

1. Record Nr.	UNINA9910298526103321
Autore	Agnētis Alessandro
Titolo	Multiagent Scheduling : Models and Algorithms // by Alessandro Agnetis, Jean-Charles Billaut, Stanisaw Gawiejnowicz, Dario Pacciarelli, Ameer Soukhal
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-642-41880-5
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (281 p.)
Disciplina	005.74 005.743 330 658.40301
Soggetti	Operations research Decision making Computers Operations Research/Decision Theory Models and Principles
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Multiagent Scheduling Fundamentals -- 2. Problems, Algorithms and Complexity -- 3. Single Machine Problems -- 4. Batching Scheduling Problems -- 5. Parallel Machine Scheduling Problems -- 6. Scheduling Problems with Variable Job Processing Times -- References.
Sommario/riassunto	Scheduling theory has received a growing interest since its origins in the second half of the 20th century. Developed initially for the study of scheduling problems with a single objective, the theory has been recently extended to problems involving multiple criteria. However, this extension has still left a gap between the classical multi-criteria approaches and some real-life problems in which not all jobs contribute to the evaluation of each criterion. In this book, we close this gap by presenting and developing multi-agent scheduling models in which subsets of jobs sharing the same resources are evaluated by different criteria. Several scenarios are introduced, depending on the

definition and the intersection structure of the job subsets. Complexity results, approximation schemes, heuristics and exact algorithms are discussed for single-machine and parallel-machine scheduling environments. Definitions and algorithms are illustrated with the help of examples and figures. .

---