1. Record Nr. UNINA9910886993003321

Autore	El-Kareh Badih
Titolo	Silicon Components and Processes Self Study : Field-Effect Transistors / / by Badih El-Kareh, Lou N. Hutter
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	9783031591938 3031591933
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (520 pages)
Disciplina	621.3815284
Soggetti	Electronic circuits Electronics Solid state physics Electronic Circuits and Systems Electronics and Microelectronics, Instrumentation Electronic Devices
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Intro -- Preface -- Contents -- Appendix A: Abbreviations, Acronyms -- Appendix B: List of Symbols -- Appendix C: Universal Physical Constants -- Appendix D: Properties of Silicon and Germanium -- Appendix E: Properties of SiO2 and Si3N4 (300 K) -- Appendix F: International System of Units, SI -- Appendix G: The Greek Alphabet -- Appendix H:Conversion Factors -- Appendix I: Periodic Table of the Elements -- Answers to Review Questions -- Solution Manual -- Index.
Sommario/riassunto	This book is one of a series of five volumes forming an integrated, self-study course on silicon device physics, modes of operation, characterization, and fabrication. The series is based on many years of the author’s experience in academic and industrial teaching of semiconductors. The books are suitable for both class-teaching and self-study. The authors have designed the content to enable readers to be introduced gradually to semiconductors, in particular silicon components. The presentation includes many illustrations, practical examples, review questions and problems at the end of each chapter.

Answers to review questions and solutions to problems will be provided for “self-check”. Complements courses covering silicon device physics, mode of components, characterization, and fabrication; Enables comprehensive, self-study in semiconductors, aimed at practicing engineers or university students; Includes many illustrations, practical examples, review questions and problems at the end of each chapter.