



# 제 29회 한국반도체학술대회

The 29th Korean Conference on Semiconductors

2022년 1월 24일(월)~ 26일(수) | 강원도 하이원 그랜드호텔(컨벤션타워)

2022년 1월 26일(수), 09:00-10:30

Room E (루비 II, 5층)

## U. Bio-Medical 분과

### [WE1-U] 바이오-메디컬용 반도체 회로설계

좌장: 이성규 박사(ETRI), 김철 교수(KAIST)

<p><b>WE1-U-1</b> 09:00-09:15</p>	<p><b>A 216nW, 5.49 <math>\mu\text{V}_{\text{rms}}</math> Neural Recording Amplifier Using Current-Reuse Folded Cascode OTA with a 1.37 Power Efficiency Factor</b> Min Jae Kim, Hyun Tae Park, Jun Gyu Kim, Sang Min Song, and Sung-Yun Park <i>Pusan National University</i></p>
<p><b>WE1-U-2</b> 09:15-09:45</p>	<p><b>A Chopper Instrument Amplifier for Wearable ExG Monitoring Devices</b> Yongjae Park and Seong-Jin Kim <i>UNIST</i></p>
<p><b>WE1-U-3</b> 09:45-10:00</p>	<p><b>Multi-Channel, Low Power Neural Recording IC with Wide Input Range</b> Yi-Gyeong Kim<sup>1</sup>, Sung Q Lee<sup>2</sup>, and Hye Jin Kim<sup>3</sup> <sup>1</sup>AI Processor Research Section, ETRI, <sup>2</sup>Future &amp; Basic Technology Research Division, ETRI, <sup>3</sup>Intelligent Sensors Research Section, ETRI</p>
<p><b>WE1-U-4</b> 10:00-10:15</p>	<p><b>180도 위상으로 정렬한 1차 측파대 필터들과 글리치 제거회로를 사용한 생체 이식용 초저전력 고속 비동기식 BPSK 복조기 이론과 SoC 설계</b> Benjamin P. Wilkerson<sup>1,2</sup> <sup>1</sup>Department of Electrical and Computer Engineering, Inha University, <sup>2</sup>PW Semiconductor Labs, Inc.</p>
<p><b>WE1-U-5</b> 10:15-10:30</p>	<p><b>A Low-Power, High-Resolution, Two-Step ADC with VCO-Based Multibit Phase Domain Quantizer for Biomedical Applications</b> Hyeon Tae Park, Joon Gyu Kim, Sang Min Song, Min Jae Kim, and Sung-Yun Park <i>Pusan National University</i></p>