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Autore	Mehrlander Andrea
Titolo	The Germans of Charleston, Richmond and New Orleans during the Civil War period, 1850-1870 [[electronic resource] ] : a study and research compendium // Andrea Mehrlander
Pubbl/distr/stampa	Berlin ; ; New York, : De Gruyter, c2011
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Descrizione fisica	1 online resource (456 p.)
Classificazione	NK 4600
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Foreword by Robert N. Rosen -- Acknowledgements -- Table of Contents -- Introduction -- I. The <Period of the Great German-American Symbiosis>: Immigration & Settlement, 1820 to 1860 -- II. In the Land of Masters and Slaves: The Urban South as the New Home of German Immigrants -- III. Know-Nothing Nativism in Richmond, New Orleans, and Charleston in the 1850's: the Dress Rehearsal for 1861 -- IV. The Antebellum Militias of South Carolina and Virginia up to December 1860: Organization and Significance -- V. Goliath and his Pygmies: the German Antebellum Militias in New Orleans -- VI. The Military Participation of the Ethnic German Minority in Charleston, Richmond, and New Orleans (1861-1865) -- VII. Anaconda & Martial Law: The Germans of the Confederacy in the Stranglehold of the Enemy -- VIII. The First Phase of Reconstruction, 1865-1870: a New Beginning for the Ethnic German Minority --

Conclusions -- Bibliography and Sources -- Appendix A: Ethnic German Companies of South Carolina -- Appendix B: Ethnic German Companies of Virginia -- Appendix C: Ethnic German Companies of Louisiana -- Appendix D: Co -- List of Tables -- List of Illustrations -- Index

Sommario/riassunto

This work is the first monograph which closely examines the role of the German minority in the American South during the Civil War. In a comparative analysis of German civic leaders, businessmen, militia officers and blockade runners in Charleston, New Orleans and Richmond, it reveals a German immigrant population which not only largely supported slavery, but was also heavily involved in fighting the war. A detailed appendix includes an extensive survey of primary and secondary sources, including tables listing the members of the all-German units in Virginia, South Carolina and Louisiana, with

2. Record Nr.	UNINA9910821592603321
Autore	Ghannouchi Fadhel M. <1958->
Titolo	Behavioral modelling and predistortion of wideband wireless transmitters // Fadhel Ghannouchi, Oualid Hammi, Mohamed Helaoui
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Edizione	[1st edition]
Descrizione fisica	1 online resource (272 p.)
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Soggetti	Wireless communication systems - Mathematical models Broadband communication systems - Mathematical models Signal theory (Telecommunication) - Mathematics Telecommunication - Transmitters and transmission - Mathematics Nonlinear systems - Mathematical models Electric distortion - 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 at the end of each chapters and

index.

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Nota di contenuto

Cover; Title Page; Copyright; Contents; About the Authors; Preface; Acknowledgments; Chapter 1 Characterization of Wireless Transmitter Distortions; 1.1 Introduction; 1.1.1 RF Power Amplifier Nonlinearity; 1.1.2 Inter-Modulation Distortion and Spectrum Regrowth; 1.2 Impact of Distortions on Transmitter Performances; 1.3 Output Power versus Input Power Characteristic; 1.4 AM/AM and AM/PM Characteristics; 1.5 1 dB Compression Point; 1.6 Third and Fifth Order Intercept Points; 1.7 Carrier to Inter-Modulation Distortion Ratio; 1.8 Adjacent Channel Leakage Ratio; 1.9 Error Vector Magnitude  
References  
Chapter 2 Dynamic Nonlinear Systems; 2.1 Classification of Nonlinear Systems; 2.1.1 Memoryless Systems; 2.1.2 Systems with Memory; 2.2 Memory in Microwave Power Amplification Systems; 2.2.1 Nonlinear Systems without Memory; 2.2.2 Weakly Nonlinear and Quasi-Memoryless Systems; 2.2.3 Nonlinear System with Memory; 2.3 Baseband and Low-Pass Equivalent Signals; 2.4 Origins and Types of Memory Effects in Power Amplification Systems; 2.4.1 Origins of Memory Effects; 2.4.2 Electrical Memory Effects; 2.4.3 Thermal Memory Effects; 2.5 Volterra Series Models; References  
Chapter 3 Model Performance Evaluation  
3.1 Introduction; 3.2 Behavioral Modeling versus Digital Predistortion; 3.3 Time Domain Metrics; 3.3.1 Normalized Mean Square Error; 3.3.2 Memory Effects Modeling Ratio; 3.4 Frequency Domain Metrics; 3.4.1 Frequency Domain Normalized Mean Square Error; 3.4.2 Adjacent Channel Error Power Ratio; 3.4.3 Weighted Error Spectrum Power Ratio; 3.4.4 Normalized Absolute Mean Spectrum Error; 3.5 Static Nonlinearity Cancellation Techniques; 3.5.1 Static Nonlinearity Pre-Compensation Technique; 3.5.2 Static Nonlinearity Post-Compensation Technique 3.5.3 Memory Effect Intensity  
3.6 Discussion and Conclusion; References; Chapter 4 Quasi-Memoryless Behavioral Models; 4.1 Introduction; 4.2 Modeling and Simulation of Memoryless/Quasi-Memoryless Nonlinear Systems; 4.3 Bandpass to Baseband Equivalent Transformation; 4.4 Look-Up Table Models; 4.4.1 Uniformly Indexed Loop-Up Tables; 4.4.2 Non-Uniformly Indexed Look-Up Tables; 4.5 Generic Nonlinear Amplifier Behavioral Model; 4.6 Empirical Analytical Based Models; 4.6.1 Polar Saleh Model; 4.6.2 Cartesian Saleh Model; 4.6.3 Frequency-Dependent Saleh Model; 4.6.4 Ghorbani Model 4.6.5 Berman and Mahle Phase Model 4.6.6 Thomas-Weidner-Durrani Amplitude Model; 4.6.7 Limiter Model; 4.6.8 ARCTAN Model; 4.6.9 Rapp Model; 4.6.10 White Model; 4.7 Power Series Models; 4.7.1 Polynomial Model; 4.7.2 Bessel Function Based Model; 4.7.3 Chebyshev Series Based Model; 4.7.4 Gegenbauer Polynomials Based Model; 4.7.5 Zernike Polynomials Based Model; References; Chapter 5 Memory Polynomial Based Models; 5.1 Introduction; 5.2 Generic Memory Polynomial Model Formulation; 5.3 Memory Polynomial Model; 5.4 Variants of the Memory Polynomial Model; 5.4.1 Orthogonal Memory Polynomial Model  
5.4.2 Sparse-Delay Memory Polynomial Model

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Sommario/riassunto

Covers theoretical and practical aspects related to the behavioral modelling and predistortion of wireless transmitters and power amplifiers. It includes simulation software that enables the users to apply the theory presented in the book. In the first section, the reader is given the general background of nonlinear dynamic systems along with their behavioral modelling from all its aspects. In the second part, a comprehensive compilation of behavioral models formulations and structures is provided including memory polynomial based models, box oriented models such as Hammerstein-based and Wiener-based models, and neural networks-based models. The book will be a

valuable resource for design engineers, industrial engineers,  
applications engineers, postgraduate students, and researchers  
working on power amplifiers modelling, linearization, and design.

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