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Titolo	Automated Electronic Filter Design : With Emphasis on Distributed Filters // by Amal Banerjee
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Descrizione fisica	1 online resource (IX, 129 p. 57 illus., 2 illus. in color.)
Disciplina	621.3815
Soggetti	Electronic circuits Electronics Microelectronics Circuits and Systems Electronic Circuits and Devices Electronics and Microelectronics, Instrumentation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Chapter 1. Introduction and Problem Statement -- Chapter 2. Automated Electronic Filter Design Scheme -- Chapter 3. Automated Electronic Filter Design Algorithm/Scheme Implementation and Design Examples -- Chapter 4. Distributed Filters - Chapter 5. High Frequencies(100's of MHz – 10's of GHz) – Design Examples -- Chapter 6. Summary and Conclusion.
Sommario/riassunto	This book describes a novel, efficient and powerful scheme for designing and evaluating the performance characteristics of any electronic filter designed with predefined specifications. The author explains techniques that enable readers to eliminate complicated manual, and thus error-prone and time-consuming, steps of traditional design techniques. The presentation includes demonstration of efficient automation, using an ANSI C language program, which accepts any filter design specification (e.g. Chebyshev low-pass filter, cut-off frequency, pass-band ripple etc.) as input and generates as output a SPICE(Simulation Program with Integrated Circuit Emphasis) format

netlist. Readers then can use this netlist to run simulations with any version of the popular SPICE simulator, increasing accuracy of the final results, without violating any of the key principles of the traditional design scheme.
