

1. Record Nr.	UNINA9910299683503321
Titolo	Smart Modeling and Simulation for Complex Systems : Practice and Theory // edited by Quan Bai, Fenghui Ren, Minjie Zhang, Takayuki Ito, Xijin Tang
Pubbl/distr/stampa	Tokyo : , : Springer Japan : , : Imprint : Springer, , 2015
ISBN	4-431-55209-X
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (VIII, 149 p. 59 illus., 30 illus. in color.)
Collana	Studies in Computational Intelligence, , 1860-949X ; ; 564
Disciplina	003.3
Soggetti	Computational complexity Artificial intelligence Computational intelligence Computers Economic sociology Complexity Artificial Intelligence Computational Intelligence Information Systems and Communication Service Organizational Studies, Economic Sociology
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	HIPRank: Ranking Nodes by Influence Propagation based on Authority and Hub -- Benefits of Generalised Microsimulation -- From Global Polarization to Local Social Mechanisms: A Study Based on ABM and Empirical Data Analysis -- Decentralised Task Allocation under Space, Time and Communication Constraints in Disaster Domains -- Describing and Evaluating Assistance using APDL -- A Relaxation Strategy with Fuzzy Constraints for Supplier Selection in a Power Market -- Idea Discovery: A Context-Awareness Dynamic System Approach for Computational Creativity -- Hierarchical Scoring Rule Based Smart Dynamic Electricity Pricing Scheme -- Evaluation of Route Assignment Method with Anticipatory Stigmergy under Distributed Processing Environment.

This book aims to provide a description of these new Artificial Intelligence technologies and approaches to the modeling and simulation of complex systems, as well as an overview of the latest scientific efforts in this field such as the platforms and/or the software tools for smart modeling and simulating complex systems. These tasks are difficult to accomplish using traditional computational approaches due to the complex relationships of components and distributed features of resources, as well as the dynamic work environments. In order to effectively model the complex systems, intelligent technologies such as multi-agent systems and smart grids are employed to model and simulate the complex systems in the areas of ecosystem, social and economic organization, web-based grid service, transportation systems, power systems and evacuation systems.
