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Titolo	Electronics for Physicists [[electronic resource] ] : An Introduction // by Bryan H. Suits
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Descrizione fisica	1 online resource (XIII, 331 p. 338 illus.)
Collana	Undergraduate Lecture Notes in Physics, , 2192-4791
Disciplina	621.3815
Soggetti	Electronic circuits Physical chemistry Geophysics Physical measurements Measurement Electronic Circuits and Devices Circuits and Systems Physical Chemistry Geophysics/Geodesy Measurement Science and Instrumentation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Basics -- Additional Theorems -- Complex Impedances -- More on Capacitors and Inductors -- The Laplace Transform -- Diodes -- FETs -- Bipolar Junction Transistors -- More on Amplifiers -- The Ideal Op-Amp -- Non-linear Uses of Op-Amps -- Digital I -- Digital II -- Calculators and Computers.
Sommario/riassunto	This book provides undergraduate physics majors and students of related sciences with a sound basic understanding of electronics and how it is used, principally in the physical sciences. While today few science students go on to careers that demand an ability to design and build electronic circuits, many will use and rely on electronics. As scientists, they will require an appropriate level of fundamental knowledge that enables them, for example, to understand what electronic equipment is doing, to correctly interpret the measurements

obtained, and to appreciate the numerous links between electronics and how it is practiced, and other areas of science. Discussing electronics in the broader context and from the point of view of the scientist, this book is intended for students who are not planning to become electronics specialists. It has been written in a relatively informal, personal style and includes detailed examples, as well as some “outside the box” material to inspire thought and creativity. A selection of relevant exercises is included at the end of each chapter.

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