1. Record Nr. UNINA990009560010403321

Autore Lefort, Louis Joseph <1835-1859>

Titolo Naples: histoire, monuments, beaux-arts, littérature / [Lefort Louis

Joseph]

Pubbl/distr/stampa Lille: L. Lefort, 1857

Descrizione fisica 288 p. : ill. ; 22 cm

Locazione FARBC

Collocazione RARI B 589

Lingua di pubblicazione Francese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Sul frontespizio: citazione di Francesco Petrarca

Record Nr. UNINA9911006609203321

Autore Ashby M. F

Titolo Nanomaterials, nanotechnologies and design: an introduction for

engineers and architects / / Michael F. Ashby, Paulo J. Ferreira, Daniel

L. Schodek

Pubbl/distr/stampa Amsterdam; ; Boston, : Butterworth-Heinemann, c2009

ISBN 9786612737558

9781282737556 1282737554 9780080941530 0080941532

Descrizione fisica 1 online resource (560 p.)

Altri autori (Persone) SchodekDaniel L. <1941->

FerreiraPaulo J. S. G

Disciplina 620.11

Soggetti Nanotechnology

High technology

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali

Nota di bibliografia

Nota di contenuto

Description based upon print version of record.

Includes bibliographical references and index.

Front cover; Half title page; Title page; Copyright page; Table of contents; Preface; Acknowledgments; Chapter 1: Nanomaterials and Nanotechnologies: An Overview; Why Nanomaterials?; Scale, Structure, and Behavior; Further Reading; Chapter 2: An Evolutionary Perspective; A Brief History of Materials; Nanomaterials and Nanostructures in Nature; Nanomaterials in Art and Cultural Heritage; Further Reading; Chapter 3: The Design Context: Materials in Design: Product Design. Architecture, and Engineering; Environments, Systems, and Assemblies; The Design and Development Process; A Design Vignette Further ReadingChapter 4: Material Classes, Structure, and Properties; Classes of Materials; The Internal Structure of Materials; Mechanical Behavior; Thermal Behavior; Electrical Behavior; Magnetic Behavior; Optical Behavior: Acoustic Behavior: Further Reading: Chapter 5: Material Property Charts and Their Uses; Material Property Charts; Using Charts to Select Translation, Screening, Ranking, and Documentation: Plotting Limits and Indices on Charts: Resolving Conflicting Objectives: Further Reading: Chapter 6: Nanomaterials: Classes and Fundamentals; Classification of Nanomaterials Size EffectsFurther Reading; Chapter 7: Nanomaterials: Properties: Mechanical Properties: Thermal Properties of Nanomaterials: Electrical Properties; Magnetic Properties; Optical Properties; Acoustic Properties; Special Cases; Further Reading; Chapter 8: Nanomaterials: Synthesis and Characterization; Synthesis of Nanoscale Materials and Structures; Characterization of Nanomaterials; Further Reading; Chapter 9: Design Environments and Systems; Environments and Systems; Structural and Mechanical Environments; The Thermal Environment; Electrical and Magnetic Environments

Light and Optical EnvironmentsSound and Acoustical Environments; Enabling Environments and Systems: Energy; Interactive, Smart, and Intelligent Systems and Environments; Nanomaterials Costs; Further Reading; Chapter 10: Nanomaterial Product Forms and Functions; Characterizing Forms and Functions: Functional Characteristics: "Smart" Behaviors; Nanoproduct Forms; Further Reading; Chapter 11: Nanomaterials and Nanotechnologies in Health and the Environment; The Context; Medical and Pharmaceutical NANOTECHNOLOGY Applications; Health Concerns; Environmental Benefits and Impacts; Further Reading

Chapter 12: The Broader ContextIndustry Perspectives; The Automotive Industry; The Building and Construction Industry; Aerospace, Textiles, Sports, and Other Industries; A Closing Comment; Further Reading; Index

Sommario/riassunto

How could nanotechnology not perk the interest of any designer, engineer or architect? Exploring the intriguing new approaches to design that nanotechnologies offer, Nanomaterials, Nanotechnologies and Design is set against the sometimes fantastic sounding potential of this technology. Nanotechnology offers product engineers, designers, architects and consumers a vastly enhanced palette of materials and properties, ranging from the profound to the superficial. It is for engineering and design students and professionals who need to understand enough about the subject to apply it with rea