1. Record Nr. UNINA9910133453803321

Titolo	Modeling and simulation in the medical and health sciences [[electronic resource] /] / edited by John A. Sokolowski, Catherine M. Banks
Pubbl/distr/stampa	Hoboken, NJ, : Wiley, c2011
ISBN	1-283-02607-4 9786613026071 1-118-00319-5 1-118-00318-7 1-118-00320-9
Descrizione fisica	1 online resource (229 p.)
Altri autori (Persone)	BanksCatherine M. <1960-> SokolowskiJohn A. <1953->
Disciplina	610.15118 617.5/22 617.522
Soggetti	Medical education - Computer simulation Computer simulation
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	MODELING AND SIMULATION IN THE MEDICAL AND HEALTH SCIENCES; CONTENTS; CONTRIBUTORS; FOREWORD; PREFACE; PART ONE FUNDAMENTALS OF MEDICAL AND HEALTH SCIENCES MODELING AND SIMULATION; 1 Introduction to Modeling and Simulation in the Medical and Health Sciences; 2 The Practice of Modeling and Simulation: Tools of the Trade; PART TWO MODELING FOR THE MEDICAL AND HEALTH SCIENCES; 3 Mathematical Models of Tumor Growth andWound Healing; 4 Physical Modeling; PART THREE MODELING AND SIMULATION APPLICATIONS; 5 Humans as Models; 6 Modeling the Human System; 7 Robotics; 8 Training; 9 Patient Care 10 Future of Modeling and Simulation in the Medical and Health SciencesAppendix Modeling Human Behavior, Modeling Human Systems: Addressing the Skepticism, Responding to the Reservations; INDEX

Sommario/riassunto

This edited book is divided into three parts: Fundamentals of Medical and Health Sciences Modeling and Simulation introduces modeling and simulation in the medical and health sciences; Medical and Health Sciences Models provides the theoretical underpinnings of medical and health sciences modeling; and Modeling and Simulation Applications in Medical and Health Sciences focuses on teaching, training, and research applications. The book begins with a general discussion of modeling and simulation from the modeling and simulation discipline perspective. This discussion grounds the reader in commo