1.	Record Nr.	UNINA9910484730003321
	Titolo	Holonic and multi-agent systems for manufacturing : third international conference on industrial applications of holonic and multi-agent systems, holomas 2007, regensburg, germany, september 3-5, 2007, proceedings / / edited by Vladimìr Marìik, Valeriy Vyatkin, Armando W. Colombo
	Pubbl/distr/stampa	Berlin, Germany ; ; New York, United States : , : Springer, , [2007] ©2007
	ISBN	3-540-74481-9
	Edizione	[1st ed. 2007.]
	Descrizione fisica	1 online resource (XVI, 456 p.)
	Collana	LNCS sublibrary. SL 7, Artificial intelligence Lecture notes in computer science. Lecture notes in artificial intelligence ; 4659, , 0302-9743
	Disciplina	670.285
	Soggetti	Computer integrated manufacturing systems Expert systems (Computer science) Manufacturing processes - Automation
	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	Invited Talks -- The Past, Present, and Future of IEC 61499 -- Can Multi-Agents Wake Us from IC Design Productivity Nightmare? -- Motivation -- From Intelligent Agents to Intelligent Beings -- Multi-agent Reflection in Autonomic Systems -- Auctions with Arbitrary Deals -- Architectures and Services -- Service Composition in Holonic Multiagent Systems: Model-Driven Choreography and Orchestration -- Flexible Roles in a Holonic Multi-Agent System -- Agent-Based Inter-Organizational Workflow Management System -- Co-operative Co-evolutionary System for Solving Dynamic VRPTW Problems with Crisis Situations -- Anonymity Architecture for Mobile Agent Systems -- SitCom – Development Platform for Multimodal Perceptual Services -- New Technologies and Techniques -- An Ontology-Based Reconfiguration Agent for Intelligent Mechatronic Systems -- Methods to Observe the Clustering of Agents Within a Multi-Agent System -- Distributed Director Facilitator in a Multiagent Platform for Networked Embedded Controllers -- Agent Methods for Network Intrusion

Detection and Response -- Detecting Intrusions in Agent System by Means of Exception Handling -- Smart Caching Algorithm for Software Agents Based on Re-execution Probability -- Planning and Scheduling -- Metaheuristic Agent Teams for Job Shop Scheduling Problems -- Distributed Production Scheduling Using Federated Agent Architecture -- A Study on Real-Time Scheduling for Holonic Manufacturing Systems – Simulation for Estimation of Future Status by Individual Holons -- Adaptive Planning for Supply Chain Networks -- An Agent Based Modelling Approach for Stochastic Planning Parameters -- Design Issues -- A Holonic Metamodel for Agent-Oriented Analysis and Design -- Using Adaptable Design to Classify Interactions Within a Distributed Control Architecture -- Application of the Holonic Approach in Distributed Control Systems Designing -- Design and Implementation of Adaptive Agents for Complex Manufacturing Systems -- Dynamic Configuration and Management of e-Supply Chains Based on Internet Public Registries Visited by Clusters of Software Agents -- Applications -- A Multiagent Control System for Shop Floor Assembly -- MagentaToolkit: A Set of Multi-agent Tools for Developing Adaptive Real-Time Applications -- On Practical Implementation of Holonic Control Principles in Baggage Handling Systems Using IEC 61499 -- Zero Downtime Reconfiguration of Distributed Automation Systems: The ?CEDAC Approach -- Holonic Multiagent-Based System for Distributed Control of Semi-industrial Pilot Plants -- Collision Avoidance Algorithms: Multi-agent Approach -- Creating Contract Templates for Car Insurance Using Multi-agent Based Text Understanding and Clustering -- Multi-agent-Based Diagnostics of Automotive Electronic Systems -- PIHoIS Workshop -- Performance in Industrial Holonic Systems -- Towards Industrial Strength Business Performance Management -- Ontology-Based Competence Management for Team Configuration -- Information Agents Handling Semantic Data as an Extension to Process Monitoring Systems -- Applications of Virtual Reality in Design and Simulation of Holonic Manufacturing Systems: A Demonstration in Die-Casting Industry -- Resilience in the Face of Disaster: Accounting for Varying Disaster Magnitudes, Resource Topologies, and (Sub)Population Distributions in the PLAN C Emergency Planning Tool -- Holonic Simulation of a Design System for Performance Analysis.

| Sommario/riassunto | The research of holonic and agent-based systems is developing rapidly, as is the community around this R&D topic. Despite the fact that real-life practical implementations of such systems remain surprisingly rare, the leaders in different branches of industry feel that the holonic and agent-based systems represent the only way to manage and control very complex, highly distributed systems in the future. The relevant R&D gains more and more support from both industry as well as academic sources. Quite naturally, the number of scientific events aimed at the subject field is also growing rapidly. We can see new lines of conferences like INDIN, while we can observe a strong focus of the already well-established conferences, like INCOM or ETFA, being shifted toward holonic and agent-based manufacturing systems. This is a good sign of the increasing recognition and importance of the field. We are convinced of the worth and importance of the continuation of the HoloMAS events, which have served as pioneering melting pots for ideas connected with distributed decision making and control in industry and which have already gained international reputation. |