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Altri autori (Persone)	ChakrabartiAmaresh
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	pt. 1. Design theory, methodology and research methodology -- pt. 2. Creative and inventive design (TRIZ) -- pt. 3. Enabling technologies and tools -- pt. 4. Global product development and PLM -- pt. 5. Design for X (safety, manufacture, assembly, cost, risk, reliability, modularity, etc.) -- pt. 6. Sustainable design and manufacturing.
Sommario/riassunto	During its life cycle, a product produces waste that is over 20 times its weight. As such it is critical to develop products that are sustainable. Currently product development processes lack high quality methods and tools that are empirically validated to support development of sustainable products. This book is a compilation of over forty cutting edge international research papers from the 22nd CIRP International Design Conference, written by eminent researchers from 15 countries, on engineering design process, methods and tools, broadly for supporting sustainable product development. A variety of new insights into the product development process, as well as a host of methods and tools that are at the cutting edge of design research are discussed and explained covering a range of diverse topics. The areas covered include: ·Sustainable design and manufacturing, ·Design synthesis and creativity, ·Global product development and product life cycle management, ·Design for X (safety, reliability, manufacturability, etc.), and ·Design taxonomy, ontology and standards. CIRP Design 2012: Sustainable Product Development provides researchers in design,

engineering and sustainability access to some of the latest, quality research in this area. Practitioners and educators of engineering design and sustainability will find an empirically validated suite of methods and tools that can be applied and taught to develop their practices.
