

1. Record Nr.	UNINA9910484197003321
Titolo	Life system modeling and intelligent computing : International Conference on Life System Modeling and Simulation, LSMS 2010, and International Conference on Intelligent Computing for Sustainable Energy and Environment, ICSEE 2010, Wuxi, China, September 17-20, 2010 : proceedings. Part I / / Kang Li ... [et al.], (eds.)
Pubbl/distr/stampa	Berlin, : Springer, 2010
ISBN	1-280-38882-X 9786613566744 3-642-15621-5
Edizione	[1st ed.]
Descrizione fisica	1 online resource (XXII, 518 p.)
Collana	Communications in computer and information science, , 0302-9743 ; ; 97 LNCS sublibrary. SL 1, Theoretical computer science and general issues Life system modeling and intelligent computing : International Conference on Life System Modeling and Simulation, LSMS 2010, and International Conference on Intelligent Computing for Sustainable Energy and Environment, ICSEE 2010, Wuxi, China, September 17-20, 2010 : proceedings ; ; pt. 1
Altri autori (Persone)	LiKang
Disciplina	570.285
Soggetti	Biological models Biological systems - Simulation methods Computational biology Computational intelligence Bioinformatics
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: Intelligent Modeling, Monitoring, and Control of Complex Nonlinear Systems -- Stabilization of a Class of Networked Control Systems with Random Packet Loss -- Improved Nonlinear PCA Based on RBF Networks and Principal Curves -- Application of Partical Swarm Optimization Algorithm in Field Holo-Balancing -- Analyzing Deformation of Supply Chain Resilient System Based on Cell Resilience Model -- Multi-objective Particle Swarm Optimization Control

Technology and Its Application in Batch Processes -- Online Monitoring of Catalyst Activity for Synthesis of Bisphenol A -- An Improved Pyramid Matching Kernel -- Stability Analysis of Multi-channel MIMO Networked Control Systems -- Synthesis of PI-type Congestion Controller for AQM Router in TCP/AQM Network -- A State Identification Method of Networked Control Systems -- Stabilization Criterion Based on New Lyapunov Functional Candidate for Networked Control Systems -- Development of Constant Current Source for SMA Wires Driver Based on OPA549 -- High Impedance Fault Location in Transmission Line Using Nonlinear Frequency Analysis -- Batch-to-Batch Iterative Optimal Control of Batch Processes Based on Dynamic Quadratic Criterion -- Management Information System (MIS) for Planning and Implementation Assessment (PIA) in Lake Dianchi -- Integration Infrastructure in Wireless/Wired Heterogeneous Industrial Network System -- Multi-innovation Generalized Extended Stochastic Gradient Algorithm for Multi-Input Multi-Output Nonlinear Box-Jenkins Systems Based on the Auxiliary Model -- Research of Parallel-Type Double Inverted Pendulum Model Based on Lagrange Equation and LQR Controller -- A Consensus Protocol for Multi-agent Systems with Double Integrator Model -- A Production-Collaboration Model for Manufacturing Grid -- The Second Section: Autonomy-Oriented Computing and Intelligent Agents -- Parallel Computation for Stereovision Obstacle Detection of Autonomous Vehicles Using GPU -- Framework Designing of BOA for the Development of Enterprise Management Information System -- Training Support Vector Data Descriptors Using Converging Linear Particle Swarm Optimization -- Research on Modeling and Simulation of an Adaptive Combat Agent Infrastructure for Network Centric Warfare -- Genetic Algorithm-Based Support Vector Classification Method for Multi-spectral Remote Sensing Image -- Grids-Based Data Parallel Computing for Learning Optimization in a Networked Learning Control Systems -- A New Distributed Intrusion Detection Method Based on Immune Mobile Agent -- Single-Machine Scheduling Problems with Two Agents Competing for Makespan -- Multi-Agent Asynchronous Negotiation Based on Time-Delay -- The Third Section: Advanced Theory and Methodology in Fuzzy Systems and Soft Computing -- Fuzzy Chance Constrained Support Vector Machine -- An Automatic Thresholding for Crack Segmentation Based on Convex Residual -- A Combined Iteration Method for Probabilistic Load Flow Calculation Applied to Grid-Connected Induction Wind Power System -- Associated-Conflict Analysis Using Covering Based on Granular Computing -- Inspection of Surface Defects in Copper Strip Based on Machine Vision -- BIBO Stability of Spatial-temporal Fuzzy Control System -- An Incremental Manifold Learning Algorithm Based on the Small World Model -- Crack Image Enhancement of Track Beam Surface Based on Nonsubsampled Contourlet Transform -- The Class-2 Linguistic Dynamic Trajectories of the Interval Type-2 Fuzzy Sets -- The Fourth Section: Computational Intelligence in Utilization of Clean and Renewable Energy Resources -- Strategic Evaluation of Research and Development into Embedded Energy Storage in Wind Power Generation -- A Mixed-Integer Linear Optimization Model for Local Energy System Planning Based on Simplex and Branch-and-Bound Algorithms -- IEC 61400-25 Protocol Based Monitoring and Control Protocol for Tidal Current Power Plant -- Adaptive Maximum Power Point Tracking Algorithm for Variable Speed Wind Power Systems -- Modeling and Simulation of Two-Leaf Semi-rotary VAWT -- The Fifth Section: Intelligent Modeling, Control and Supervision for Energy Saving and Pollution Reduction -- Identification of Chiller Model in HVAC System Using Fuzzy Inference Rules with

Zadeh's Implication Operator -- An Improved Control Strategy for Ball Mill Grinding Circuits -- Sliding Mode Controller for Switching Mode Power Supply -- The Sixth Section: Intelligent Methods in Developing Vehicles, Engines and Equipments -- Expression of Design Problem by Design Space Model to Support Collaborative Design in Basic Plan of Architectural Design -- Drive Cycle Analysis of the Performance of Hybrid Electric Vehicles -- The Seventh Section: Computational Methods and Intelligence in Modeling Genetic and Biochemical Networks and Regulation -- Supply Chain Network Equilibrium with Profit Sharing Contract Responding to Emergencies -- Modeling of the Human Bronchial Tree and Simulation of Internal Airflow: A Review -- Robust Semi-supervised Learning for Biometrics -- Research on Virtual Assembly of Supercritical Boiler -- Validation of Veracity on Simulating the Indoor Temperature in PCM Light Weight Building by EnergyPlus -- Positive Periodic Solutions of Nonautonomous Lotka-Volterra Dispersal System with Delays -- An Algorithm of Sphere-Structure Support Vector Machine Multi-classification Recognition on the Basis of Weighted Relative Distances.

Sommario/riassunto

The 2010 International Conference on Life System Modeling and Simulation (LSMS 2010) and the 2010 International Conference on Intelligent Computing for Sustainable Energy and Environment (ICSEE 2010) were formed to bring together researchers and practitioners in the fields of life system modeling/simulation and intelligent computing applied to worldwide sustainable energy and environmental applications. A life system is a broad concept, covering both micro and macro components ranging from cells, tissues and organs across to organisms and ecological niches. To comprehend and predict the complex behavior of even a simple life system can be extremely difficult using conventional approaches. To meet this challenge, a variety of new theories and methodologies have emerged in recent years on life system modeling and simulation. Along with improved understanding of the behavior of biological systems, novel intelligent computing paradigms and techniques have emerged to handle complicated real-world problems and applications. In particular, intelligent computing approaches have been valuable in the design and development of systems and facilities for achieving sustainable energy and a sustainable environment, the two most challenging issues currently facing humanity. The two LSMS 2010 and ICSEE 2010 conferences served as an important platform for synergizing these two research streams.
