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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 Magnetocardiography -- 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.
