1. Record Nr. UNISALENTO991001006849707536

Autore	Da Prato, Giuseppe
Titolo	Introduction to stochastic analysis and Malliavin calculus / Giuseppe Da Prato
Pubbl/distr/stampa	Pisa : Edizioni della Normale, c2008
ISBN	9788876423376 8876423370
Edizione	[2. ed.]
Descrizione fisica	xvi, 211 p. ; 24 cm
Collana	Appunti ; 7
Classificazione	AMS 60-02 AMS 46N30 AMS 47D07 AMS 47N30 AMS 60H05 AMS 60J65 LC QA274.23.D3
Disciplina	515
Soggetti	Stochastic differential equations Malliavin calculus
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	University lectures First ed. 2007, now enlarged
Nota di bibliografia	Includes bibliographical references

2.

Record Nr.	UNINA9910790857703321
Autore	Grimm Volker <1958->
Titolo	Individual-based modeling and ecology / / Volker Grimm, Steven F. Railsback
Pubbl/distr/stampa	Princeton : , : Princeton University Press, , [2005] ©2005
ISBN	0-691-09665-1 1-4008-5062-2
Edizione	[Course Book]
Descrizione fisica	1 online resource (445 p.)
Collana	Princeton Series in Theoretical and Computational Biology ; ; 8 Princeton series in theoretical and computational biology
Classificazione	WC 7000
Altri autori (Persone)	RailsbackSteven F
Disciplina	577/.01/5118
Soggetti	Population biology - Mathematical models Biotic communities - Mathematical models
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 (pages [395]-420) and index.
Nota di contenuto	Introduction -- A primer to modeling -- Pattern-oriented modeling -- Theory in individual-based ecology -- A conceptual framework for designing individual-based models -- Examples -- Formulating individual-based models -- Software for individual-based models -- Analyzing individual-based models -- Communicating individual-based models and research -- Using analytical models in individual-based ecology.
Sommario/riassunto	Individual-based models are an exciting and widely used new tool for ecology. These computational models allow scientists to explore the mechanisms through which population and ecosystem ecology arises from how individuals interact with each other and their environment. This book provides the first in-depth treatment of individual-based modeling and its use to develop theoretical understanding of how ecological systems work, an approach the authors call "individual-based ecology.? Grimm and Railsback start with a general primer on modeling: how to design models that are as simple as possible while still allowing specific problems to be solved, and how to move efficiently through a cycle of pattern-oriented model design, implementation, and analysis. Next, they address the problems of

	theory and conceptual framework for individual-based ecology: What is "theory"? That is, how do we develop reusable models of how system dynamics arise from characteristics of individuals? What conceptual framework do we use when the classical differential equation framework no longer applies? An extensive review illustrates the ecological problems that have been addressed with individual-based models. The authors then identify how the mechanics of building and using individual-based models differ from those of traditional science, and provide guidance on formulating, programming, and analyzing models. This book will be helpful to ecologists interested in modeling, and to other scientists interested in agent-based modeling.

3. Record Nr. UNINA9910830834003321

Autore	Suarez Almudena
Titolo	Analysis and design of autonomous microwave circuits / / Almudena Suarez
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , c2009 [Piscataqay, New Jersey] : , : IEEE Xplore, , 2008
ISBN	1-282-68268-7 9786612682681 0-470-38590-1 0-470-38589-8
Descrizione fisica	1 online resource (729 p.)
Collana	Wiley series in microwave and optical engineering ; ; 19
Disciplina	621.381/32 621.38132
Soggetti	Microwave circuits - Mathematical models Oscillators, Microwave - Automatic control Oscillators, Microwave - Design and construction System analysis
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 and index.
Nota di contenuto	Preface -- 1. Oscillator Dynamics -- 1.1. Introduction -- 1.2. Operational Principle of Free-Running Oscillators -- 1.3. Impedance-

Admittance Analysis of an Oscillator -- 1.4. Frequency-Domain Formulation of an Oscillator Circuit -- 1.5. Oscillator Dynamics -- 1.6. Phase Noise -- 2. Phase Noise -- 2.1. Introduction -- 2.2. Random Variable and random Processes -- 2.3. Noise Sources in Electronic Circuits -- 2.4. Derivation of the Oscillator Noise Spectrum Using Time-Domain Analysis -- 2.5. Frequency-Domain Analysis of a Noisy Oscillator -- 3. Bifurcation Analysis -- 3.1. Introduction -- 3.2. Representation of Solutions -- 3.3. Bifurcations -- 4. Injected Oscillators and Frequency Dividers -- 4.1. Introduction -- 4.2. Injection-Locked Oscillators -- 4.3. Frequency Dividers -- 4.4. Subharmonically and Ultrasubharmonically Injection-Locked Oscillators -- 4.5. Self-Oscillating Mixers -- 5. Nonlinear Circuit Simulation -- 5.1. Introduction -- 5.2. Time-Domain Integration -- 5.3. Fast Time-Domain Techniques -- 5.4. Harmonic Balance -- 5.5. Harmonic Balance Analysis of Autonomous and Synchronized Circuit -- 5.6. Envelope Transient -- 5.7. Conversion Matrix Approach -- 6. Stability Analysis Using Harmonic Balance -- 6.1. Introduction -- 6.2. Local Stability Analysis -- 6.3. Stability Analysis of Free-Running Oscillators -- 6.4. Solution Curves Versus a Circuit Parameter -- 6.5.Global Stability Analysis -- 6.6. Bifurcation Synthesis and Control -- 7. Noise Analysis Using Harmonic Balance -- 7.1. Introduction -- 7.2. Noise in Semiconductor Devices -- 7.3. Decoupled Analysis of Phase and Amplitude Perturbations in a Harmonic Balance System -- 7.4. Coupled Phase and Amplitude Noise Calculation -- 7.5. Carrier Modulation Approach -- 7.6. Conversion Matrix Approach -- 7.7. Noise in Synchronized Oscillators -- 8. Harmonic Balance Techniques for Oscillator Design -- 8.1. Introduction -- 8.2. Oscillator Synthesis -- 8.3. Design of Voltage-Controlled Oscillators
8.4. Maximization of Oscillator Efficiency -- 8.5. Control of Oscillator Transients -- 8.6. Phase Noise Reduction -- 9. Stabilization Techniques for Phase Noise Reduction -- 9.1. Introduction -- 9.2. Self-Injection Topology -- 9.3. Use of High-Q Resonators -- 9.4. Stabilization Loop -- 9.5. Transistor-Based Oscillators -- 10. Coupled-Oscillator Systems -- 10.1. Introduction -- 10.2. Oscillator Systems with Global Coupling -- 10.3. Coupled-Oscillator Systems for Beam Steering -- 11. Simulation Techniques for Frequency-Divider Design -- 11.1. Introduction -- 11.2. Types of frequency dividers -- 11.3. Design of Transistor-Based Regenerative Frequency Dividers -- 11.4. Design of Harmonic Injection Dividers -- 11.5. Extension of the Techniques to Subharmonic Injection Oscillators -- 12. Circuit Stabilization -- 12.1. Introduction -- 12.2. Unstable Class AB Amplifier Using Power Combiners -- 12.3. Unstable Class E/F Amplifier -- 12.4. Unstable Class E Amplifier -- 12.5. Stabilization of Oscillator Circuits -- 12.6. Stabilization of Multifunction MMIC Chips -- Index

Sommario/riassunto

Presents simulation techniques that substantially increase designers' control over the oscillationin autonomous circuits This book facilitates a sound understanding of the free-running oscillation mechanism, the start-up from the noise level, and the establishment of the steady-state oscillation. It deals with the operation principles and main characteristics of free-running and injection-locked oscillators, coupled oscillators, and parametric frequency dividers. Analysis and Design of Autonomous Microwave Circuits provides: . An exploration of the main nonlinear-analysis methods, with emphasis on harmonic balance and envelope transient methods. Techniques for the efficient simulation of the most common autonomous regimes. A presentation and comparison of the main stability-analysis methods in the frequency domain. A detailed examination of the instabilization mechanisms that delimit the operation bands of autonomous circuits.

Coverage of techniques used to eliminate common types of undesired behavior, such as spurious oscillations, hysteresis, and chaos. A thorough presentation of the oscillator phase noise. A comparison of the main methodologies of phase-noise analysis. Techniques for autonomous circuit optimization, based on harmonic balance. A consideration of different design objectives: presetting the oscillation frequency and output power, increasing efficiency, modifying the transient duration, and imposing operation bands Analysis and Design of Autonomous Microwave Circuits is a valuable resource for microwave designers, oscillator designers, and graduate students in RF microwave design