IEEE Journal of Biomedical and Health Informatics

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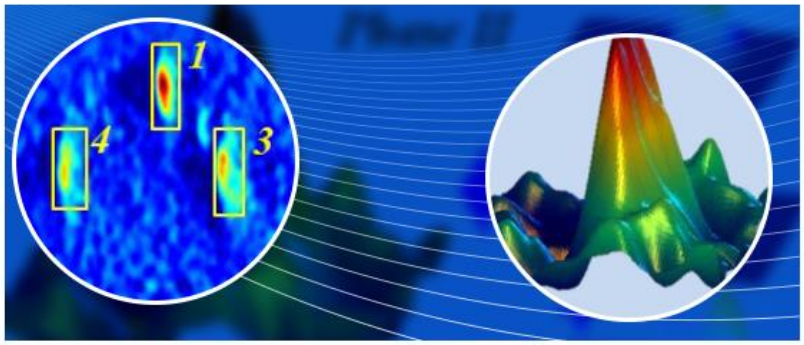
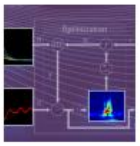
Featured Article



Two-Phase Greedy Pursuit Algorithm for Automatic Detection and Characterization of Transient Calcium Signaling

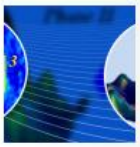
This paper presents a novel two-phase greedy pursuit (TPGP) algorithm for automatic detection and characterization of calcium sparks. In Phase I, a coarse-grained search is conducted across the whole image to identify the predominant sparks. In Phase II, adaptive basis function model is developed for the fine-grained representation of detected sparks. Experimental results show that TPGP algorithms yield better performances than previous hard-thresholding approaches in terms of both sensitivities and positive predicted values. The present research provides the community a more robust tool for the automatic detection and characterization of transient calcium signaling.



Epsilon-Tube Filtering: Reduction of High-Amplitude Motion Artifacts from Impedance Plethysmography Signal

Vein Visualization Using a Smart Phone with Multispectral Wiener Estimation for Point-of-Care Applications

Integrative Clustering by Non-Negative Matrix Factorization Can Reveal Coherent Functional Groups from Gene Profile Data



Two-Phase Greedy Pursuit Algorithm for Automatic Detection and Characterization of Transient Calcium Signaling

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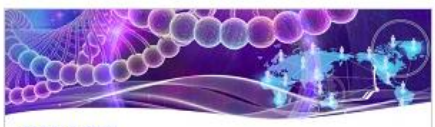
Manuscripts may deal with these applications and their integration, such as clinical information systems, decision support systems, medical and biological imaging informatics, wearable systems, body senor networks, informatics in biological and physiological systems, personalized and pervasive health technologies (telemedicine, u-, p-, m- and e-Health) for public health, home healthcare and wellness management. Topics related to integration include interoperability, protocol-based patient care, evidence-based medicine, and methods of secure patient data.



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