1. Record Nr. UNINA9910254332503321

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Titolo	Simulation Approach Towards Energy Flexible Manufacturing Systems / / by Jan Beier
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-46639-9
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XXVIII, 227 p. 96 illus.)
Collana	Sustainable Production, Life Cycle Engineering and Management, , 2194-0541
Disciplina	670.286
Soggetti	Manufactures Industrial management—Environmental aspects Sustainable development Energy systems Energy Manufacturing, Machines, Tools, Processes Sustainability Management Sustainable Development Energy Systems Energy, general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Manufacturing systems and variable renewable electricity supply -- Existing approaches in the field of energy flexible manufacturing systems -- Manufacturing system real-time energy flexibility control and improvement -- Manufacturing system real-time energy flexibility control and improvement -- Example application -- Summary, critical review and outlook.
Sommario/riassunto	This authored monograph provides in-depth analysis and methods for aligning electricity demand of manufacturing systems to VRE supply. The book broaches both long-term system changes and real-time manufacturing execution and control, and the author presents a concept with different options for improved energy flexibility including battery, compressed air and embodied energy storage. The reader will

also find a detailed application procedure as well as an implementation into a simulation prototype software. The book concludes with two case studies. The target audience primarily comprises research experts in the field of green manufacturing systems. .