

IEEE TRANSACTIONS ON NEURAL SYSTEMS AND REHABILITATION ENGINEERING

A PUBLICATION OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY

The IEEE gratefully recognizes the technical co-sponsorship of RESNA and IFESS in the marketing and editing of this Transactions.



Indexed in the National Library of Medicine, PubMed®, and MEDLINE®



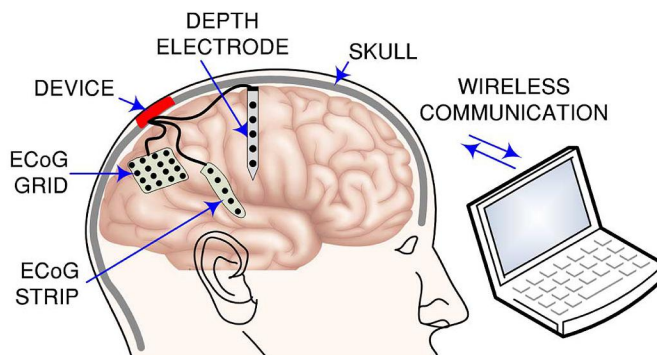
JUNE 2016

VOLUME 24

NUMBER 6

ITNSB3

(ISSN 1534-4320)



Envisioned implant configuration of the proposed therapeutic neurostimulation device, as described in the paper "Seizure Suppression Efficacy of Closed-Loop Versus Open-Loop Deep Brain Stimulation in a Rodent Model of Epilepsy" by M. T. Salam, J. L. Perez Velazquez, and R. Genov, on p. 710.

IEEE TRANSACTIONS ON NEURAL SYSTEMS AND REHABILITATION ENGINEERING

JUNE 2016

VOLUME 24

NUMBER 6

ITNSB3

(ISSN 1534-4320)

PAPERS

Neural Engineering

- Estimating the Mechanical Behavior of the Knee Joint During Crouch Gait: Implications for Real-Time Motor Control of Robotic Knee Orthoses Z. F. Lerner, D. L. Damiano, and T. C. Bulea 621
- An EEMD-ICA Approach to Enhancing Artifact Rejection for Noisy Multivariate Neural Data K. Zeng, D. Chen, G. Ouyang, L. Wang, X. Liu, and X. Li 630

Rehabilitation Engineering

- Sit-to-Stand Trainer: An Apparatus for Training “Normal-Like” Sit to Stand Movement Z. Matjačić, M. Zadravec, and J. Oblak 639
- Improving the Performance Against Force Variation of EMG Controlled Multifunctional Upper-Limb Prostheses for Transradial Amputees A. H. Al-Timemy, R. N. Khushaba, G. Bugmann, and J. Escudero 650
- Extraction and Classification of Multichannel Electromyographic Activation Trajectories for Hand Movement Recognition M. AbdelMaseeh, T.-W. Chen, and D. Stashuk 662
- Application of the F-Response for Estimating Motor Unit Number and Amplitude Distribution in Hand Muscles of Stroke Survivors X. Li, M. Fisher, W. Z. Rymer, and P. Zhou 674

Neural and Rehabilitation Interface

- Robot-Mediated Imitation Skill Training for Children With Autism Z. Zheng, E. M. Young, A. R. Swanson, A. S. Weitlauf, Z. E. Warren, and N. Sarkar 682
- Using a cVEP-Based Brain-Computer Interface to Control a Virtual Agent H. Riechmann, A. Finke, and H. Ritter 692
- Optimal Multitrial Prediction Combination and Subject-Specific Adaptation for Minimal Training Brain Switch Designs L. Spyrou, Y. Blokland, J. Farquhar, and J. Bruhn 700
- Seizure Suppression Efficacy of Closed-Loop Versus Open-Loop Deep Brain Stimulation in a Rodent Model of Epilepsy M. T. Salam, J. L. Perez Velazquez, and R. Genov 710

ANNOUNCEMENTS

- Call for Papers: IEEE EMBS Micro and Nanoengineering in Medicine Conference 720
- IEEE EMBS Special Topic Conference on Healthcare Innovations and Point-of-Care Technologies 721
- IEEE International Symposium on Biomedical Imaging 722
- IEEE SMC 6th Workshop on Brain—Machine Interface Systems 723
- Wireless Health Conference 724
-