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Titolo	INFORMATICS 2017 : 2017 IEEE 14th International Scientific Conference on Informatics : proceedings : November 14-16, 2017, Poprad, Slovakia / / editors, Valerie Novitzka, Stefan Korecko, Aniko Szakal ; sponsored by Institute of Electrical and Electronics Engineers
Pubbl/distr/stampa	Piscataway, New Jersey : , : Institute of Electrical and Electronics Engineers, , 2017
ISBN	1-5386-0889-8
Descrizione fisica	1 online resource (xi, 437 pages)
Disciplina	029.7
Soggetti	Information storage and retrieval systems Computer architecture
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr.	UNINA9911019899203321
Autore	Moskowitz Sanford L
Titolo	The advanced materials revolution : technology and economic growth in the age of globalization // Sanford L. Moskowitz
Pubbl/distr/stampa	Hoboken, N.J., : John Wiley, c2009
ISBN	9786612681738 9781118975718 1118975715 9781282681736 1282681737 9780470403525 0470403527 9780470403518 0470403519
Descrizione fisica	1 online resource (275 p.)
Classificazione	06.08
Disciplina	620.1/1
Soggetti	Materials - Research Civil engineering
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	The Advanced Materials Revolution; Contents; Preface; Acknowledgments; PART I ADVANCED MATERIALS, PAST AND PRESENT; References; 1. The Coming of the Advanced-Materials Revolution; Continuity and New Directions: 1980s and 1990s; The New Materials and the Rise of the "Technological" Society; References; PART II OPPORTUNITIES AND RISKS; 2. A Great Potential-Markets and Society; The Advanced Material Families: Characteristics, Technology, and Applications; Bioengineered Materials; Advanced Metals: Advanced Stainless Steel and "Superalloys"; Advanced Ceramics and Superconductors Synthetic Engineering (Nonconduction) PolymersOrganic Electronic Materials (Conduction Polymers); Advanced (Nonthin) Coatings; Nanopowders and Nanocomposites; Nanocarbon Materials; Nanofibers; Thin Films; Advanced Composites; Global Markets: The Question of

Convergence; References; 3. The Great Divide: Advanced Materials, Productivity, and Economic Growth in the United States and Europe; Technology and Economic Performance. I-IT, Energy and Biomedical; Technology and Economic Performance. II-The Role of Advanced Materials

Localization, Globalization, and the Competitiveness Factor: European Union versus United StatesReferences; 4. Facing Reality: The Risk Factor in Advanced-Materials Technology; The Risks of Innovation; Technical Risk: Can This Be Done?; The Financial Capital Dilemma: Can This Be Paid For?; The Human Capital Dilemma: Can This Be Staffed?; The "Selection" Dilemma: Can We Pick the Winner?; The Market Dilemma: Can We Sell This?; The Management Dilemma: Can Our Team Be Effective?; Public Policy and Perception Dilemmas: Will Government Action Derail Our Strategy?; References

PART III CREATION: RESEARCH AND DEVELOPMENT5. Research and Development I: The American Context; Opportunities Taken and Opportunities Missed: Case Studies; Advanced Polymers; Organic Polymer Electronics (OPEs); Nanocarbon Materials: Metal Fullerness and Nanotubes; Nanocrystals and Quantum Dots; The United States, R&D, and Advanced Materials; What Type of R&D?; Where Is R&D Located? The Decentralization of Innovation; What Are the Fruits of R&D?

Patents; References; 6. Research and Development II: The European Context; The European Dilemma in R&D I: Funding Problems

The European Dilemma in R&D II: Structural ProblemsStructural Problems I: The Questions of Patent Law and Resource Allocation; Structural Problems II: The Universities, Science, and Innovation: The Question of Entrepreneurship; Structural Problems III: Resource Overextension: The Question of Eastern Europe; Structural Problems IV: The Coordination Question; The European Dilemma in R&D III: The "Cultural" Problem; Cultural Bias and the Science versus Technology Issue; Cultural Bias, Public Perception, and Fear of Technology Issue; Discussion; References

PART IV A WIDER CONTEXT: THE SEAMLESS WEB

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#### Sommario/riassunto

Comprehensive investigation into the emerging advanced materials industry, addressing the ways in which science, technology, business, and markets are converging to produce one of the most dynamic industries of recent yearsExamines the major groups of advanced materials and discusses the range of markets and industries to which these materials are, or are likely to be, appliedOrganised thematically, with each chapter discussing a particular phase of an advanced material product's life cycleAlso includes in-depth interviews and internal documentationEssential reading for

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