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ISBN	3-319-92237-8
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Descrizione fisica	1 online resource (171 pages)
Collana	Sustainable Production, Life Cycle Engineering and Management, , 2194-0541
Disciplina	658.56
Soggetti	Industrial engineering Production engineering Sustainable development Industrial management—Environmental aspects Industrial and Production Engineering Sustainable Development Sustainability Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- State of the art and future developments in life-cycle assessment (LCA) -- Using network analysis for use phase allocations in LCA studies of automation technology components -- Eco-indicators of machining processes -- Enhancing the Water Footprint method to a region specific management tool -- Product system modularization in LCA towards a graph theory based optimization for product design alternative -- Integrating LCA into automotive manufacturing – A review-based framework to measure the ecological performance of production technologies -- Hydrothermal carbonization (HTC) of sewage sludge: GHG emissions of various hydrochar applications -- Uncertainty information in LCI-databases and its propagation through an LCA model -- LCA of energy and material demands in professional data centers: Case study of a server -- Identification of potentials for improvement in paint production process through Material Flow Cost Accounting – a step towards sustainability -- Development of a

functional unit for a product service system: One year of varied use of clothing -- LCA in process development: Case study of the OxFA-process -- Using energy system Modelling Results for Assessing the Emission Effect of Vehicle-to-Grid for Peak Shaving -- Assessment of social impacts along the value chain of automation technology components using the LCWE method -- LCA of industrial cooling towers -- Bioplastics and Circular Economy -performance indicators to identify optimal pathways -- Spatially differentiated sustainability assessment of products -- Life cycle assessment of German energy scenarios.

Sommario/riassunto

The book contains the latest developments in the field of life cycle assessment (LCA) and its application. It contains numerous research articles from leading German research institutes working towards the further development of the methodology. The book provides important insights for professionals working in the field of sustainability assessment, for researchers interested in the current state of the research of the methodology and its application as well as for advanced university students in different science and engineering fields.
