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14 – 15 June 2018**



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FR1A: Transistor-Level Biosensor Techniques

Chairs: Christian Damm, Universität Ulm and Simon Hemour, IMS (UMR 5218)

Room 201A, Time 08:00–09:30, Friday 15 June 2018

FR1A-1
08:00

- C** **Integrated Millimeter-Wave and THz Analyzer Platforms for Miniature Biosensors**
Dietmar Kissinger, IHP, Germany **A**

PAGE 1
FR1A-2
08:30

- C** **A Compact Energy Efficient CMOS Permittivity Sensor Based on Multiharmonic Downconversion and Tunable Impedance Bridge**
G. Vlachogiannakis, Z. Hu, H. Thippur Shivamurthy, A. Neto, M.A.P. Pertijs, L.C.N. de Vreede, M. Spirito, Technische Universiteit Delft, The Netherlands **A**

PAGE 4
FR1A-3
08:50

- C** **Homodyne and Heterodyne Terahertz Dielectric Sensors: Prototyping and Comparison in BiCMOS Technology for Lab-on-Chip Applications**
Defu Wang¹, Klaus Schmalz¹, Mohamed Hussein Eissa¹, Johannes Borngräber¹, Maciej Kucharski¹, Mohamed Elkhoully², Minsu Ko¹, Yong Wang¹, H.J. Ng¹, Jongwon Yun¹, Bernd Tillack¹, Dietmar Kissinger¹
¹IHP, Germany **A** ; ²Robert Bosch, Germany **A**

PAGE 7
FR1A-4
09:10

- C** **Towards High-Transconductance Graphene High-Speed Biosensors**
W. Wei, S. Mhedbhi, P. Tilmant, H. Happy, E. Pallecchi, IEMN (UMR 8520), France **A**

FR1B: Neuroimplants and Miniaturized Devices

Chairs: *Ifana Mahbub, University of North Texas and Yong Xin Guo, National University of Singapore*

Room 201B, Time 08:00-09:30, Friday 15 June 2018

FR1B-1
08:00

- C** **Multiscale Modeling and Electroneural Interfaces for Neuroimplants: from a Retinal Prosthesis to Restore Vision to the Blind to a Hippocampus Implant for Memory Restoration**

Gianluca Lazzi, University of Southern California, USA **A**

PAGE 10
FR1B-2
08:30

- C** **A Ka-Band Beamformer for Wireless Power Transfer to Body Area Networks**

Nicholas D. Saiz, Gabriel Buckmaster, Thomas H. Lee, Stanford University, USA **A**

PAGE 13
FR1B-3
08:50

- C** **NEMS Magnetolectric Antennas for Biomedical Application**

Hwaider Lin, Mohsen Zaeimbashi, Neville Sun, Xianfeng Liang, Huaihao Chen, Cunzheng Dong, Alexei Matyushov, Xinjun Wang, Yingxue Guo, Yuan Gao, Nian X. Sun, Northeastern University, USA **A**

PAGE 16
FR1B-4
09:10

- C** **UHF RFID Sensor Tag Antenna Concept for Stable and Distance Independent Remote Monitoring**

Lukas Görtschacher, Wolfgang Bösch, Jasmin Grosinger, Technische Universität Graz, Austria ●

FR1C : Bio-Tissue and Cell Modelling

Chairs: James Hwang, Lehigh University and Pai-Yen Chen, Wayne State University

Room 201C, Time 08:00-09:30, Friday 15 June 2018

PAGE 19
FR1C-1
08:00

C Shared Knowledge, Gaps and Challenges of Microdosimetry: Realistic Models of Cells and Endoplasmic Reticulum

A. Denzi¹, C. Merla², F.M. Andre³, T. Garcia-Sanchez³, L.M. Mir³, F. Apollonio¹, M. Liberti¹

¹Università di Roma "La Sapienza", Italy **A** ; ²ENEA, Italy **A** ; ³VAT (UMR 8203), France **A**

PAGE 22
FR1C-2
08:30

C Development of a Tissue Dielectric Properties Model Based on Maxwell-Fricke Mixture Theory

Sevde Etoz, William Greisch, Christopher L. Brace, University of Wisconsin-Madison, USA

A

PAGE 25
FR1C-3
08:50

C Reproducibility Evaluation of Composite Dielectric Materials Based on an Error Propagation Model

Birk Hattenhorst, Christoph Baer, Thomas Musch, Ruhr-Universität Bochum, Germany

A

PAGE 28
FR1C-4
09:10

C Molecular Dynamics Simulations in Service of Microwave Dielectric Analysis of Biomolecules

M. Cifra, J. Průša, D. Havelka, O. Krivosudský, Czech Academy of Sciences, Czech Republic **A**

FR2A: Microwave Imaging and MRI



Chairs: Abbas Omar, Universität Magdeburg and Xudong Chen, National University of Singapore

Room 201A, Time 10:50–12:20, Friday 15 June 2018




FR2A-1
10:50

- C** **Recent Advances in RF Aspects of Magnetic Resonance Imaging**
Robert Caverly, Villanova University, USA 

PAGE 31
FR2A-2
11:20

- C** **Real-Time Microwave Imaging of Breast Phantoms with Constrained Deconvolution of Planar Data**
D. Tajik¹, F. Foroutan¹, D.S. Shumakov², A.D. Pitcher¹, E.A. Eveleigh¹, N.K. Nikolova¹
¹McMaster University, Canada  ; ²Health Canada, Canada 

PAGE 34
FR2A-3
11:40

- C** **A Fast Algorithm for Microwave Biomedical Imaging with Inhomogeneous Background**
Kuiwen Xu¹, Yu Zhong², Xudong Chen³
¹Hangzhou Dianzi University, China  ; ²A*STAR, Singapore  ; ³National University of Singapore, Singapore 

PAGE 37
FR2A-4
12:00

- C** **Realization of Breast Tissue-Mimicking Phantom Materials: Dielectric Characterization in the 0.5–50GHz Frequency Range**
S. Di Meo, L. Pasotti, M. Pasian, G. Matrone, Università di Pavia, Italy 

FR2B: Microwave and Antennas for Wireless Power and Wearables

Chairs: Aydin Farajidavar, New York Institute of Technology and Simon Hemour, IMS (UMR 5218)

Room 201B, Time 10:50-12:20, Friday 15 June 2018


- FR2B-1
10:50
- C RF in Medicine: Current Status and Future Directions of Antennas and Wireless Power**
Yongxin Guo, National University of Singapore, Singapore **A**
- PAGE 40
FR2B-2
11:20
- C Evaluating the Microwave Performance of Epidermal Electronics with Equivalent Transmission Line Modeling**
Tammy Chang, Jonathan A. Fan, Thomas H. Lee, Stanford University, USA **A**
- PAGE 43
FR2B-3
11:40
- C High Efficiency Wireless Power Transfer System Using Spiral DGS Resonators Through Biological Tissues**
Sumin Chalise, F. Tahar, M.R. Saad, A. Baraket, Kuniaki Yoshitomi, R.K. Pokharel, Kyushu University, Japan **A**
- PAGE 46
FR2B-4
12:00
- C High-Q Implantable Resonator for Wireless Power Delivery**
L. Di Trocchio¹, J.-L. Lachaud¹, C. Dejous¹, A. Kuhn², S. Hemour¹
¹IMS (UMR 5218), France **A** ; ²ISM (UMR 5255), France **A**

FR2C : Biosensors



Chairs: Arnaud Pothier, XLIM (UMR 7252) and Pingshan Wang, Clemson University

Room 201C, Time 10:50–12:20, Friday 15 June 2018




FR2C-1
10:50

- G** **Biosensors for Measuring the Dielectric Response of Single Cells to Applied Stress**
Gregory Bridges, University of Manitoba, Canada 


PAGE 49
FR2C-2
11:20

- G** **A Four-Layer Phantom for Testing in-vitro Microwave-Based Sensing Approach in Intra-Cranial Pressure Monitoring**
Jacob Velander¹, Syaiful Redzwan¹, Mauricio D. Perez¹, Noor Badariah Asan¹, Daniel Nowinski², Anders Lewén², Per Enblad², Robin Augustine¹
¹Uppsala University, Sweden  ; ²Uppsala University Hospital, Sweden 

PAGE 52
FR2C-3
11:40

- G** **Microwave Noninvasive Blood Glucose Monitoring Sensor: Penetration Depth and Sensitivity Analysis**
Heungjae Choi¹, Steve Luzio², Jan Beutler³, Adrian Porch¹
¹Cardiff University, UK  ; ²Swansea University, UK  ; ³Université du Luxembourg, Luxembourg 

FR2C-4
12:00

- G** **Microwave Sensing Based on Peelable Microfluidic Thin Film Resonator**
Rong Wang, Li Jun Jiang, University of Hong Kong, China 

FR3A : Biomedical Radar

Chairs: José-María Muñoz-Ferreras, Universidad de Alcalá and Negar Tavassolian, Stevens Institute of Technology
Room 201A, Time 13:20–15:10, Friday 15 June 2018

- FR3A-1
13:20
- Biomedical Radars Using Self-Injection-Locking Technology**
T.-S. Jason Horng, National Sun Yat-sen University, Taiwan
- DE; 9),
FR3A-2
13:50
- Multi-Target Vital-Signs Monitoring Using a Dual-Beam Hybrid Doppler Radar**
*Mehrdad Nosrati*¹, *Shahram Shahsavari*², *Negar Tavassolian*¹
¹Stevens Institute of Technology, USA ; ²New York University, USA
- PAGE 61
FR3A-3
14:10
- Noise Tolerable Vital Sign Detection Using Phase Accumulated Demodulation for FMCW Radar System**
Wei-Fang Chang, *Kuan-Wei Chen*, *Chin-Lung Yang*, National Cheng Kung University, Taiwan
- PAGE 64
FR3A-4
14:30
- Monitoring of Healing Progression of Cranial Vault Using One-Dimensional Pulsed Radar Technique**
*Doojin Lee*¹, *George Shaker*¹, *Daniel Nowinski*², *Robin Augustine*³
¹University of Waterloo, Canada ; ²Uppsala University Hospital, Sweden ;
³Uppsala University, Sweden
- PAGE 67
FR3A-5
14:50
- A Supervised Learning Approach for Real Time Vital Sign Radar Harmonics Cancellation**
Justin J. Saluja, *Jenshan Lin*, *Joaquin Casanova*, University of Florida, USA

FR3B: Wireless Implantable Monitoring Systems

Chairs: Roberto Gómez-García, Universidad de Alcalá and Xun Gong, University of Central Florida

Room 201B, Time 13:20-15:10, Friday 15 June 2018

FR3B-1
13:20

- C** **Multi-Channel Wireless and Battery-Less Brain Signal Monitoring System**
John Volakis, Florida International University, USA **A**

PAGE 70
FR3B-2
13:50

- C** **Ultrasonic Energy Harvesting Scheme for Implantable Active Stent**
Sayemul Islam, Albert Kim, Temple University, USA **A**

PAGE 73
FR3B-3
14:10

- C** **Initial in-vitro Trial for Intra-Cranial Pressure Monitoring Using Subdermal Proximity-Coupled Split-Ring Resonator**
Syaiful Redzwan¹, Jacob Velandar¹, Mauricio D. Perez¹, Noor Badariah Asan¹, Mina Rajabi², Frank Niklaus², Daniel Nowinski³, Anders Lewén³, Per Enblad³, Robin Augustine¹
¹Uppsala University, Sweden **A** ; ²KTH, Sweden **A** ; ³Uppsala University Hospital, Sweden **A**

PAGE 76
FR3B-4
14:30

- C** **Low-Impedance Probes for Wireless Monitoring of Neural Activation**
Carolina Moncion, Satheesh Bojja-Venkatakrishnan, Jorge Riera Diaz, John Volakis, Florida International University, USA **A**

PAGE 79
FR3B-5
14:50

- C** **Towards a Distributed Multi-Channel System for Studying Gastrointestinal Tract**
Rui Bao, Amir Javan-Khoshkholgh, Wahib Alrofati, Aydin Farajidavar, New York Institute of Technology, USA **A**

FR3C : Bio-Tissue Characterization I

Chairs: Katia Grenier, LAAS and Natalia Nikolova, McMaster University

Room 201C, Time 13:20–15:10, Friday 15 June 2018

PAGE 82
FR3C-1
13:20

C **Low Volume and Label-Free Molecules Characterization and Cell Monitoring with Microwave Dielectric Spectroscopy**

K. Grenier¹, A. Tamra¹, A. Zedek¹, G. Poiroux¹, F. Artis¹, T. Chen¹, W. Chen¹, M. Poupot², J.-J. Fournié², D. Dubuc¹

¹LAAS, France **A** ; ²CRCT (UMR 1037), France **A**

PAGE 85
FR3C-2
13:50

C **A Noninvasive Blood Glucose Measurement by Microwave Dielectric Spectroscopy: Drift Correction Technique**

Masahito Nakamura¹, Takuro Tajima¹, Michiko Seyama¹, Kayo Waki²

¹NTT, Japan **A** ; ²University of Tokyo, Japan **A**

PAGE 88
FR3C-3
14:10

C **A 60GHz Mixer-Based Reflectometer in 130nm SiGe BiCMOS Technology Toward Dielectric Spectroscopy in Medical Applications**

*Rahul Kumar Yadav, Mohamed Hussein Eissa, Jan Wessel, Dietmar Kissinger, IHP, Germany **A***

PAGE 91
FR3C-4
14:30

C **Measurement of Broadband Temperature-Dependent Dielectric Properties of Liver Tissue**

*Hojjatollah Fallahi, Punit Prakash, Kansas State University, USA **A***

PAGE 94
FR3C-5
14:50

C **Validation of Clausius-Mossotti Function in Single-Cell Dielectrophoresis**

*Xiaotian Du, Xiao Ma, Hang Li, Yaqing Ning, Xuanhong Cheng, James C.M. Hwang, Lehigh University, USA **A***

FR4A: Pulsed Fields for Biomedical Applications

Chairs: Roberto Gómez-García, Universidad de Alcalá and Xiaoguang Liu, University of California, Davis

Room 201A, Time 15:40–17:30, Friday 15 June 2018

PAGE 97
FR4A-1
15:40

C Miniature Flexible Planar Microwave and RF Energy Delivery Structure for New Endoscopic Procedures — Design and Initial Pre-Clinical Data

Chris Hancock¹, Steve Morris², Zacharias Tsiamoulos³, Brian Saunders³

¹Bangor University, UK **A** ; ²Creo Medical, UK **A** ; ³St. Mark's Hospital, UK **A**

PAGE 100
FR4A-2
16:00

C Non-Contact Picosecond Pulsed Electric Fields Up Regulate SOX2 Gene Expression in Mesenchymal Stem Cells

Ross A. Petrella, Peter A. Mollica, Martina Zamponi, Shu Xiao, Robert D. Bruno,

*Patrick C. Sachs, Old Dominion University, USA **A***

PAGE 103
FR4A-3
16:20

C A Microwave Ablation System for the Visualisation and Treatment of Pulmonary Nodules and Tumours

Shaun C. Preston, William Taplin, Aeron W. Jones, Chris Hancock, Bangor University,

*UK **A***

PAGE 106
FR4A-4
16:40

C Electroporabilization of Isolated Cancer Stem Cells with a Novel and Versatile Nanosecond Pulse Generator

I.W. Davies¹, C. Merla², A. Casciati², A. Zambotti², J. Bishop³, G. Hodgkins³,

C. Palego¹, Chris Hancock¹

¹Bangor University, UK **A** ; ²ENEA, Italy **A** ; ³Creo Medical, UK **A**

PAGE 109
FR4A-5
17:00

C Flexible Ablation Device with Single Applicator Structure that Supports both Radiofrequency and Microwave Energy Delivery

Patrick Burn¹, Pallav Shah², Chris Hancock¹

¹Bangor University, UK **A** ; ²Imperial College London, UK **A**

FR4B: Biomedical Signal Monitoring and Communication

Chairs: Chung-Tse (Michael) Wu, Rutgers University and Hung Cao, University of Washington

Room 201B, Time 15:40-17:30, Friday 15 June 2018

PAGE 112
FR4B-1
15:40

- C** **Soft Wearable Sensors for Precise Physiological Signals Measurements Based on the Fabric-Substrate Complementary Split-Ring Resonator**
Po-Kai Chan, Ta-Chung Chang, Kuan-Wei Chen, Chin-Lung Yang, National Cheng Kung University, Taiwan **A**

PAGE 115
FR4B-2
16:00

- C** **Characterization of Passive Wireless Electrocardiogram Acquisition in Adult Zebrafish**
Silviu Gruber¹, Tai Le¹, Miguel Huerta¹, Konnor Wilson¹, Jingchun Yang², Xiaolei Xu², Hung Cao¹
¹University of Washington, USA **A** ; ²Mayo Clinic, USA **A**

PAGE 118
FR4B-3
16:20

- C** **A Miniature Wireless 64-Channel System for Monitoring Gastrointestinal Activity**
Amir Javan-Khoshkholgh¹, Wahib Alrofati¹, Zaid Abukhalaf¹, Ahmed Ibrahim², Mehdi Kiani², Aydin Farajidavar¹
¹New York Institute of Technology, USA **A** ; ²Pennsylvania State University, USA **A**

PAGE 121
FR4B-4
16:40

- C** **Wireless Passive Monitoring of Electrocardiogram in Firefighters**
Tai Le, Miguel Huerta, Alexander Moravec, Hung Cao, University of Washington, USA **A**

PAGE 124
FR4B-5
17:00

- C** **Bone Conduction: A Feasible Concept for Ear-to-Ear Communication?**
Jan-Christoph Edelmann, Gilbert Prokop, Thomas Ussmueller, Universität Innsbruck, Austria **A**

FR4C : Bio-Tissue Characterization II

Chairs: Abbas Omar, Universität Magdeburg and Perry Li, Abbott Laboratories

Room 201C, Time 15:40–17:30, Friday 15 June 2018

- FR4C-1
15:40
- C** **Material Characterization for the Detection of African Trypanosomes Using RNA-Derivatized Surface Layers with mm-Wave and THz Sensors**
Mario Mueh¹, Robert Knieß¹, H. Ulrich Göringer¹, Christian Damm²
¹Technische Universität Darmstadt, Germany **A** ; ²Universität Ulm, Germany **A**
- PAGE 127
FR4C-2
16:10
- C** **Measuring Ion-Pairing in Buffer Solutions with Microwave Microfluidics**
Angela C. Stelson, Charles E. Little, Nathan D. Orloff, Christian J. Long, James C. Booth,
*NIST, USA **A***
- PAGE 130
FR4C-3
16:30
- C** **Discrimination of Glioblastoma Cancer Stem Cells by Measuring Their UHF-Dielectrophoresis Crossover Frequency**
*R. Manczak¹, S. Saada², C. Dalmay¹, B. Bessette², G. Begaud², S. Battu², P. Blondy¹,
M.O. Jauberteau², F. Lalloue², M. Inac³, C. Baristiran Kaynak³, M. Kaynak³,
C. Palego⁴, A. Pothier¹*
¹XLIM (UMR 7252), France **A** ; ²HCP (EA 3842), France **A** ; ³IHP, Germany **A** ; ⁴Bangor
University, UK **A**
- PAGE 133
FR4C-4
16:50
- C** **Ferromagnetic Resonance Characterization of Magnetic Nanowires for Biolabel Applications**
*Wen Zhou, Joseph Um, Yali Zhang, Alexander Nelson, Bethanie Stadler,
Rhonda Franklin, University of Minnesota, USA **A***
- PAGE 136
FR4C-5
17:10
- C** **Effect of Thickness Inhomogeneity in Fat Tissue on In-Body Microwave Propagation**
*Noor Badariah Asan¹, Jacob Velander¹, Syaiful Redzwan¹, Mauricio D. Perez¹,
Emadeldeen Hassan², Taco J. Blokhuis³, Thiemo Voigt¹, Robin Augustine¹*
¹Uppsala University, Sweden **A** ; ²Umeå University, Sweden **A** ; ³Maastricht UMC+,
The Netherlands **A**


FRIF1 : Interactive Forum

Chair: Hung Cao, University of Washington

Room 204AB, Time 09:30-10:00, Friday 15 June 2018


PAGE 139
FRIF1-1
POSTER

C Accuracy Enhancement of Doppler Radar-Based Heartbeat Rate Detection Using Chest-Wall Acceleration

Mehrdad Nosrati, Negar Tavassolian, Stevens Institute of Technology, USA 

PAGE 142
FRIF1-2
POSTER



C A Novel Millimeter Wave Radar Sensor for Medical Signal Detection

Salam Benchikh, Homa Arab, Serioja Ovidiu Tatu, INRS-EMT, Canada 

PAGE 145
FRIF1-3
POSTER

C Robust Radar-Based Human Motion Recognition with L1-Norm Linear Discriminant Analysis



Panos P. Markopoulos¹, Fauzia Ahmad²

¹Rochester Institute of Technology, USA  ; ²Temple University, USA 

PAGE 148
FRIF1-4
POSTER

C A Novel Miniature Tissue Resection Device with Moveable Jaws that Combines 400KHz and 5.8GHz Energy for Cutting and Coagulation

Louis A. Turner¹, Patrick Burn¹, James E. Coad², Chris Hancock¹

¹Bangor University, UK  ; ²West Virginia University School of Medicine, USA 

PAGE 151
FRIF1-5
POSTER



C Feasibility Study of Applying Ferromagnetic Contrast Agents in Thermoacoustic Imaging

Dajun Zhang, Xiong Wang, ShanghaiTech University, China 

PAGE 154
FRIF1-6
POSTER

C Total Variation Constrained Sparse Image Reconstruction of Multiple Stationary Human Targets Behind Walls

Qiang An¹, Jianqi Wang¹, Ahmad Hoorfar²

¹Fourth Military Medical University, China  ; ²Villanova University, USA 

Interactive Forum continued ...

- PAGE 157
FRIF1-7
POSTER
- C** **Acoustic Transmission of Biomedical Data via the Intercommunication System of an MRI**
Viktoria Kalpen, Fabian Eichin, Thomas Ussmueller, Universität Innsbruck, Austria **A**
- PAGE 160
FRIF1-8
POSTER
- C** **Real-Time Evaluation of Heart Rate and Heart Rate Variability Using Microwave Reflectometry**
Atsushi Mase¹, Yuichiro Kogi², Toru Maruyama¹
¹Kyushu University, Japan **A**; *²Fukuoka Institute of Technology, Japan* **A**
- PAGE 163
FRIF1-9
POSTER
- C** **Miniaturized Wireless Power Transfer Module Design for Brain Optoelectronic Implant**
D.K. Biswas, N.T. Tasneem, J. Hyde, M. Sinclair, I. Mahbub, University of North Texas, USA **A**
- PAGE 166
FRIF1-10
POSTER
- C** **Improving the Efficiency of Magnetic Induction-Based Wireless Body Area Network (WBAN)**
Negar Golestani, Mahta Moghaddam, University of Southern California, USA **A**
- PAGE 169
FRIF1-11
POSTER
- C** **Numerical Evaluation of Sensitivity of Microwave Metamaterial and Microstrip TL Sensors to Blood Glucose Concentration**
Jan Vrba, David Vrba, Luis Díaz, Ondrej Fiser, ELEDIA@CTU, Czech Republic **A**
- PAGE 172
FRIF1-12
POSTER
- C** **Inductive Ear-to-Ear Communication Systems: Coupling Enhancement by Means of Constructional Coil Features**
Jan-Christoph Edelmann, S. Bergmueller, D. Mair, Gilbert Prokop, Thomas Ussmueller, Universität Innsbruck, Austria **A**
- PAGE 175
FRIF1-13
POSTER
- C** **X-Band Microwave Radiation Induced Biological Effects in Rats Skin: Plausible Role of Heat Shock Proteins**
Saurabh Verma, Gaurav K. Keshri, Manish Sharma, Kumar V. Mani, Santanu Karmakar, Satish Chauhan, Asheesh Gupta, DRDO, India **A**

Interactive Forum continued ...

PAGE 178
FRIF1-14
POSTER

- C** **Characterization of Microwave Dicke Radiometer for Non-Invasive Tissue Thermometry**
Sathya Priya Sugumar, C.V. Krishnamurthy, Kavitha Arunachalam, IIT Madras, India
A

PAGE 181
FRIF1-15
POSTER

- C** **A Highly Sensitive RF Biosensor Based on Splitter/Combiner Configuration for Single-Cell Characterization**
Abdulrahman Alghamdi, Saeed Mohammadi, Purdue University, USA **A**

PAGE 184
FRIF1-16
POSTER

- C** **Predicting Nonthermal Electroporation of Intervertebral Disc Tissue**
Steven Schwartz, Gary L. Thompson, Rowan University, USA **A**

PAGE 187
FRIF1-17
POSTER

- C** **Simulation of Electroporation in Cell Using Bipolar AC Pulse**
Hao Qiu¹, Xianping Wang², Wenbing Zhao³
¹Fort Valley State University, USA **A** ; ²Southeast Missouri State University, USA **A** ;
³Cleveland State University, USA **A**

PAGE 190
FRIF1-18
POSTER

- C** **Correlation Between Dielectric Properties and Women Age for Breast Cancer Detection at 30GHz**
S. Di Meo¹, G. Matrone¹, P.F. Espin-Lopez¹, A. Martellosio¹, M. Pasian¹, M. Bozzi¹, L. Perregrini¹, A. Mazzanti¹, F. Svelto¹, P.E. Summers², G. Renne², L. Preda¹, M. Bellomi²
¹Università di Pavia, Italy **A** ; ²Istituto Europeo di Oncologia, Italy **A**

PAGE 193
FRIF1-19
POSTER



- C** **Preliminary Measurements of Magnetic Nanoparticles as Potential Biomarkers for Impedance Flow Cytometry**
Paweł Barmuta¹, Izabela Kamińska², Juncheng Bao¹, Tomislav Marković¹, Bożena Sikora², Krzysztof Fronc², Dominique Schreurs¹, Ilja Ocket¹
¹Katholieke Universiteit Leuven, Belgium **A** ; ²Polish Academy of Sciences, Poland **A**

Interactive Forum continued ...

PAGE 196
FRIF1-20
POSTER

C Spurious Material Detection on Functionalized Thin-Film Sensors Using Multiresonant Split-Rings

Mario Mueh¹, Christian Damm²

¹*Technische Universität Darmstadt, Germany*  ; ²*Universität Ulm, Germany* 

PAGE 199
FRIF1-21
POSTER



C Real-Time Microscopic Observation of Biological Interactions with Microwave Fields



C.F. Williams, J. Lees, D. Lloyd, G.M. Geroni, S. Jones, S. Ambala, W. Baradat, G. Comat, A. Aboubakary, S. Voisin, Adrian Porch, Cardiff University, UK 

PAGE 202
FRIF1-22
POSTER

C Numerical Study of Pore Density Distribution and Pore Formation Energy

Hao Qiu¹, Xianping Wang², Ravindra Joshi³, Wenbing Zhao⁴

¹*Fort Valley State University, USA*  ; ²*Southeast Missouri State University, USA*  ;

³*Texas Tech University, USA*  ; ⁴*Cleveland State University, USA* 

PAGE 205
FRIF1-23
POSTER

C NanoNeuroRFID: A Low Loss Brain Implantable Device Based on Magnetoelectric Antenna

Mohsen Zaeimbashi, Hwaider Lin, Zhiguang Wang, Huaihao Chen, Shadi Emam, Yuan Gao, Nian X. Sun, Northeastern University, USA 

PAGE 208
FRIF1-24
POSTER

C Power Budget and Reconstruction Algorithms for Through the Wall Radar Imaging System

S. Pisa, E. PiuZZi, E. Pittella, P. D'Atanasio, A. Zambotti, G. Sacco, Università di Roma "La Sapienza", Italy 