

1. Record Nr.	UNINA9910437928403321
Titolo	CIRP Design 2012 : Sustainable Product Development // edited by Amaresh Chakrabarti
Pubbl/distr/stampa	London : , : Springer London : , : Imprint : Springer, , 2013
ISBN	1-283-91231-7 1-4471-4507-0
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (428 p.)
Altri autori (Persone)	ChakrabartiAmaresh
Disciplina	658.4013
Soggetti	Engineering design Industrial Management Security systems Engineering Design Security Science and Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part 1. Design Theory, Methodology and Research Methodology -- Part 2. Creative and Inventive Design (TRIZ) -- Part 3. Enabling Technologies & Tools -- Part 4. Global Product Development and PLM -- Part 5. Design For X (Safety, Manufacture, Assembly, Cost, Risk, Reliability, Modularity, etc.) -- Part 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.
