa Kharaishvili, Mariam Kacheishvili and Giorgi Akhvlediani. Chapter 6 Genomic Consequences of Ovarian Cancer with Respect to DNA Damage and Repair Mechanism by Sonali Verma, Gresh Chander, Ruchi Shah and Rakesh Kumar. Section 5 BRCA Genetic Testing and Counselling. Chapter 7 Implications of BRCA1 and BRCA2 Mutations in Mexico by Carlos Arturo Gonzalez Nunez, Paula Anel Cabrera Galeana, Sandy Ruiz Cruz and Alexandra Garcilazo Reyes. Chapter 8 Quality of Life is Essential: Implications for Diagnosis and Treatment for BRCA1/2 Germline Mutations by Yuliana Sanchez Contreras, Brigney Isvettia Aceves Poveda, David Neri Acosta Gutierrez and Rosa Maria Alvarez

Gomez.

Sommario/riassunto

Mutations in the BRCA1/2 genes are the most common cause of hereditary breast and ovarian cancer (HBOC), and HBOC is an autosomal dominant cancer predisposition syndrome. Individuals with HBOC have a high risk for breast and ovarian cancers and a moderate risk for other cancers, such as prostate, pancreatic, melanoma, and fallopian tube cancers. The goal of screening individuals at high risk of familial cancer is either prevention (such as a change in lifestyle or diet) or early detection of cancer. The identification of BRCA mutation carriers is important, since increased surveillance, drug therapy, and prophylactic surgery can reduce cancer-related morbidity and mortality. In recent years, there has been substantial development in BRCA-associated hereditary breast and/or breast-ovarian cancer research and its clinical applications. In this context, this book consolidates the recent advances in BRCA-related cancer biology and therapeutics, covering a wide spectrum of interrelated topics. Chapters cover a wide range of topics, such as BRCA discovery, BRCA structure and function, BRCA-associated cancers, BRCA genetic testing and counselling, and more. This book is a valuable resource not only for medical and allied health students but also for researchers, clinical and nurse geneticists, genetic counselors, and physician assistants.

2. Record Nr. UNINA9910790309203321

Titolo	Extended-nanofluidic systems for chemistry and biotechnology [[electronic resource] /] / Kitamori Takehiko ... [et al.]
Pubbl/distr/stampa	London, : Imperial College Press, 2012
ISBN	1-281-60347-3 9786613784162 1-84816-802-0
Descrizione fisica	1 online resource (187 p.)
Altri autori (Persone)	TakehikoKitamori
Disciplina	620.106
Soggetti	Nanofluids Microfluidics Fluidic devices
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	CONTENTS; Chapter 1. Introduction; References; Chapter 2. Microchemical Systems; References; Chapter 3. Fundamental Technology: Nanofabrication Methods; 3.1. Top-Down Fabrication; 3.1.1. Introduction; 3.1.2. Bulk nanomachining techniques; 3.1.2.1. Combination of lithography and wet etching; 3.1.2.2. Combination of lithography and dry etching; 3.1.2.3. Other lithographic techniques; 3.1.2.4. Direct nanofabrication; 3.1.3. Surface machining techniques; 3.1.3.1. Utilization of polysilicon as a sacrificial material; 3.1.3.2. Utilization of metals and polymers as sacrificial materials 3.1.4. Imprinting and embossing nanofabrication techniques3.1.5. New strategies of nanofabrication; 3.1.5.1. Non-lithographic techniques; 3.1.5.2. Hybrid-material techniques; 3.1.6. Combination of lift-off and lithography; 3.2. Local Surface Modification; 3.2.1. Modification using VUV; 3.2.2. Modification using an electron beam; 3.2.3. Modification using photochemical reaction; 3.3. Bonding; 3.3.1. Introduction; 3.3.2. Wafer bond characterization methods; 3.3.3. Wafer direct bonding; 3.3.4. Wafer direct bonding mechanism; 3.3.5. Surface requirements for wafer direct bonding 3.3.6. Low temperature direct bonding by surface plasma activation3.

3.7. Anodic bonding; References; Chapter 4. Fundamental Technology: Fluidic Control Methods; 4.1. Basic Theory; 4.2. Pressure-Driven Flow; 4.3. Shear-Driven Flow; 4.4. Electrokinetically-Driven Flow; 4.5. Conclusion and Outlook; References; Chapter 5. Fundamental Technology: Detection Methods; 5.1. Single Molecule Detection Methods; 5.1.1. Optical detection methods; 5.1.2. Electrochemical methods; 5.2. Measurement of Fluidic Properties; 5.2.1. Nonintrusive flow measurement techniques
5.2.1.1. Streaming potential/current measurement in pressure-driven flows5.2.1.2. Current monitoring in electroosmotic flow; 5.2.2. Optical flow imaging techniques using a tracer; 5.2.2.1. Properties of flow tracers; 5.2.2.2. Scalar image velocimetry; 5.2.2.3. Nanoparticle image velocimetry; 5.2.2.4. Laser-induced fluorescence photobleaching anemometer with stimulated emission depletion; References; Chapter 6. Basic Nanoscience; 6.1. Liquid Properties; 6.1.1. Introduction; 6.1.2. Viscosities of liquids confined in extended nanospaces; 6.1.3. Electrical conductivity in extended nanospaces
6.1.4. Streaming current/potential in extended nanospaces6.1.5. Ion transport in extended nanospaces; 6.1.6. Gas/liquid phase transition phenomena in extended nanospaces; 6.1.7. Structures and dynamics of liquids confined in extended nanospaces; 6.2. Chemical Reaction; 6.2.1. Enzymatic reaction; 6.2.2. Keto-enol tautomeric equilibrium; 6.2.3. Nanoparticle synthesis; 6.2.4. Nano DNA hybridization; 6.2.5. Nano redox reaction; 6.3. Liquid Properties in Intercellular Space; References; Chapter 7. Application to Chemistry and Biotechnology; 7.1. Separation; 7.1.1. Separation by electrophoresis
7.1.2. Separation by pressure-driven flow or shear-driven flow

Sommario/riassunto

For the past decade, new research fields utilizing microfluidics have been formed. General micro-integration methods were proposed, and the supporting fundamental technologies were widely developed. These methodologies have made various applications in the fields of analytical and chemical synthesis, and their superior performances such as rapid, simple, and high efficient processing have been proved. Recently, the space is further downscaling to 101-103nm scale (we call the space extended-nano space). The extended-nano space located between the conventional nanotechnology (100-101nm) and micr