

1. Record Nr.	UNISA996465604603316
Titolo	Life system modeling and simulation : international conference on life system modeling, and simulation, lsms 2007, Shanghai, China, september 14-17, 2007. Proceedings / / edited by Kang Li, 4 others
Pubbl/distr/stampa	Berlin, Germany ; ; New York, United States : , : Springer, , [2007] Â©2007
ISBN	3-540-74771-0
Edizione	[1st ed. 2007.]
Descrizione fisica	1 online resource (XX, 288 p.)
Collana	Lecture notes in computer science. Lecture notes in bioinformatics, 4689, , 0302-9743
Disciplina	570.285
Soggetti	Bioinformatics Biological systems - Simulation methods Computational intelligence Biological models Computational biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	The First Section: Modeling and Simulation of Societies and Collective Behavior -- The Second Section: Computational Methods and Intelligence in Biomechanical Systems, Tissue Engineering and Clinical Bioengineering -- The Third Section: Computational Intelligence in Bioinformatics and Biometrics -- The Fourth Section: Brain Stimulation, Neural Dynamics and Neural Interfacing -- The Fifth Section: Biological and Biomedical Data Integration, Mining and Visualization -- The Sixth Section: Computational Methods and Intelligence in Organism Modeling and Biochemical Networks and Regulation -- The Seventh Section: Computational Methods and Intelligence in Modeling of Molecular, Cellular, Multi-cellular Behavior and Design of Synthetic Biological Systems -- The Eighth Section: Others.
Sommario/riassunto	The International Conference on Life System Modeling and Simulation (LSMS) was formed to bring together international researchers and practitioners in the field of life system modeling and simulation as well as life system-inspired theory and methodology. The concept of a life

system is quite broad. It covers both micro and macro components ranging from cells, tissues and organs across to organisms and ecologic niches. These interact and evolve to produce an overall complex system whose behavior is difficult to comprehend and predict. The arrival of the 21st century has been marked by a resurgence of research interest both in arriving at a systems-level understanding of biology and in applying such knowledge in complex real-world applications. Consequently, computational methods and intelligence in systems, biology, as well as bio-inspired computational intelligence, have emerged as key drivers for new computational methods. For this reason papers dealing with theory, techniques and real-world applications relating to these two themes were especially solicited. Building on the success of a previous workshop in 2004, the 2007 International Conference on Life System Modeling and Simulation (LSMS 2007) was held in Shanghai, China, September 14–17, 2007. The conference was jointly organized by The Shanghai University, Queen's University Belfast together with The Life System Modeling and Simulation Special Interest Committee of the Chinese Association for System Simulation.
