

## Session Poster 4 (8/9 Fri. 10:20 – 11:20)

Room: 7F 交誼廳

1. (S0004) A 4.5 – 6.7 GHz CMOS Inverter-Based Low-Noise Amplifier with Dual-Path Transformer-Feedback

Ho-Chun Chang, Hong-Yu Chen, Hong-Shen Chen, and Jenny Yi-Chun Liu

National Tsing Hua University

2. (S0023) Error-Resilient Neuromorphic RRAM

Yu-Teng Chang, Dong-Ying Wu, Jing Huang, Jia-Cheng Jhang, and Tsung-Chu Huang

National Changhua University of Education

3. (S0055) Fence-Region Aware Multiple-Row Height Cell Placement Approach

Jai-Ming Lin, Yi-Wen Wang, Wei-Shin Lin, and Jia-Jian Chen

National Cheng Kung University

4. (S0068) A CMOS Salinity Difference to Frequency Converter with Auto-Sensitivity Selection Circuits for

Applications in Aquaculture

Cheng-Ta Chiang, Tsung-Yuan Chen, and Yi-Ting Wu

National Chia Yi University

5. (S0069) A Wide-Range Sugar Concentration to Duty Cycle Converter with Scaling Circuits for Detecting

Sugar Concentration Applications

Cheng-Ta Chiang, Lu-Shen Shie, and Bin-Hong Wang

National Chia Yi University

6. (S0077) A Low-Jitter Fast-Locking All-Digital PLL with Dynamic Loop Gain Control and Phase

Self-Alignment Technique

Yu-Lung Lo (1), Hsi-Hua Wang (1), Wei-Han Song (1), and Wei-Bin Yang (2)

(1) National Kaohsiung Normal University and (2) Tamkang University

7. (S0087) A 10-GHz All-Digital Frequency Synthesizer with Fast-Locked Detection

Guan-Min Luo and Ching-Yuan Yang

National Chung Hsing University

8. (S0110) A 2.7-Gb/s D/PLL-Based Clock and Data Recovery Circuit

You-Sheng Lin, Miao-Shan Li, and Ching-Yuan Yang

National Chung Hsing University

9. (S0111) SSC Type-3 PLL-Based Clock and Data Recovery

Miao-Shan Li, Yen-Kuei Lu, Ching-Yuan Yang, and Chin-Lung Lin

National Chung Hsing University

10. (S0120) CMOS MEMS Inductive Accelerometer with Digital Output

Hsuan-Wu Liu, Shih-Hsuan Hsu, Cheng-Yen Lin, Yi Chiu, and Hao-Chiao Hong

National Chiao Tung University

11. (S0125) Piezoelectric Accelerometer Readout Circuit and SAR ADC

Rui-Tong Weng and Soon-Jyh Chang

National Cheng Kung University

12. (S0130) Design of Low Temperature Sensitivity CMOS Relaxation Oscillator

Truong Manh Cuong and Poki Chen

National Taiwan University of Science and Technology

13. (S0131) 900-MHz and 2.4-GHz Wireless Power Transfer Rectifiers for IoT applications

Yuen-Sum Ng, Yi-Ju Yang, and Yi-Jan Emery Chen

National Taiwan University

14. (S0132) Asynchronous Digital Low-Dropout Regulator for Ultra-Low Voltage Applications

Wei-Bin Yang and Shu-Yu Ku

Tamkang University

15. (S0136) A CMOS-MEMS PIRANI GAUGE WITH WIDE SENSING RANGE

You-Wei Pai, Fan-Hao Su, and Chung-Nan Chen

National Kaohsiung University of Sciences and Technology

16. (S0144) A SP-Based Analog Layout Migration Engine for Placement Preservation

Zi-Jun Lin (1), Chih-Hsin Yang (1), Hao-Yu Chi (2), Chien-Nan Jimmy Liu (2), and Jing-Yang Jou (1)

(1) National Central University and (2) National Chiao Tung University

17. (S0145) A 3-dBm Output Power 47-GHz Current-Reused CMOS VCO with Spontaneous

Transconductance Match Technique

San-Hsien Liu and Huey-Ru Chuang

National Cheng Kung University

18. (S0152) Low-Voltage Cascode Current Mirror with High Output Impedance

You-Cyuan Wei, Po-Cheng Ke, Geng-Xiang Lin, and Hung-Yu Wang

National Kaohsiung University of Science and Technology

19. (S0166) Design, Fabrication and Analysis of a Sensing Pixel for Thermopile Array

Zhu-An Guo, Ya-Han Yang, and Chung-Nan Chen

National Kaohsiung University of Sciences and Technolog

20. (S0167) The Micro Display on Smart Contact Lens through 900MHz RFID Wireless Powering

Cheng-Wei Tsai, Shin-Ho Wu, Mang Ou-Yang, Herming Chiueh, and Jin-Chern Chiou

National Chiao Tung University

21. (S0169) Design of High Linearity Wideband Amplifier in HBT Technology

Chien-Hui Tsai and Chien-Nan Kuo

National Chiao Tung University

22. (S0184) A 10Gb/s Full Rate PAM-4 Clock and Data Recovery with Symmetric Edge Detector

Wei-Ting Liu, Yu-Yen Ke, and Kuo-Hsing Cheng

National Central University

23. (S0186) Generalized Via Pattern Awareness Substrate Routing Framework for Fine Pitch Ball Grid Array

Chi-An Pan, Jun-Sheng Wu, and Yi-Yu Liu

National Taiwan University of Science and Technology

24. (S0188) IR-aware Multiple Power Net Routing

Shuo-Hui Wang, Guan-Hong Liou, Yen-Yu Su, Wei-Da Wang, and Mark Po-Hung Lin

National Chung Cheng University

25. (S0190) A 10 Gb/s Full-Rate Adaptive PAM-4 Equalizer with High-Pass Filter Compensation

Zi-Yi Chen, Yuan Wang, and Kuo-Hsing Cheng

National Central University

26. (S0191) Classifying Analog and Digital Sub-Circuits in Mixed-Signal Design

Guan-Hong Liou, Jun-Jie Zhao, Cheng-Yao Liu, and Mark Po-Hung Lin

National Chung Cheng University

27. (S0195) A 6th-Order Current-Mode Gm-C Bandpass Filter with Correlated Ring Oscillator Calibrating Scheme

Hsin-Liang Chen (1), Chun-Kai Fu (2), and Jen-Shiun Chiang (2)

(1) Chinese Culture University and (2) Tamkang University

28. (S0199) Speeding up Fault Simulation with Graphic Processing Units by Using 3D Parallelism

Hua-Ren Li and Hsing-Chung Liang

Chung Yuan Christian University

29. (S0215) A Buffer Circuit for the Interface of RF and Baseband System

Zhi-Sheng Zhang, Tzu-Hao Lin, and Hung-Wen Lin

Yuan Ze University

30. (S0216) A Test Method for Estimating the Nonlinearity of an Amplifier

Kun-Chih Wu, Chuang-Wei Chueh, and Hao-Chiao Hong

National Chiao Tung University