

1. Record Nr.	UNINA9910437892703321
Titolo	Service Orientation in Holonic and Multi Agent Manufacturing and Robotics // edited by Theodor Borangiu, Andre Thomas, Damien Trentesaux
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2013
ISBN	3-642-35852-7
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (XXIV, 398 p. 164 illus., 84 illus. in color.)
Collana	Studies in Computational Intelligence, , 1860-949X ; ; 472
Disciplina	006.3
Soggetti	Computational intelligence Artificial intelligence Robotics Automation Computational Intelligence Artificial Intelligence Robotics and Automation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Holonic and multi-agent systems for manufacturing -- Intelligent products and product driven manufacturing -- Service orientation in manufacturing management control -- Distributed intelligence for sustainable manufacturing. .
Sommario/riassunto	The book covers four research domains representing a trend for modern manufacturing control: Holonic and Multi-agent technologies for industrial systems; Intelligent Product and Product-driven Automation; Service Orientation of Enterprise's strategic and technical processes; and Distributed Intelligent Automation Systems. These evolution lines have in common concepts related to service orientation derived from the Service Oriented Architecture (SOA) paradigm. The service-oriented multi-agent systems approach discussed in the book is characterized by the use of a set of distributed autonomous and cooperative agents, embedded in smart components that use the SOA principles, being oriented by offer and request of services, in order to

fulfil production systems and value chain goals. A new integrated vision combining emergent technologies is offered, to create control structures with distributed intelligence supporting the vertical and horizontal enterprise integration and running in truly distributed and global working environments. The service value creation model at enterprise level consists into using Service Component Architectures for business process applications, based on entities which handle services. In this componentization view, a service is a piece of software encapsulating the business/control logic or resource functionality of an entity that exhibits an individual competence and responds to a specific request to fulfil a local (product) or global (batch) objective.
