1. Record Nr. UNINA9910254284503321 Autore Liu Xinbao Titolo Optimization and Management in Manufacturing Engineering: Resource Collaborative Optimization and Management through the Internet of Things / / by Xinbao Liu, Jun Pei, Lin Liu, Hao Cheng, Mi Zhou, Panos M. **Pardalos** Cham: .: Springer International Publishing: .: Imprint: Springer. . Pubbl/distr/stampa 2017 **ISBN** 3-319-64568-4 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (XVIII, 264 p. 14 illus., 6 illus. in color.) Collana Springer Optimization and Its Applications, , 1931-6828; ; 126 Disciplina 670.285 Soggetti Operations research Management science **Business logistics** Mathematical models **Algorithms** Operations Research, Management Science Supply Chain Management Mathematical Modeling and Industrial Mathematics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Includes bibliographical references. Nota di bibliografia 1. Information Sharing and Risk Management -- 2. Optimal Allocation Nota di contenuto of Decision-Making Authority in IoT-based Manufacturing Enterprises -- 3. Dynamic Coordinated Supply Chain Scheduling in an IoT Environment -- 4. Hybrid Manufacturing Distributed Inventory Management with Sharing Logistics -- 5. Cutting stock problem with the IoT -- 6. Total Quality Management of the Product Life Cycle in an IoT Environment -- 7. Life Cycle Assessment in an IoT Environment. --References. Sommario/riassunto Problems facing manufacturing clusters that intersect information technology, process management, and optimization within the Internet of Things (IoT) are examined in this book. Recent advances in information technology have transformed the use of resources and data

exchange, often leading to management and optimization problems

attributable to technology limitations and strong market competition. This book discusses several problems and concepts which makes significant connections in the areas of information sharing, organization management, resource operations, and performance assessment. Geared toward practitioners and researchers, this treatment deepens the understanding between resource collaborative management and advanced information technology. Those in manufacturing will utilize the numerous mathematical models and methods offered to solve practical problems related to cutting stock, supply chain scheduling, and inventory management. Academics and students with a basic knowledge of manufacturing, combinatorics, and linear programming will find that this discussion widens the research area of resource collaborative management and unites the fields of information technology, manufacturing management, and optimization.