1.	Record Nr.	UNINA9910456202003321
	Autore	Kundert Kenneth S
		The designer's guide to SPICE and Spectre [[electronic resource] /] / by Kenneth S. Kundert ; [with foreword by Paul Gray]
	Pubbl/distr/stampa	Boston, : Kluwer Academic Publishers, c1995
	ISBN	0-306-48200-2
	Edizione	[1st ed. 1995.]
	Descrizione fisica	1 online resource (401 p.)
	Collana	The Designer's Guide Book Series
	Disciplina	621.3815/01/1353
	Soggetti	Electronic circuits - Computer simulation Electronic books.
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references (p. [367]-370) and index.
	Nota di contenuto	Circuit Simulation DC Analysis AC Analyses Transient Analysis Fourier Analysis.
	Sommario/riassunto	Engineering productivity in integrated circuit product design and - velopment today is limited largely by the effectiveness of the CAD tools used. For those domains of product design that are highly dependent on transistor-level circuit design and optimization, such as high-speed logic and memory, mixed-signal analog-digital int- faces, RF functions, power integrated circuits, and so forth, circuit simulation is perhaps the single most important tool. As the complexity and performance of integrated electronic systems has increased with scaling of technology feature size, the capabilities and sophistication of the underlying circuit simulation tools have correspondingly increased. The absolute size of circuits requiring transistor-level simulation has increased dramatically, creating not only problems of computing power resources but also problems of task organization, complexity management, output representation, initial condition setup, and so forth. Also, as circuits of more c- plexity and mixed types of functionality are attacked with simu- tion, the spread between time constants or event time scales within the circuit has tended to become wider, requiring new strategies in simulators to deal with large time constant spreads.