

10:10 - 11:50

TH2E: Millimeter-Wave/THz Sensors and Systems

Chair: Goutam Chattopadhyay

Chair organization: Jet Propulsion Lab

Co-chair: John Kuno

Co-chair organization: Quinstar

Location: 314

Abstract: This session highlights papers related to mm-wave/THz system applications, including radar, permittivity measurement, lab on-chip, active tags, and contact-less connection systems.

Presentations in this session

TH2E-1 : An Ultra-Low-Power 4-Channel 60-GHz Radar Sensor

[Abstract](#)

Authors: Stefan Shopov, Mekdes Girma, Juergen Hasch, Sorin Voinigescu

Presenter: Stefan Shopov, Univ. of Toronto, Canada

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TH2E-2 : Integrated 240 GHz Dielectric Sensor With DC Readout Circuit in THz Lab-on-Chip Measurements

[Abstract](#)

Authors: Defu Wang, Klaus Schmalz, Mohamed Eissa, Johannes Borngraeber, Maciej Kucharski, Mohamed Elkhoully, Farabi Jamal, Minsu Ko, Herman Ng, Dietmar Kissinger

Presenter: Defu Wang, IHP Microelectronics, Germany

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TH2E-3 : A High-Speed THz Permittivity Measurement System Featuring a Simple 2-Tone Generation Method Using LO Leakage

[Abstract](#)

Authors: Teruo Jyo, Hiroshi Hamada, Daisuke Kitayama, Makoto Yaita, Amine El Moutaouakil, Hideaki Matsuzaki, Hideyuki Nosaka

Presenter: Teruo Jyo, NTT Device Technology Laboratories, Japan

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TH2E-4 : A W-Band Active Millimeter-Wave Tag IC With Wake-Up Function

[Abstract](#)

Authors: Sadegh Dadash, Juergen Hasch, Pascal Chevalier, Andreia Cathelin, Sorin Voinigescu

Presenter: Sadegh Dadash, Univ. of Toronto, Canada

(11:10 - 11:30)

TH2E-5 : A 125 GHz Transceiver in 65 nm CMOS Assembled With FR4 PCB Antenna for Contactless Wave-Connectors

[Abstract](#)

Authors: Yanghyo Kim, Yuan Du, Adrian Tang, Yan Zhao, Brian Lee, Huan-Neng Chen, Chewnpu Jou, Jason Cong, Tatsuo Itoh, M.C. Frank Chang

Presenter: Yanghyo Kim, Univ. of California, Los Angeles, United States

(11:30 - 11:50)