1.	Record Nr.	UNINA9910254167803321
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	Titolo	Automatic Analog IC Sizing and Optimization Constrained with PVT Corners and Layout Effects / / by Nuno Lourenço, Ricardo Martins, Nuno Horta
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
	ISBN	3-319-42037-2
	Edizione	[1st ed. 2017.]
	Descrizione fisica	1 online resource (XXVII, 182 p. 112 illus., 90 illus. in color.)
	Disciplina	621.3815
	Soggetti	Electronic circuits
		Microprocessors
		Electronics
		Microelectronics
		Circuits and Systems
		Processor Architectures
		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	Introduction -- Previous Works on Automatic Analog IC Sizing -- AIDA-C Architecture -- Multi-Objective Optimization Kernel -- AIDA-C Circuit Sizing Results -- Layout-Aware Circuit Sizing -- AIDA-C Layout-aware Circuit Sizing Results -- Conclusions.
	Sommario/riassunto	This book introduces readers to a variety of tools for automatic analog integrated circuit (IC) sizing and optimization. The authors provide a historical perspective on the early methods proposed to tackle automatic analog circuit sizing, with emphasis on the methodologies to size and optimize the circuit, and on the methodologies to estimate the circuit's performance. The discussion also includes robust circuit design and optimization and the most recent advances in layout-aware analog sizing approaches. The authors describe a methodology for an automatic flow for analog IC design, including details of the inputs and interfaces, multi-objective optimization techniques, and the

enhancements made in the base implementation by using machine leaning techniques. The Gradient model is discussed in detail, along with the methods to include layout effects in the circuit sizing. The concepts and algorithms of all the modules are thoroughly described, enabling readers to reproduce the methodologies, improve the quality of their designs, or use them as starting point for a new tool. An extensive set of application examples is included to demonstrate the capabilities and features of the methodologies described.