

1. Record Nr.	UNISA996267132803316
Titolo	Power electronics and electric drives for traction applications / / edited by Gonzalo Abad
Pubbl/distr/stampa	Chichester, West Sussex, United Kingdom : , : John Wiley & Sons, Incorporated, , 2017
ISBN	1-118-95443-2 1-118-95445-9
Descrizione fisica	1 online resource (647 p.)
Disciplina	621.8/5
Soggetti	Traction drives Electric driving 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 and index.
Nota di contenuto	Title Page ; Copyright; Contents; List of contributors; Preface; Chapter 1 Introduction; 1.1 Introduction to the book; 1.2 Traction applications; 1.3 Electric drives for traction applications; 1.3.1 General description; 1.3.2 Different electric drive configurations; 1.4 Classification of different parts of electric drives: converter, machines, control strategies, and energy sources; 1.4.1 Converters; 1.4.2 Machines; 1.4.3 Control strategies; 1.4.4 AC and DC voltage sources; 1.5 Future challenges for electric drives; 1.6 Historical evolution; References; Chapter 2 Control of induction machines 2.1 Introduction2.2 Modeling of induction motors; 2.2.1 Dynamic model of the induction motor using three-phase variables; 2.2.2 Basics of space vector theory; 2.2.3 Dynamic model of the induction machine using complex space vectors; 2.2.4 Dynamic model in the stationary reference frame; 2.2.5 Dynamic models in a synchronous reference frame; 2.2.6 Torque and power equations; 2.3 Rotor flux oriented vector control; 2.3.1 Fundamentals of rotor flux oriented control; 2.3.2 The stator voltage equation; 2.3.3 Synchronous current regulators; 2.3.4 Rotor flux estimation 2.4 Torque capability of the induction machine2.4.1 Constant torque region; 2.4.2 Flux-weakening region I (constant power region); 2.4.3

Flux-weakening region II (constant Temm2); 2.5 Rotor flux selection; 2.5.1 Rotor flux reference selection below rated speed; 2.5.2 Accurate criteria for flux reference generation; 2.5.3 Feedback based field weakening; 2.6 Outer control loops; 2.6.1 Speed control; 2.6.2 Rotor flux control loop; 2.7 Sensorless control; 2.7.1 Sensorless control of induction machines using model-based methods; 2.7.2 Sensorless control using saliency-tracking-based methods
2.8 Steady-state equations and limits of operation of the induction machine2.8.1 Calculation of the maximum capability curves; 2.8.2 Calculation of the steady-state operation; References; Chapter 3 Control of synchronous machines ; 3.1 Introduction; 3.2 Types of synchronous machines; 3.3 Modeling of synchronous machines; 3.3.1 Dynamic models of synchronous machines using three-phase variables; 3.3.2 Dynamic model of synchronous machines in the stationary reference frame using complex space vectors; 3.3.3 Dynamic model of synchronous machines in the synchronous reference frame
3.4 Torque equation for synchronous machines3.4.1 Surface permanent magnet synchronous machine (non-salient machines); 3.4.2 Interior permanent magnet synchronous machine (salient machines with magnets); 3.4.3 Synchronous reluctance machines (salient machines without magnets); 3.4.4 Maximum torque per ampere (MTPA) in interior permanent magnet machines; 3.5 Vector control of permanent magnet synchronous machines; 3.5.1 Vector control of non-salient synchronous machines; 3.5.2 Vector control of salient synchronous machines; 3.5.3 Synchronous current regulators
3.6 Operation under voltage and current constraints

2. Record Nr.	UNISA996466067103316
Titolo	Functional imaging and modeling of the heart : 4th international conference, FIMH 2007, Salt Lake City, UT, USA, June 7-9, 2007 : proceedings / / Frank B. Sachse, Gunnar Seemann (editors)
Pubbl/distr/stampa	Berlin ; ; Heidelberg ; ; New York : , : Springer, , [2007] ©2007
ISBN	3-540-72907-0
Edizione	[1st ed. 2007.]
Descrizione fisica	1 online resource (497 p.)
Collana	Lecture notes in computer science ; ; 4466
Disciplina	611.12
Soggetti	Heart - Imaging Heart - Computer simulation
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	Imaging and Image Analysis -- Local Wall-Motion Classification in Echocardiograms Using Shape Models and Orthomax Rotations -- A Fully 3D System for Cardiac Wall Deformation Analysis in MRI Data -- Automated Tag Tracking Using Gabor Filter Bank, Robust Point Matching, and Deformable Models -- Strain Measurement in the Left Ventricle During Systole with Deformable Image Registration -- Vessel Enhancement in 2D Angiographic Images -- Effect of Noise and Slice Profile on Strain Quantifications of Strain Encoding (SENC) MRI -- Reconstruction of Detailed Left Ventricle Motion from tMRI Using Deformable Models -- Computer Aided Reconstruction and Motion Analysis of 3D Mitral Annulus -- Volumetric Analysis of the Heart Using Echocardiography -- Constrained Reconstruction of Sparse Cardiac MR DTI Data -- An Experimental Framework to Validate 3D Models of Cardiac Electrophysiology Via Optical Imaging and MRI -- A Framework for Analyzing Confocal Images of Transversal Tubules in Cardiomyocytes -- Cardiac Electrophysiology -- Computer Simulation of Altered Sodium Channel Gating in Rabbit and Human Ventricular Myocytes -- Scroll Waves in 3D Virtual Human Atria: A Computational Study -- Determining Recovery Times from Transmembrane Action Potentials and Unipolar Electrograms in Normal Heart Tissue -- Simulations of Cardiac Electrophysiological Activities Using a Heart-

Torso Model -- An Anisotropic Multi-front Fast Marching Method for Real-Time Simulation of Cardiac Electrophysiology -- Parallel Solution in Simulation of Cardiac Excitation Anisotropic Propagation -- A Three Dimensional Ventricular E-Cell (3Dv E-Cell) with Stochastic Intracellular Ca $^{2+}$? Handling -- A Model for Simulation of Infant Cardiovascular Response to Orthostatic Stress -- Effects of Geometry and Architecture on Re-entrant Scroll Wave Dynamics in Human Virtual Ventricular Tissues -- Can We Trust the Transgenic Mouse? Insights from Computer Simulations -- Relating Discontinuous Cardiac Electrical Activity to Mesoscale Tissue Structures: Detailed Image Based Modeling -- Electro- and Magetocardiography -- Is There Any Place for Magnetocardiographic Imaging in the Era of Robotic Ablation of Cardiac Arrhythmias? -- Towards the Numerical Simulation of Electrocardiograms -- Experimental Measures of the Minimum Time Derivative of the Extracellular Potentials as an Index of Electrical Activity During Metabolic and Hypoxic Stress -- Experimental Epicardial Potential Mapping in Mouse Ventricles: Effects of Fiber Architecture -- Noninvasive Electrocardiographic Imaging: Application of Hybrid Methods for Solving the Electrocardiography Inverse Problem -- Towards Noninvasive 3D Imaging of Cardiac Arrhythmias -- Forward and Inverse Solutions of Electrocardiography Problem Using an Adaptive BEM Method -- Contributions of the 12 Segments of Left Ventricular Myocardium to the Body Surface Potentials -- Numerical Analysis of the Resolution of Surface Electrocardiographic Lead Systems -- Simultaneous High-Resolution Electrical Imaging of Endocardial, Epicardial and Torso-Tank Surfaces Under Varying Cardiac Metabolic Load and Coronary Flow -- Cardiac Mechanics and Clinical Application -- Characteristic Strain Pattern of Moderately Ischemic Myocardium Investigated in a Finite Element Simulation Model -- Constitutive Modeling of Cardiac Tissue Growth -- Effect of Pacing Site and Infarct Location on Regional Mechanics and Global Hemodynamics in a Model Based Study of Heart Failure -- Effective Estimation in Cardiac Modelling -- Open-Source Environment for Interactive Finite Element Modeling of Optimal ICD Electrode Placement -- Mathematical Modeling of Electromechanical Function Disturbances and Recovery in Calcium-Overloaded Cardiomyocytes -- Locally Adapted Spatio-temporal Deformation Model for Dense Motion Estimation in Periodic Cardiac Image Sequences -- Imaging and Anatomical Modeling -- Visualisation of Dog Myocardial Structure from Diffusion Tensor Magnetic Resonance Imaging: The Paradox of Uniformity and Variability -- Statistical Comparison of Cardiac Fibre Architectures -- Extraction of the Coronary Artery Tree in Cardiac Computer Tomographic Images Using Morphological Operators -- Segmentation of Myocardial Regions in Echocardiography Using the Statistics of the Radio-Frequency Signal -- A Hyperelastic Deformable Template for Cardiac Segmentation in MRI -- Automated Segmentation of the Left Ventricle Including Papillary Muscles in Cardiac Magnetic Resonance Images -- Simulation of 3D Ultrasound with a Realistic Electro-mechanical Model of the Heart -- Automated, Accurate and Fast Segmentation of 4D Cardiac MR Images.

3. Record Nr.	UNIORUON00041088
Autore	PANTANELLI, Enrico
Titolo	Le risorse idriche della Cirenaica / Enrico Pantanelli ; con prefazione di Giuseppe Tassinari
Pubbl/distr/stampa	91 p. ; 24 cm
Edizione	[Firenze : Regio Istituto Agronomico per l'Africa Italiana]
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Soggetti	LIBIA - Geografia - Cirenaica CIRENAICA (LIBIA) - CARTE IDROGRAFICHE
Lingua di pubblicazione	Italiano
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Livello bibliografico	Monografia