

1. Record Nr.	UNINA9910830208603321
Autore	Saleh S. A.
Titolo	An introduction to wavelet modulated inverters // S.A. Saleh, M. Azizur Rahman
Pubbl/distr/stampa	Piscataway, New Jersey : , : IEEE Press, , c2011 [Piscataway, New Jersey] : , : IEEE Xplore, , [2011]
ISBN	1-283-37165-0 9786613371652 1-118-09772-6 0-470-64822-8 0-470-64799-X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (168 p.)
Collana	IEEE Press series on power engineering ; ; 58
Altri autori (Persone)	RahmanM. Azizur (Mohammad Azizur)
Disciplina	621.3815/322 621.3815322
Soggetti	Electric inverters Modulation (Electronics) Wavelets (Mathematics)
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. 135-141) and index.
Nota di contenuto	Frontmatter -- Introduction to Power Inverters -- Wavelets and the Sampling Theorem -- Modeling of Power Inverters -- Scale-Based Linearly Combined Wavelets -- Single-Phase Wavelet Modulated Inverters -- Three-Phase Wavelet Modulated Inverters -- Appendix A: Nondyadic MRA for 3f WM Inverters.
Sommario/riassunto	An authoritative guide to designing and constructing wavelet functions that accurately model complex circuits for better performanceThis is the first book to provide details, analysis, development, implementation, and performances of wavelet modulated (WM) inverters, a novel technique that keeps power systems stable and minimizes energy waste while enhancing power quality and efficiency. Written by experts in the power electronics field, it provides step-by-step procedures to implement the WM technique for single- and three-phase inverters. Also presented are key sample performance results for the new WM power inverters for different load types, which

demonstrate the inverters' simplicity, efficacy, and robustness. Beginning with the fundamentals of inverter technology, the book then describes wavelet basis functions and sampling theory with particular reference to the switching model of inverters. From there, comprehensive chapters explain: The connection between the non-uniform sampling theorem and wavelet functions to develop an ideal sampling-reconstruction process to operate an inverter. The development of scale-based linearly combined basis functions in order to successfully operate single-phase WM inverters. Performances of single-phase WM inverters for static, dynamic, and non-linear loads. The simulation and experimental performances of three-phase wavelet modulated voltage source inverters for different loads at various operating conditions. The book establishes, for the first time, a direct utilization of different concepts of the sampling theorem and signal processing in accurate modeling of the operation of single- and three-phase inverters. Figures are provided to help develop the basis of utilizing concepts of the sampling, signal processing, and wavelet theories in developing a new tool and technology for inverters. Also included are easy-to-follow mathematical derivations, as well as procedures and flowcharts to facilitate the implementation of the WM inverters. These items make this unique reference of great interest to academic researchers, industry-based researchers, and practicing engineers. It is ideally suited for senior undergraduate and graduate-level students in electrical engineering, computer engineering, applied signal processing, and power electronics courses.

2. Record Nr.	UNINA9910866587303321
Autore	Zhai Guangtao
Titolo	Digital Multimedia Communications : 20th International Forum on Digital TV and Wireless Multimedia Communications, IFTC 2023, Beijing, China, December 21–22, 2023, Revised Selected Papers, Part II // edited by Guangtao Zhai, Jun Zhou, Long Ye, Hua Yang, Ping An, Xiaokang Yang
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9736-26-9
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (413 pages)
Collana	Communications in Computer and Information Science, , 1865-0937 ; ; 2067
Altri autori (Persone)	ZhouJun YeLong YangHua AnPing YangXiaokang
Disciplina	006.7
Soggetti	Multimedia systems Application software Artificial intelligence Image processing - Digital techniques Computer vision Multimedia Information Systems Computer and Information Systems Applications Artificial Intelligence Computer Imaging, Vision, Pattern Recognition and Graphics Sistemes multimèdia Programari d'aplicació Intel·ligència artificial Processament d'imatges Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

-- Quality Assessment. -- AUIQE: Attention-Based Underwater Image Quality Evaluator. -- I2QED: A Benchmark Database for Infrared Imaging Quality Evaluation. -- Perceptual Blind Panoramic Image Quality Assessment Based on Super-Pixel. -- Image Aesthetics Assessment Based on Visual Perception and Textual Semantic Understanding. -- An Omnidirectional Videos Quality Assessment Method Using Salient Object Information. -- A No-Reference Stereoscopic Image Quality Assessment Based on Cartoon Texture Decomposition and Human Visual System. -- Decoding the Flow Experience in Video Games: An Analysis of Physiological and Performance Metrics. -- Source Coding. -- ULIC: Ultra Lightweight Image Coder on Wearable Devices. -- Temporal Dependency-Oriented Deep In-Loop Filter for VVC. -- Resolution-Agnostic Neural Compression for High-Fidelity Portrait Video Conferencing via Implicit Radiance Fields. -- Fast QTMT Decision for H.266/VVC via Jointly Leveraging Neural Network and Machine Learning Models. -- End-to-End Image Compression Through Machine Semantics. -- Application of AI. -- PM2.5 Concentration Measurement Based on Natural Scene Statistics and Progressive Learning. -- Human-Centered Financial Signal Processing: A Case Study on Stock Chart Analysis. -- Unsupervised Event-to-Image Reconstruction Based on Domain Adaptation. -- Adjusting Exploitation and Exploration Rates of Differential Evolution: A Novel Mutation Strategy. -- Revealing Real Face for Generalized Anti-Spoofing. -- Study on Sound Insulation Performance of Membrane-Type Acoustic Metamaterials with Pendulum Arm. -- An Anomaly Detection Framework for Propagation Networks Leveraging Deep Learning. -- MABC-Net: Multimodal Mixed Attentional Network with Balanced Class for Temporal Forgery Localization. -- Exploiting Diffusion Model as Prompt Generator for Object Localization. -- Depression Recognition Based on Pre-Trained ResNet-18 Model and Brain Effective Connectivity Network. -- ChatASD: LLM-Based AI Therapist for ASD. -- Billiards Hitting Assistance System. -- Visual Detection System for Industrial Defects. -- A Multimodal Registration and Fusion Diagnostic System Based on Multi-Scale Feature. -- CCDaS: A Benchmark Dataset for Cartoon Character Detection in Application Scenarios. -- Driving Dynamics: An In-depth Analysis of Attention Allocation Between Driver and Co-Driver in a Simulated Environment.

Sommario/riassunto

This book constitutes the refereed proceedings of the 20th International Forum on Digital Multimedia Communication, IFTC 2023, held in Beijing, China, December 21–22, 2023. The 57 full papers included in this book were carefully reviewed and selected from 150 submissions. They were organized in topical sections as follows: CCIS 2066: Image Processing, Media Computing, Metaverse and Virtual Reality, and Multimedia Communication. CCIS 2067: Quality Assessment, Source Coding, and Application of AI.