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Titolo	Digital filter design using python for power engineering applications : an open source guide // Shivkumar Venkatraman Iyer
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ISBN	3-030-61860-9
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XIII, 194 p. 171 illus., 41 illus. in color.)
Disciplina	621.3815324
Soggetti	Electric filters, Digital - Design and construction Python (Computer program language)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Introduction to discrete systems -- Getting started with signal processing -- Introduction to Python -- Implementing analog filters digitally -- Frequency response analysis -- Filter design -- Conclusion.
Sommario/riassunto	This book is an in-depth description on how to design digital filters. The presentation is geared for practicing engineers, using open source computational tools, while incorporating fundamental signal processing theory. The author includes theory as-needed, with an emphasis on translating to practical application. The book describes tools in detail that can be used for filter design, along with the steps needed to automate the entire process. Breaks down signal processing theory into simple, understandable language for practicing engineers; Provides readers with a highly-practical introduction to digital filter design; Uses open source computational tools, while incorporating fundamental signal processing theory; Describes examples of digital systems in engineering and a description of how they are implemented in practice; Includes case studies where filter design is described in depth from inception to final implementation.