1. Record Nr. UNINA9911019554803321

Titolo	The interferons : characterization and application / / edited by Anthony Meager
Pubbl/distr/stampa	Weinheim, : Wiley-VCH Chichester, : John Wiley [distributor], 2006
ISBN	9786610723416 9781280723414 1280723416 9783527608201 3527608206 9783527607921 3527607927
Descrizione fisica	1 online resource (462 p.)
Altri autori (Persone)	MeagerAnthony
Disciplina	616.0791
Soggetti	Interferon Interferon - Testing
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	The Interferons; Contents; Preface; List of Contributors; Color Plates; Section A Molecular Aspects, Introduction and Purification; 1 Type I Interferons: Genetics and Structure; 1.1 Introduction; 1.2 The Type I IFN Genetic Locus; 1.3 Type I IFN Genes; 1.3.1 IFN-; 1.3.2 IFN-; 1.3.3 IFN-; 1.3.4 IFN-; 1.3.5 IFN-; 1.3.6 IFN- (Limitin); 1.3.7 IFN-; 1.3.8 IFN-; 1.3.9 IFN-; 1.4 Type I IFN Gene-regulatory Regions; 1.5 Evolution of the Type I IFNs; 1.5.1 Vertebrate IFN Genes; 1.5.2 The Expansion and Divergence of the IFN Genes; 1.6 Natural and Induced Mutations in IFN Genes 1.7 Secondary Structural Features of Type I IFNs1.7.1 Conserved Amino Acid Residues; 1.7.2 Post-translational Modifications of Type I IFNs; 1.7.3 Conserved Cysteine Residues and Disulfide Bond Formation; 1.8 The Structure of Type I IFNs; References; 2 Activation of Interferon Gene Expression Through Toll-like Receptor-dependent and -independent Pathways; 2.1 Introduction; 2.2 IFN- Gene Transcription;

2.3 IRF Family Members; 2.4 Role of IRFs in Virus-mediated IFN Activation; 2.4.1 IRF-3; 2.4.2 IRF-5; 2.4.3 IRF-7; 2.5 IFN Signaling Pathways; 2.5.1 TLR-dependent Signaling to IFN Activation
2.5.1.1 TLR Overview2.5.1.2 TLR-3 Signaling; 2.5.1.3 TLR-4 Signaling; 2.5.1.4 TLR-7 Signaling; 2.5.1.5 TLR-9 Signaling; 2.5.2 TLR-independent Signaling; 2.5.2.1 Retinoic Acid Inducible Gene (RIG)-I Signaling; 2.5.2.2 Melanoma Differentiation-associated Gene-5 (mda-5); 2.6 Conclusions; References; 3 Interferon Proteins: Structure, Production and Purification; 3.1 Introduction; 3.2 The Structure of Type I IFNs; 3.3 Production and Purification of Type I IFNs; 3.3.1 Leukocyte-derived IFN - First Steps in Producing Commercial IFN; 3.3.2 Lymphoblastoid IFN - Towards more Reliable Supplies of IFN
3.3.3 Cloned Type I IFNs - An Inexhaustible Supply of Therapeutic Material3.4 Long-acting IFNs; 3.5 Summary; References; 4 Interferon-: Gene and Protein Structure, Transcription Regulation, and Actions; 4.1 Introduction; 4.2 IFN- Gene Structure and Regulation; 4.2.1 Transcriptional Regulation; 4.2.2 Epigenetic Regulation; 4.2.3 Post-transcriptional Regulation; 4.3 IFN- Signal Transduction; 4.3.1 The JAK-STAT Signaling Pathway; 4.3.2 Activation of Alternate Signaling Pathways; 4.3.3 Regulation of IFN- Signaling; 4.4 IFN- in T(h) Cell Development
4.4.1 Signaling Pathways Involved in T Cell Development4.5 IFN- and DCs; 4.5.1 IFN- and T Cell-DC Crosstalk; 4.5.2 Signals through Toll-like Receptors (TLRs) Activate DCs and Influence IFN- Expression; 4.6 IFN- - Role in Tumor Development and Growth; 4.6.1 IFN- in Tumor Growth and Survival; 4.6.2 Inhibition of Angiogenesis by IFN-; 4.6.3 Role of IFN- in Promoting Immune Responses against Tumors; 4.7 Summary; References; 5 Interferon and Related Receptors; 5.1 Introduction; 5.2 IFNs and IFN-like Molecules in Brief; 5.3 The Receptors; 5.3.1 Receptor Nomenclature
5.4 The Type I IFN Receptor

Sommario/riassunto

At long last, the first book to cover all important areas of interferon science in one volume. Top scientists, including many pioneers in the field, highlight the role of interferons as research tools and as therapeutic agents in clinical applications. Edited by an experienced interferonologist, chapters include discussions of interferon genes, Type I, II and III IFNs, as well as their induction, production and purification, receptors actions, measuring IFN activities and anti-IFN antibodies, as well as the evolution of viral defense mechanisms. For immunologists, cancer researchers, medic

2. Record Nr. UNINA9910299661903321

Titolo	Robots and Lattice Automata / / edited by Georgios Ch. Sirakoulis, Andrew Adamatzky
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-10924-3
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (319 p.)
Collana	Emergence, Complexity and Computation, , 2194-7295 ; ; 13
Disciplina	629.892
Soggetti	Control engineering Robotics Automation Dynamics Nonlinear theories Computational intelligence Graph theory Control, Robotics, Automation Applied Dynamical Systems Computational Intelligence Graph Theory
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 at the end of each chapters and index.
Nota di contenuto	Algorithmic Insights into Finite-State Robots -- Lattice Automata for Control of Self-Reconfigurable Robots -- Modular Reconfigurable Robotic Systems: Lattice Automata -- Lattice-based Modular Self-reconfigurable Systems -- Speed control on a hexapodal robot driven by a CNN-CPG structure -- Routing by Cellular Automata Agents in the Triangular Lattice -- Multi-Resolution Hierarchical Motion Planner for Multi-Robot Systems on Spatiotemporal Cellular Automata -- Autonomous Robot Path Planning techniques using Cellular Automata -- Cellular Robotic Ants Synergy Coordination for Path Planning -- Employing Cellular Automata for Shaping Accurate MorphologyMaps Using Scattered Data From Robotics' Missions -- On the use of Cellular

	Automata in Vision-based Robot Exploration -- Modelling Synchronisation in Multirobot Systems with CellularAutomata: Analysis of Update Methods and Topology Perturbations -- Cellular AutomatonManipulator Array.
Sommario/riassunto	The book gives a comprehensive overview of the state-of-the-art research and engineering in theory and application of Lattice Automata in design and control of autonomous Robots. Automata and robots share the same notional meaning. Automata (originated from the latinization of the Greek word “”) as self-operating autonomous machines invented from ancient years can be easily considered the first steps of robotic-like efforts. Automata are mathematical models of Robots and also they are integral parts of robotic control systems. A Lattice Automaton is a regular array or a collective of finite state machines, or automata. The Automata update their states by the same rules depending on states of their immediate neighbours. In the context of this book, Lattice Automata are used in developing modular reconfigurable robotic systems, path planning and map exploration for robots, as robot controllers, synchronisation of robot collectives, robot vision, parallel robotic actuators. All chapters are written in an accessible manner and lavishly illustrated. The book will help computer and robotic scientists and engineers to understand mechanisms of decentralised functioning of robotic collectives and to design future and emergent reconfigurable, parallel and distributed robotic systems. .