1. Record Nr. UNINA9910830531903321

Titolo	Biology of IGF-1 [[electronic resource]] : its interaction with insulin in health and malignant states / / [edited by Gregory Bock, Jamie Goode]
Pubbl/distr/stampa	The Atrium, Southern Gate, Chichester, UK ; ; Hoboken, NJ, : John Wiley & Sons, c2004
ISBN	1-280-27251-1 9786610272518 0-470-66753-2 0-470-86997-6 0-470-86999-2
Descrizione fisica	1 online resource (294 p.)
Collana	Novartis Foundation symposium ; ; 262
Classificazione	44.78
Altri autori (Persone)	BockGregory GoodeJamie
Disciplina	612.01575 612/.015756
Soggetti	Somatomedin - Physiological effect Somatomedin - Pathophysiology Carcinogenesis
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 indexes.
Nota di contenuto	Circulating IGF-I and its role in cancer: lessons from the IGF-1 gene-deletion (LID) mouse -- Physiology of the IGF system -- Molecular basis of insulin action -- IGF-1 and insulin as growth hormones -- Insulin-like growth factors and neoplasia -- Loss of IGF2 imprinting: mechanisms and consequences -- Insulin and IGF-1 receptor trafficking and signalling -- The mTOR/S6K signalling pathway: the role of the TSC1/2 tumour suppressor complex and the proto-oncogene Rheb -- Structural biology of insulin and IGF-1 receptors -- Genetic blockade of the insulin-like growth factor-I receptor for human malignancy -- IGF-1 and prostate cancer -- IGF-1 and breast cancer -- IGFBPs and cancer -- The IGF receptor as anticancer treatment target -- Nutrition, insulin, IGF-1 metabolism and cancer risk: a summary of epidemiological evidence.
Sommario/riassunto	An invaluable book containing a series of interdisciplinary discussions

	between clinical and basic scientists. Biology of IGF-1: Its interaction with insulin and health and malignant states focuses on key issues such as:the definition of danger zonesthe development of methods for early recognition of malignant states linked to IGF-1 and/or insulinpossible approaches to preventative interventionthe relevance in this field of research to the development of novel therapeutic approaches to treating certain cancers.

2. Record Nr. UNINA9911019210903321

Autore	Brandon David
Titolo	Microstructural Characterization of Materials
Pubbl/distr/stampa	Hoboken, : Wiley, 2008
ISBN	9786612342943 9781282342941 1282342940 9780470727126 0470727128 9780470727133 0470727136
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (554 p.)
Collana	Quantitative software engineering series Microstructural characterization of materials
Altri autori (Persone)	KaplanWayne D BrandonD. G
Disciplina	620.1/1299
Soggetti	Electronic books. -- local Materials -- Microscopy Microstructure Materials - Microscopy Materials Science Chemical & Materials Engineering Engineering & Applied Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.

Nota di contenuto

Microstructural Characterization of Materials; Contents; Preface to the Second Edition; Preface to the First Edition; 1 The Concept of Microstructure; 1.1 Microstructural Features; 1.1.1 Structure-Property Relationships; 1.1.2 Microstructural Scale; 1.1.3 Microstructural Parameters; 1.2 Crystallography and Crystal Structure; 1.2.1 Interatomic Bonding in Solids; 1.2.2 Crystalline and Amorphous Phases; 1.2.3 The Crystal Lattice; Summary; Bibliography; Worked Examples; Problems; 2 Diffraction Analysis of Crystal Structure; 2.1 Scattering of Radiation by Crystals
2.1.1 The Laue Equations and Bragg's Law2.1.2 Allowed and Forbidden Reflections; 2.2 Reciprocal Space; 2.2.1 The Limiting Sphere Construction; 2.2.2 Vector Representation of Bragg's Law; 2.2.3 The Reciprocal Lattice; 2.3 X-Ray Diffraction Methods; 2.3.1 The X-Ray Diffractometer; 2.3.2 Powder Diffraction-Particles and Polycrystals; 2.3.3 Single Crystal Laue Diffraction; 2.3.4 Rotating Single Crystal Methods; 2.4 Diffraction Analysis; 2.4.1 Atomic Scattering Factors; 2.4.2 Scattering by the Unit Cell; 2.4.3 The Structure Factor in the Complex Plane
2.4.4 Interpretation of Diffracted Intensities2.4.5 Errors and Assumptions; 2.5 Electron Diffraction; 2.5.1 Wave Properties of Electrons; 2.5.2 Ring Patterns, Spot Patterns and Laue Zones; 2.5.3 Kikuchi Patterns and Their Interpretation; Summary; Bibliography; Worked Examples; Problems; 3 Optical Microscopy; 3.1 Geometrical Optics; 3.1.1 Optical Image Formation; 3.1.2 Resolution in the Optical Microscope; 3.1.3 Depth of Field and Depth of Focus; 3.2 Construction of the Microscope; 3.2.1 Light Sources and Condenser Systems; 3.2.2 The Specimen Stage; 3.2.3 Selection of Objective Lenses
3.2.4 Image Observation and Recording3.3 Specimen Preparation; 3.3.1 Sampling and Sectioning; 3.3.2 Mounting and Grinding; 3.3.3 Polishing and Etching Methods; 3.4 Image Contrast; 3.4.1 Reflection and Absorption of Light; 3.4.2 Bright-Field and Dark-Field Image Contrast; 3.4.3 Confocal Microscopy; 3.4.4 Interference Contrast and Interference Microscopy; 3.4.5 Optical Anisotropy and Polarized Light; 3.4.6 Phase Contrast Microscopy; 3.5 Working with Digital Images; 3.5.1 Data Collection and The Optical System; 3.5.2 Data Processing and Analysis; 3.5.3 Data Storage and Presentation
3.5.4 Dynamic Range and Digital Storage3.6 Resolution, Contrast and Image Interpretation; Summary; Bibliography; Worked Examples; Problems; 4 Transmission Electron Microscopy; 4.1 Basic Principles; 4.1.1 Wave Properties of Electrons; 4.1.2 Resolution Limitations and Lens Aberrations; 4.1.3 Comparative Performance of Transmission and Scanning Electron Microscopy; 4.2 Specimen Preparation; 4.2.1 Mechanical Thinning; 4.2.2 Electrochemical Thinning; 4.2.3 Ion Milling; 4.2.4 Sputter Coating and Carbon Coating; 4.2.5 Replica Methods; 4.3 The Origin of Contrast; 4.3.1 Mass-Thickness Contrast
4.3.2 Diffraction Contrast and Crystal Lattice Defects

Sommario/riassunto

Microstructural characterization is usually achieved by allowing some form of probe to interact with a carefully prepared specimen. The most commonly used probes are visible light, X-ray radiation, a high-energy electron beam, or a sharp, flexible needle. These four types of probe form the basis for optical microscopy, X-ray diffraction, electron microscopy, and scanning probe microscopy.

 Microstructural Characterization of Materials, 2nd Edition is an introduction to the expertise involved in assessing the microstructure of engineering materials and to the experimental met