

1. Record Nr.	UNINA9910366602003321
Autore	Wu Min
Titolo	Intelligent Optimization and Control of Complex Metallurgical Processes // by Min Wu, Weihua Cao, Xin Chen, Jinhua She
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-1145-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XVIII, 274 p. 125 illus., 10 illus. in color.)
Collana	Engineering Applications of Computational Methods, , 2662-3374 ; ; 3
Disciplina	658.56
Soggetti	Security systems Automatic control Metals Robotics Automation System theory Manufactures Security Science and Technology Control and Systems Theory Metals and Alloys Control, Robotics, Automation Complex Systems Machines, Tools, Processes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Intelligent Optimization and Control of Raw Material Proportioning Processes -- Intelligent Optimization and Control of Coking Process -- Intelligent Control of Thermal State Parameters in Sintering Process -- Intelligent Decoupling Control of Gas Collection and Mixing-and-Pressurization Processes -- Intelligent Optimization and Control for Reheating Furnace.
Sommario/riassunto	This book discusses the intelligent optimization and control of complex metallurgical processes, including intelligent optimization and control of raw-material proportioning processes, coking process, and reheating furnaces; intelligent control of thermal state parameters in

sintering processes; and intelligent decoupling control of gas collection and mixing-and-pressurization processes. The intelligent control and optimization methods presented were originally applied to complex metallurgical processes by the authors, and their effectiveness and their advantages have been theoretically proven and demonstrated practically. This book offers an up-to-date overview of this active research area, and provides readers with state-of-the-art methods for the control of complex metallurgical processes.

---