1. Record Nr. UNINA9910410004103321 Autore Srikant Satya Sai Titolo Basic Electronics Engineering: Including Laboratory Manual / / by Satya Sai Srikant, Prakash Kumar Chaturvedi Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020 Pubbl/distr/stampa 981-13-7414-7 **ISBN** Edizione [1st ed. 2020.] 1 online resource (388 pages) Descrizione fisica Disciplina 621.3815 Soggetti Electronic circuits **Electronics** Microelectronics Semiconductors Optical materials **Electronics - Materials Electronic Circuits and Devices** Electronics and Microelectronics, Instrumentation Circuits and Systems Optical and Electronic Materials Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Nota di contenuto CHAPTER 1: Semiconductor – An overview -- CHAPTER 2: Semiconductor Diodes and Applications -- CHAPTER 3: Transistors and other devices -- CHAPTER 4: Optoelectronic Devices -- CHAPTER 5: Digital Electronics -- CHAPTER 6: Transducer -- CHAPTER 7: Communications System -- CHAPTER 8: Simple Laboratory Experiments. Sommario/riassunto This book is primarily designed to serve as a textbook for undergraduate students of electrical, electronics, and computer engineering, but can also be used for primer courses across other disciplines of engineering and related sciences. The book covers all the

basic aspects of electronics engineering, from electronic materials to devices, and then to basic electronic circuits. The book can be used for

freshman (first year) and sophomore (second year) courses in

undergraduate engineering. It can also be used as a supplement or primer for more advanced courses in electronic circuit design. The book uses a simple narrative style, thus simplifying both classroom use and self study. Numerical values of dimensions of the devices, as well as of data in figures and graphs have been provided to give a real world feel to the device parameters. It includes a large number of numerical problems and solved examples, to enable students to practice. A laboratory manual is included as a supplement with the textbook material for practicals related to the coursework. The contents of this book will be useful also for students and enthusiasts interested in learning about basic electronics without the benefit of formal coursework.