

1. Record Nr.	UNINA9910300375103321
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Titolo	Solid-State Electronic Devices : An Introduction // by Christo Papadopoulos
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2014
ISBN	1-4614-8836-2
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (XIII, 277 p. 151 illus., 45 illus. in color.)
Collana	Undergraduate Lecture Notes in Physics, , 2192-4791
Disciplina	537.622
Soggetti	Electronics Microelectronics Semiconductors Computer engineering Nanotechnology Electronics and Microelectronics, Instrumentation Computer Engineering Nanotechnology and Microengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface -- Chapter 1 – Introduction -- Chapter 2 – Junctions and Diodes -- Chapter 3 – Bipolar transistors -- Chapter 4 – Field Effect Transistors -- Chapter 5 - Emerging Devices for Electronics and Beyond -- Appendix I -- A.1 Quantum mechanics -- A.2 Semiconductor physics -- A.3 Outline of semiconductor planar processing -- Appendix II – Useful data -- Bibliography -- List of Symbols -- Index.
Sommario/riassunto	A modern and concise treatment of the Solid-State Electronic Devices that are fundamental to electronic systems and information technology is provided in this book. The main devices that comprise semiconductor integrated circuits are covered in a clear manner accessible to the wide range of scientific and engineering disciplines that are impacted by this technology. As the field of electronic materials and devices becomes more interdisciplinary, catering to a wider audience is becoming increasingly important with applications in biology, chemistry and electro-mechanical devices (to name a few)

becoming more prevalent. Updated and state-of-the-art advancements are included along with emerging trends in electronic devices and their applications. In addition, an appendix containing the relevant physical background is included to assist readers from different disciplines and provide a review for those more familiar with the area. Readers of this book can expect to derive a strong foundation for understanding modern electronic devices and also be prepared for future developments and advancements in this far-reaching area of science and technology.
