1. Record Nr. UNINA9910627249803321

Autore	Chen Toly <1969->
Titolo	Production Planning and Control in Semiconductor Manufacturing : Big Data Analytics and Industry 4.0 Applications / / by Tin-Chih Toly Chen
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	9783031140655 9783031140648
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (106 pages)
Collana	SpringerBriefs in Applied Sciences and Technology, , 2191-5318
Disciplina	006.42 338.4762138152
Soggetti	Industrial engineering Production engineering Internet of things Production management Cooperating objects (Computer systems) Semiconductors Industrial and Production Engineering Internet of Things Production Cyber-Physical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Big Data Analytics for Semiconductor Manufacturing -- Chapter 2. Industry 4.0 for Semiconductor Manufacturing -- Chapter 3. Cycle Time Prediction and Output Projection -- Chapter 4. Defect Pattern Analysis, Yield Learning Modeling and Yield Prediction -- Chapter 5. Job Sequencing and Scheduling.
Sommario/riassunto	This book systematically analyzes the applicability of big data analytics and Industry 4.0 from the perspective of semiconductor manufacturing management. It reports in real examples and presents case studies as supporting evidence. In recent years, technologies of big data analytics and Industry 4.0 have been frequently applied to the management of

semiconductor manufacturing. However, related research results are mostly scattered in various journal issues or conference proceedings, and there is an urgent need for a systematic integration of these results. In addition, many related discussions have placed too much emphasis on the theoretical framework of information systems rather than on the needs of semiconductor manufacturing management. This book addresses these issues.