1. Record Nr. UNINA9910454580503321

Autore	Niknejad Ali M. <1972->
Titolo	Design, simulation and applications of inductors and transformers for Si RF ICs [[electronic resource] /] / Ali M. Niknejad, Robert G. Meyer
Pubbl/distr/stampa	Boston, Mass., : Kluwer Academic Publishers, c2000
ISBN	1-280-20605-5 9786610206056 0-306-47038-1
Edizione	[1st ed. 2000.]
Descrizione fisica	1 online resource (211 p.)
Collana	Kluwer international series in engineering and computer science. Analog circuits and signal processing
Altri autori (Persone)	MeyerRobert G. <1942->
Disciplina	621.381
Soggetti	Electric inductors - Computer-aided design Electronic transformers - Computer-aided design Silicon-on-insulator technology Microwave integrated circuits - Computer-aided design 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.[171]-181) and index.
Nota di contenuto	Analysis and Simulation of Passive Devices -- Problem Description -- Previous Work -- Electromagnetic Formulation -- Inductance Calculations -- Calculation of Eddy Current Losses -- Asitic -- Experimental Study -- Applications of Passive Devices -- Voltage Controlled Oscillators -- Distributed Amplifiers -- Conclusion.
Sommario/riassunto	The modern wireless communication industry has put great demands on circuit designers for smaller, cheaper transceivers in the gigahertz frequency range. One tool which has assisted designers in satisfying these requirements is the use of on-chip inductiveelements (inductors and transformers) in silicon (Si) radio-frequency (RF) integrated circuits (ICs). These elements allow greatly improved levels of performance in Si monolithic low-noise amplifiers, power amplifiers, up-conversion and down-conversion mixers and local oscillators. Inductors can be used to improve the intermodulation distortion performance and noise figure of small-signal amplifiers and mixers. In addition, the gain of amplifier stages can be enhanced and the realization of low-cost on-chip local

	oscillators with good phase noise characteristics is made feasible. In order to reap these benefits, it is essential that the IC designer be able to predict and optimize the characteristics of on-chip inductiveelements. Accurate knowledge of inductance values, quality factor (Q) and the influence of ad- cent elements (on-chip proximity effects) and substrate losses is essential. In this book the analysis, modeling and application of on-chip inductive elements is considered. Using analyses based on Maxwells equations, an accurate and efficient technique is developed to model these elements over a wide frequency range. Energy loss to the conductive substrate is modeled through several mechanisms, including electrically induced displacement and conductive c- rents and by magnetically induced eddy currents. These techniques have been compiled in a user-friendly software tool ASITIC (Analysis and Simulation of Inductors and Transformers for Integrated Circuits).

2. Record Nr. UNINA9910480291403321

Titolo	Topology and geometry in dimension three : triangulations, invariants, and geometric structures : conference in honor of William Jaco's 70th birthday, June 4-6, 2010, Oklahoma State University, Stillwater, Oklahoma / / Weiping Li [and five others], editors
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , [2011] ©2011
ISBN	0-8218-8239-2
Descrizione fisica	1 online resource (210 p.)
Collana	Contemporary mathematics ; ; volume 560
Disciplina	514/.34
Soggetti	Three-manifolds (Topology) Topological manifolds 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.
Nota di contenuto	""A generic Margulis number for hyperbolic 3-manifolds""""On gradings in Khovanov homology and sutured Floer homology""; ""Hyperbolic

knots in irreducible Heegaard surfaces""; ""Stable W-length""; ""Turn graphs and extremal surfaces in free groups""; ""Kauffman brackets, character varieties and triangulations of surfaces""; ""Problems at the Jacofest""