

IEEE TRANSACTIONS ON **BIOMEDICAL ENGINEERING**

A PUBLICATION OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY



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



JUNE 2016

VOLUME 63

NUMBER 6

IEBEAX

(ISSN 0018-9294)

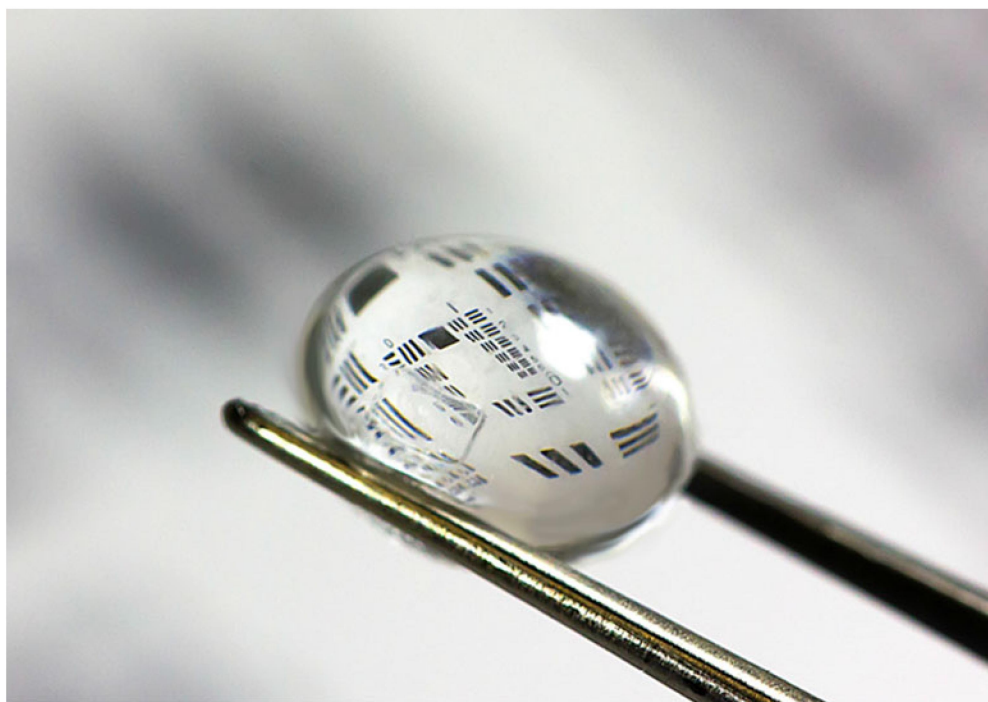


Image of the proposed flexible fluid lens. See “Biomimetic Accommodating Intraocular Lens Using a Valved Deformable Liquid Balloon,” by DeBoer *et al.*, p. 1130.

IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING

A PUBLICATION OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY



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



JUNE 2016

VOLUME 63

NUMBER 6

IEBEAX

(ISSN 0018-9294)

REGULAR PAPERS

Noncontact Monitoring of Blood Oxygen Saturation Using Camera and Dual-Wavelength Imaging System	1091
..... <i>D. Shao, C. Liu, F. Tsow, Y. Yang, Z. Du, R. Iriya, H. Yu, and N. Tao</i>	
Analysis of Moving-Coil Actuator Jet Injectors for Viscous Fluids	1099
..... <i>R. M. J. Williams, B. P. Ruddy, N. C. Hogan, I. W. Hunter, P. M. F. Nielsen, and A. J. Taberner</i>	
Iterative Correction Scheme Based on Discrete Cosine Transform and L1 Regularization for Fluorescence Molecular Tomography With Background Fluorescence	1107
..... <i>J. Zhang, J. Shi, H. Guang, S. Zuo, F. Liu, J. Bai, and J. Luo</i>	
Elastic Stability of Concentric Tube Robots Subject to External Loads	1116
..... <i>J. Ha, F. C. Park, and P. E. Dupont</i>	
Biomimetic Accommodating Intraocular Lens Using a Valved Deformable Liquid Balloon	1129
..... <i>C. M. T. DeBoer, J. K. Lee, B. P. Wheelan, C. Cable, W. Shi, Y.-C. Tai, and M. S. Humayun</i>	
A Motion Interference-Insensitive Flexible Dry Electrode	1136
..... <i>H. Zhang, W. Pei, Y. Chen, X. Guo, X. Wu, X. Yang, and H. Chen</i>	
MAPS: A Quantitative Radiomics Approach for Prostate Cancer Detection	1145
..... <i>A. Cameron, F. Khalvati, M. A. Haider, and A. Wong</i>	
Comparison of Auditory Middle-Latency Responses From Two Deconvolution Methods at 40 Hz	1157
..... <i>X.-D. Tan, X. Peng, C. A. Zhan, and T. Wang</i>	
Methods for Improving the Curvature of Steerable Needles in Biological Tissue	1167
..... <i>T. K. Adebear, J. D. Greer, P. F. Laeseke, G. L. Hwang, and A. M. Okamura</i>	
A New Feature-Enhanced Speckle Reduction Method Based on Multiscale Analysis for Ultrasound B-Mode Imaging ...	1178
..... <i>J. Kang, J. Y. Lee, and Y. Yoo</i>	
Switched LPV Glucose Control in Type 1 Diabetes	1192
..... <i>P. H. Colmegna, R. S. Sánchez-Peña, R. Gondhalekar, E. Dassau, and F. J. Doyle</i>	
Continuous Monitoring of Aortic Valve Opening in Rotary Blood Pump Patients	1201
..... <i>M. Granegger, M. Masetti, R. Laohasurayodhin, T. Schloegelhofer, D. Zimpfer, H. Schima, and F. Moscato</i>	

(Contents Continued on Page 1090)



Multiatlas-Based Segmentation Editing With Interaction-Guided Patch Selection and Label Fusion	1208
. <i>S. H. Park, Y. Gao, and D. Shen</i>	
Patient-Specific Oscillometric Blood Pressure Measurement	1220
. <i>J. Liu, H.-M. Cheng, C.-H. Chen, S.-H. Sung, M. Moslehpour, J.-O. Hahn, and R. Mukkamala</i>	
Design and Control of a Mechatronic Tracheostomy Tube for Automated Tracheal Suctioning	1229
. <i>T. N. Do, T. E. T. Seah, and S. J. Phee</i>	
A Circuit Model of Real Time Human Body Hydration	1239
. <i>C. O. Asogwa, A. K. Teshome, S. F. Collins, and D. T. H. Lai</i>	
Application-Driven No-Reference Quality Assessment for Dermoscopy Images With Multiple Distortions	1248
. <i>F. Xie, Y. Lu, A. C. Bovik, Z. Jiang, and R. Meng</i>	
Stimulation Frequency Alters the Dorsal Root Ganglion Neurite Growth and Directionality <i>In Vitro</i>	1257
. <i>P. J. Kumar, R. D. Adams, A. B. Harkins, E. D. Engeberg, and R. K. Willits</i>	
Separation and Analysis of Fetal-ECG Signals From Compressed Sensed Abdominal ECG Recordings	1269
. <i>G. Da Poian, R. Bernardini, and R. Rinaldo</i>	
Unsupervised Trajectory Segmentation for Surgical Gesture Recognition in Robotic Training	1280
. <i>F. Despinoy, D. Bouget, G. Forestier, C. Penet, N. Zemiti, P. Pognet, and P. Jannin</i>	
Estimation of Fluorescence Lifetimes Via Rotational Invariance Techniques	1292
. <i>H. Yu, R. Saleeb, P. Dalgarno, and D. D.-U. Li</i>	
Simultaneous CT-MRI Reconstruction for Constrained Imaging Geometries Using Structural Coupling and Compressive Sensing	1301
. <i>Y. Xi, J. Zhao, J. R. Bennett, M. R. Stacy, A. J. Sinusas, and G. Wang</i>	
An Unsorted Spike-Based Pattern Recognition Method for Real-Time Continuous Sensory Event Detection from Dorsal Root Ganglion Recording	1310
. <i>S. Han, J.-U. Chu, H. Kim, K. Choi, J. W. Park, and I. Youn</i>	
Epileptic Seizure Prediction Based on Multivariate Statistical Process Control of Heart Rate Variability Features	1321
. <i>K. Fujiwara, M. Miyajima, T. Yamakawa, E. Abe, Y. Suzuki, Y. Sawada, M. Kano, T. Maehara, K. Ohta, T. Sasai-Sakuma, T. Sasano, M. Matsuura, and E. Matsushima</i>	
Noninvasive Imaging of High-Frequency Drivers and Reconstruction of Global Dominant Frequency Maps in Patients With Paroxysmal and Persistent Atrial Fibrillation	1333
. <i>Z. Zhou, Q. Jin, L. Y. Chen, L. Yu, L. Wu, and B. He</i>	
<hr/>	
COMMENTS AND CORRECTIONS	
Corrections to “Neural Data-Driven Musculoskeletal Modeling for Personalized Neurorehabilitation Technologies”	1341
. <i>M. Sartori, D. G. Lloyd, and D. Farina</i>	
<hr/>	
ANNOUNCEMENTS	
Call For Papers: IEEE-NIH 2016 Special Topics Conference on Healthcare Innovations and Point-of-Care Technologies	1342
Call For Papers: EMBS Micro and Nanoengineering in Medicine Conference	1343
Call For Papers: IEEE International Symposium on Biomedical Imaging	1344
