2018 IEEE International Symposium on Medical Measurements and Applications (MeMeA 2018)

Rome, Italy
11-13 June 2018

Pages 1-551

Additional Copies of This Publication Are Available From:

Technical Papers Table of Contents
Monday, June 11, 2018

Technical Papers Table of Contents
Monday, June 11, 2018

Technical Papers Table of Contents
Monday, June 11, 2018

11:15 – 12:55
SS1: Special Session: Application of fiber optic sensors to medical devices and instruments
Room: Aula Multimediale

Technical Papers Table of Contents
Monday, June 11, 2018

Technical Papers Table of Contents
Monday, June 11, 2018

Technical Papers Table of Contents
Monday, June 11, 2018

14:30 – 16:10
T5.2: Measurements for biotechnology, physiology and biomechanics (II)
Room: Saletta del Chiostro

Technical Papers Table of Contents
Monday, June 11, 2018

14:30 – 16:10
SS2.1: Special Session: Measuring myoelectric function to predict, assess, assist in, and recover from motor-related disorders (I)
Room: Aula Multimediale

Technical Papers Table of Contents
Monday, June 11, 2018

Technical Papers Table of Contents
Monday, June 11, 2018

16:30 – 18:10
T1.3: Sensors and transducers for medical systems (III)
Room: Sala del Chiostro

Kyoko Katayama (Shinshu University, Japan)
H Ishizawa (Shinshu University, Japan)
Shouhei Koyama (Shinshu University, Japan)
Keisaku Fujimoto (Shinshu University, Japan)

Mayyada Hawsawi (King Abdullah University of Science and Technology, Saudi Arabia)
Selma Amara (King Abdullah University of Science and Technology, Saudi Arabia)
Yousof Mashraei (King Abdullah University of Science and Technology, Saudi Arabia)
Abdullah Almansouri (King Abdullah University of Science and Technology, Saudi Arabia)
Hanan Mohammed (King Abdullah University of Science and Technology, Saudi Arabia)
Galo Torres Sevilla (King Abdullah University of Science and Technology, Saudi Arabia)
Gerhard Jakob (Johannes Gutenberg Universität Mainz, Germany)
Samridh Jaiswal (Johannes Gutenberg Universität Mainz, Germany)
Mathias Kläui (Johannes Gutenberg Universität Mainz, Germany)
Ali Haneef (King Abdullah International Medical Research Center, Saudi Arabia)
Abdelhamid Saoudi (King Abdullah International Medical Research Center, Saudi Arabia)
Muhammad Hussain (King Abdullah University of Science and Technology, Saudi Arabia)
Jürgen Kosel (King Abdullah University of Science and Technology, Saudi Arabia)

Ganesh Arvind C (IIT Madras, India)
Renganathan Bellagunda Santhanakrishnan (IIT Madras, India)
Rajakumaran C (Physiotherapist and Ergonomics Consultant, Chennai, India)
Preejith Sp (IIT Madras, India)
Shubham Khandelwal (IIT Madras, India)
Jayaraj Joseph (IIT Madras, India)
Mohanasankar Sivaprakasam (IIT Madras, India)

Selma Amara (King Abdullah University of Science and Technology, Saudi Arabia)
Ride Bu (Shandong University, Saudi Arabia)
Meshal Alawein (King Abdullah University of Science and Technology, Saudi Arabia)
Nouf Alsharif (King Abdullah University of Science and Technology, Saudi Arabia)
Mohammed Asadullah Khan (King Abdullah University of Science and Technology, Saudi Arabia)
Yan Wen (King Abdullah University of Science and Technology, Saudi Arabia)
Xixiang Zhang (King Abdullah University of Science and Technology, Saudi Arabia)
Jürgen Kosel (King Abdullah University of Science and Technology, Saudi Arabia)
Hossein Fariborzi (King Abdullah University of Science and Technology, Saudi Arabia)

Amente Bekele (Carleton University, Canada)
Shermeen Nizami (Carleton University, Canada)
Yasmina Souley Dosso (Carleton University, Canada)
Cheryl Aubertin and Kim Greenwood (Children's Hospital of Eastern Ontario, Canada)
JoAnn Harrold (The Children's Hospital of Eastern Ontario, Ottawa, Canada)
James R Green (Carleton University, Canada)

Technical Papers Table of Contents
Monday, June 11, 2018

Technical Papers Table of Contents
Monday, June 11, 2018

Technical Papers Table of Contents
Monday, June 11, 2018

16:30 – 18:10
T2.3: Biosignal processing for diagnostics in medicine (III)
Room: Aula 1

Technical Papers Table of Contents
Tuesday, June 12, 2018

9:30 – 12:30
Poster Session
Room: Colonnade of the Sangallo Cloister

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Tuesday, June 12, 2018

9:30 – 11:10
T11.1: Wearable physiology and activity monitor (I)
Room: Sala del Chiostro

Technical Papers Table of Contents
Tuesday, June 12, 2018

9:30 – 11:10
T5.3: Measurements for biotechnology, physiology and biomechanics (III)
Room: Saletta del Chiostro

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Tuesday, June 12, 2018

9:30 – 11:10
T6.1: Measurements in medical imaging (I)
Room: Aula 1

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Tuesday, June 12, 2018

11:30 – 13:10
SS3: Special Session: Industrial track
Room: Aula Multimediale

Technical Papers Table of Contents
Tuesday, June 12, 2018

11:30 – 13:10
T6.2: Measurements in medical imaging (II)
Room: Aula 1

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Tuesday, June 12, 2018

14:45 – 16:25
SS6.1: Special Session: Novel Techniques in Medical Ultrasound (I)
Room: Aula Multimediale

Technical Papers Table of Contents
Tuesday, June 12, 2018

14:45 – 16:25
T6.3: Measurements in medical imaging (III)
Room: Aula 1

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Tuesday, June 12, 2018

Technical Papers Table of Contents
Wednesday, June 13, 2018

9:00 – 10:40
T11.3: Wearable physiology and activity monitor (III)
Room: Sala del Chiostro

Technical Papers Table of Contents
Wednesday, June 13, 2018

9:00 – 10:40
T4.1: E-health technologies and remote monitoring for disability and aging (I)
Room: Saletta del Chiostro

Technical Papers Table of Contents
Wednesday, June 13, 2018

9:00 – 10:40
SS5.1: Special Session: Motion capture measurement systems for medical applications (I)
Room: Aula Multimediale

Technical Papers Table of Contents
Wednesday, June 13, 2018

9:00 – 10:40
T2.4: Biosignal processing for diagnostics in medicine (IV)
Room: Aula 1

Mariachiara Ricci (University of Rome Tor Vergata, Italy)
Franco Giannini (University of Rome Tor Vergata, Italy)
Giovanni Saggio (University of Rome Tor Vergata, Italy)
Carla Cenci (University of Rome Tor Vergata, Italy)
Giulia Di Lazzaro (University of Rome Tor Vergata, Italy)
Antonio Pisani (University of Rome Tor Vergata, Italy)

Andrzej Majkowski (Warsaw University of Technology, Poland)
Marcin Kolodziej (Warsaw University of Technology, Poland)
Remigiusz J. Rak (Warsaw University of Technology, Poland)
Andrzej Rysz (Medical University of Warsaw, Poland)

Umit Ozsandikcioglu (Karadeniz Technical University, Turkey)
Ayten Atasoy (Karadeniz Technical University, Turkey)
Şule Yapıcı (Karadeniz Technical University, Turkey)

Tommaso Addabbo (University of Siena, Italy)
Ada Fort (University of Siena, Italy)
Riccardo Moretti (University of Siena, Italy)
Marco Mugnaini (University of Siena, Italy)
Valerio Vignoli (University of Siena, Italy)
Maurizio Gennaro Cataldo (University of Siena, Italy)
Gabriele Cevenini (University of Siena, Italy)
Federico Franchi (University of Siena, Italy)

Paolo Marchionni (Università Politecnica delle Marche, Italy)
Luca Antognoli (Università Politecnica delle Marche, Italy);
Stefano Nobile (Azienda Ospedaliero-Universitaria Ospedali Riuniti, Italy)
Virgilio Carnielli (Università Politecnica delle Marche, Italy)
Lorenzo Scalise (Università Politecnica delle Marche, Italy)

Technical Papers Table of Contents
Wednesday, June 13, 2018

11:10 – 12:50
T11.4: Wearable physiology and activity monitor (IV)
Room: Sala del Chiostro

Technical Papers Table of Contents
Wednesday, June 13, 2018

11:10 – 12:50
T4.2: E-health technologies and remote monitoring for disability and aging (II)
Room: Saletta del Chiostro

François Charih (Carleton University, Canada)
Matthew Bromwich (Children's Hospital of Eastern Ontario, Canada)
Renée Lefrançois (Clearwater Clinical Limited, Canada)
Amy E. Mark (Clearwater Clinical Limited, Canada)
James R Green (Carleton University, Canada)

Balazs Tusor (Óbuda University & Integrated Intelligent Systems Japanese-Hungarian Laboratory, Hungary)
Annamária R. Várkonyi-Kóczy (Óbuda University, Hungary)
József Bukor (J. Selye University, Slovakia)

Ilaria Mileti (Sapienza University of Rome, Italy)
Juri Taborri (University of Tuscia, Viterbo, Italy)
Stefano Rossi (University of Tuscia, Italy)
Zaccaria Del Prete (Sapienza University of Rome, Italy)
Marco Paoloni (Sapienza University of Rome, Italy)
Antonio Suppa (Sapienza University of Rome, Italy
Eduardo Palermo (Sapienza University of Rome, Italy)

André F Manso (IST - Instituto Superior Técnico, Universidade de Lisboa, Portugal)
Ana Fred (I.S.T. - Technical U. Lisbon / I.T. Lisbon, Portugal);
Rui C. Neves (CAST - Cons. e Apl. em Sistemas e Tecnologias, Lda., Portugal)
Rui C. Ferreira (Hospital Santa Marta - CHLC, Portugal)

Technical Papers Table of Contents
Wednesday, June 13, 2018

11:10 – 12:50
SS5.2: Special Session: Motion capture measurement systems for medical applications (II)
Room: Aula Multimediale

Technical Papers Table of Contents
Wednesday, June 13, 2018

11:10 – 12:50
T10: Robotics for rehabilitation
Room: Aula 1

Technical Papers Table of Contents
Wednesday, June 13, 2018

11:10 – 12:50
T10: Robotics for rehabilitation
Room: Aula 1