

# Curriculum Vitae

## Prof. JUNG-DONG PARK

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### EDUCATION

|       |   |                       |
|-------|---|-----------------------|
| Ph.D. | <b>University of California Berkeley, USA</b><br>Electrical Engineering and Computer Sciences<br>(Advisor: Prof. Ali M. Niknejad)                   | Aug. 2007 ~ May 2012  |
| M.S.  | <b>Gwangju Institute of Science and Technology,</b><br>Gwangju, South Korea<br>Information and Communications (EE)<br>(Advisor: Prof. Jong-In Song) | Mar. 1998 ~ Aug.2000  |
| B.E.  | <b>Dongguk University,</b> Seoul, South Korea<br>Electronic Engineering (EE)  | Mar. 1994 ~ Feb. 1998 |

### PROFESSIONAL POSITIONS

|                            |  |                            |
|----------------------------|--|----------------------------|
| <b>Associate Professor</b> | <b>Dongguk Univ., South Korea</b>        | <b>Mar. 2019 ~ Present</b> |
| Assistant Professor        | Dongguk Univ., South Korea               | Mar. 2015 ~ Feb. 2019      |
| Senior Engineer            | Qualcomm, USA                            | Jul. 2012 ~ Feb. 2015      |
| Internship                 | Qualcomm, USA                            | Jun. 2011 ~ Sept. 2011     |
| Internship                 | HealthMicro, USA                         | Jun. 2010 ~ Nov. 2010      |
| Consultant                 | Streetline, USA                          | Dec. 2008 ~ May 2009       |
| Senior Researcher          | Agency for Defense Development (ADD)     | Aug. 2002 ~ Jul. 2007      |
| Researcher                 | Institute for Advanced Engineering (IAE) | Jul. 2000 ~ Jul. 2002      |

### MEMBERSHIP

- *Senior Member*, the Institute of Electrical and Electronics Engineers (IEEE)
- *Member*, the Institute of Electronics Engineers of Korea (IEEK)

## REPRESENTATIVE PAPERS

- [1] **Jung-Dong Park**, Shinwon Kang, Siva V Thyagarajan, Elad Alon, Ali M. Niknejad, “A 260 GHz Fully Integrated CMOS Transceiver for Wireless Chip-to-Chip Communication,” in *Proc. IEEE Symposium on VLSI Circuits, Honolulu*, June 2012. (2017 Most Frequently Cited Paper Award in 2010–2016, IEEE Symposium on VLSI)
- [2] **Jung-Dong Park**, Shinwon Kang, and Ali M. Niknejad, “A 0.38 THz Fully Integrated Transceiver Utilizing a Quadrature Push-Push Harmonic Circuitry in SiGe BiCMOS,” *IEEE Journal of Solid-State Circuits*, vol. 47, no. 10, October 2012, pp.2344~2354.

## HONORS AND AWARDS

- 2019 IEEK Semiconductor Society Best Paper Award Dec. 2019
- 2018 Albert Nelson Marquis Lifetime Achievement Award Nov. 2018
- 2017 Most Frequently Cited Paper Award in 2010–2016, June 2017  
IEEE Symposium on VLSI Circuits (as the lead author)
- Dongguk Centennial Power Elite Scholarship 2007–2009
- Silver Medal Award for National Defense Technology, ADD Aug. 2006
- Distinguished Service Medal, ADD Aug. 2006, Feb. 2005

## RESEARCH EXPERIENCE

### *Research in Berkeley Wireless Research Center, UC Berkeley*

- Fully Integrated 0.26 THz TRx for Chip to Chip Communication in 65nm CMOS
  - One of the first fully-integrated THz wireless transceiver with the on-chip antenna in CMOS
- Fully Integrated 0.38 THz FMCW Radar TRx in 0.13  $\mu\text{m}$  SiGe
  - One of the first fully-integrated THz radar transceiver with the on-chip antenna in silicon
- W-band Radar for Autonomous Helicopters: Polarimetric Radar TRx architecture
- 100 GHz LNA Design in 65nm LP CMOS
- 60 GHz TRx in 90nm CMOS: LNA with ESD Protection, Passive Circuits

### *Consulting and Internship Works*

- 60 GHz LNA with ESD protection in 40nm CMOS in Qualcomm, USA
- 2.4 GHz Low-power receiver design in 90 nm CMOS in HealthMicro, USA
- 2.4 GHz Low-profile antenna design in Streetline, USA

***Industrial Fieldworks*****Qualcomm, USA**

- GPS Front-end Design in 28nm CMOS (WTR3925, WTR5975)

**Agency for Defense Development, South Korea**

- 94 GHz Radiometer/Radar Multi-sensor TRx design
- RCS Characterization of the ground clutter and various targets

**Institute for Advanced Engineering (IAE), South Korea**

- 35 GHz Radiometer/Radar TRx Design

***Projects in Dongguk Univ. as the Principal Investigator***

- 280 GHz Integrated Receiver Front-end in Silicon by ETRI (2020.04-Present)
- 200Gb/s High Swing Broadband Driver for Silicon-Photonic Mach-Zehnder Modulator by ETRI (2022.04-Present)
- Development of 6G Transmitter based on Highly Efficient Spatial QAM Synthesis, by Ministry of Science, ICT (IITP) (2021.04-Present)
- Core GaN MMIC Localization Project for KF-21 AESA radar, KRIT (DAPA) (2021.12-Present)
- MMIC Design for Next Generation Tx/Rx Block by Hanwha Systems (2020.07-Present)
- Fully integrated E-band CMOS Transceiver for Point-to-Point High-Speed Communication Network Using Drone in Future Battlefield Environment by Ministry of Science, ICT (2019.11-2021.12)
- Sub-THz CMOS Transceiver by Ministry of Science, ICT (2018.03-2020.03)
- Dielectric Material Characterization in Microwave Range by LG Display (2018)
- Multifunctional Chip (Transmit/Receive Module) by Hanwha Systems (2017.05-2019.03)
- Ultra-fast Compressed Sensing Receiver by Hanwha Systems (2016.01-2017.12)
- W-band CMOS Receiver by Poongsan LTD (2016.03-2018.11)
- Dual-band Signal Source using Meta-material by Poongsan LTD (2016.03-2018.1)
- 5G Up-converter by Samsung Electronics (2016)
- Fire detection radiometer in quasi-mm-wave range by Ministry of Science, ICT (2016.04-2017.04)
- Studies on On-chip Transmission-lines for High-speed Switching Circuitries, by Samsung Thales (2015)

***Professional and Extracurricular Activities*****Verified Peer Reviews in Publons: 98<sup>th</sup> percentile (overall), 99<sup>th</sup> percentile (2021)**

- Reviewer of IEEE Journal of Solid-State Circuits (JSSC), 2015–present
- Reviewer of IEEE Transactions on Microwave and Theory and Techniques, 2015–present
- Reviewer of IEEE Microwave and Wireless Components Letters (MWCL), 2017–present
- Reviewer of IEEE Antennas and Wireless Propagation Letters (AWPL), 2015–present
- Reviewer of IEEE Transactions on Electronic Devices (TED), 2017–present
- Reviewer of IEEE Transactions on Device and Materials Reliability, 2016–present
- Reviewer of IEEE Transactions on Nanotechnology, 2018–present
- Reviewer of Electronics Letters, IET, 2016–present
- Reviewer of IET Circuit, Devices and Systems, 2018–present

**REFERENCE**

- Prof. Ali M. Niknejad, EECS, University of California, Berkeley: [niknejad@eecs.berkeley.edu](mailto:niknejad@eecs.berkeley.edu)

**PUBLICATIONS*****Journal and Letter Articles*****2022**

- [53] Van-Son Trinh and **Jung-Dong Park**, "An E-band Transformer-based  $\times 8$  Frequency Multiplier with Enhanced Harmonic Rejection," IEEE Trans. Microw. Theory Tech., accepted, Sept. 2022.
- [52] Van-son Trinh, Jeong-Moon Song and, **Jung-Dong Park**, "A 280GHz 30GHz Bandwidth Cascaded Amplifier Using Flexible Interstage Matching Strategy in 130nm SiGe Technology," Electronics,11(19), 3045, September 2022.
- [51] Van-son Trinh, Hyohyun Nam, Jeong-Moon Song, and **Jung-Dong Park**, "A 78.8-84 GHz Phase Locked Loop Synthesizer for a W-band Frequency-Hopping FMCW Radar Transceiver in 65nm CMOS," Sensors,02,3626, 2022.
- [50] Hyeonseok Lee, Van-son Trinh, and **Jung-Dong Park**, "A 90GHz Broadband Balanced 8-Way Power Amplifier for High Precision FMCW Radar Sensors in 65-nm CMOS," Sensors 22, no.9, 3114, 2022.
- [49] Jeong-Moon Song, and **Jung-Dong Park**, "A 5-11 GHz 8-bit Precision Passive True-Time

Delay in 65-nm CMOS Technology," IEEE Access, vol. 10, 2022, pp.18456-18462

- [48] Van-Son Trinh, and **Jung-Dong Park**, "An 85-GHz Power Amplifier Utilizing a Transformer-Based Power Combiner Operating Beyond the Self-Resonance Frequency," IEEE Journal of Solid-State Circuits, vol. 57, 2022, pp.882-891

## 2021(Sabbatical)

- [47] Van-Son Trinh, and **Jung-Dong Park**, "A 16.4dbm 20.3% PAE 22-dB Gain 77GHz Power Amplifier in 65-nm CMOS Technology," IEEE Access, vol. 9, 2021, pp.159541-159548
- [46] Van-Son Trinh, and **Jung-Dong Park**, "A 25.1dBm 25.9-dB Gain 25.4% PAE X-band Power Amplifier Utilizing Voltage Combining Transformer in 65-nm CMOS," IEEE Access, vol. 9, pp. 6513-6521, January 2021; 10.1109/ACCESS.2020.3048757

## 2020

- [45] Hyohyun Nam, Van-Viet Nguyen, Van-Son Trinh, Jeong-Moon Song, Bok-Hyung Lee, and **JungDong Park**, "A Full X-band Phased-Array Transmit/Receive Module Chip in 65-nm CMOS Technology," IEEE Access, vol. 8, May 2020, pp.76182-76192.
- [44] Hyohyun Nam, and **Jung-Dong Park**, "A W-band Divide-by-Three Injection Locked Frequency Divider with Injection Current Boosting Utilizing Inductive Feedback in 65nm CMOS," IEEE Microw. Wireless Compon. Letters, vol.30, no.5, May 2020, pp.516-519.
- [43] Van-Son Trinh, and **Jung-Dong Park**, "A +3dBm-EIRP 240-GHz Circular-Polarized Radiator Utilizing a Sub-THz PA in 65-nm CMOS," IEEE Microw. Wireless Compon. Letters, vol.30, no.4, April 2020, pp.399-402.
- [42] Van-Son Trinh, and **Jung-Dong Park**, "Common-Mode Stability Test and Design Guidelines for a Transformer-coupled Push-pull Power Amplifier," IEEE Access, vol. 8, March 2020, pp.76182-76192.
- [41] Young-Joe Choe, Hyohyun Nam, and **Jung-Dong Park** "A Low Drop-Out Regulator With PSRR Enhancement Through Feed-Forward Ripple Cancellation Technique in 65-nm CMOS Process," Electronics 2020, 9(1), 146.
- [40] Hyohyun Nam, Woo-Jae Lee, Ju-ho Son, and **Jung-Dong Park**, "Compact I/Q Up-Conversion Chain for a 5G Wireless Transmitter in 65-nm CMOS Technology," IEEE Microw. Wireless Compon. Letters, vol.30, no.3, March 2020, pp.284-287.
- [39] Van-Son Trinh, and **Jung-Dong Park**, "A 16.3-dBm 14.1% PAE 28-dB Gain W-band Power Amplifier with Inductive Feedback in a 65-nm CMOS," IEEE Microw. Wireless Compon. Letters, vol.30, issue 2, February 2020, pp.193-196.

**2019**

- [38] Van-Son Trinh, and **Jung-Dong Park**, "Theory and Design of Impedance Matching Network Utilizing a Lossy On-Chip Transformer," IEEE Access, vol.7, no.1, October 2019, pp. 140980-140989.
- [37] Hsiang Nerng Chen, Jeong-Moon Song, and **Jung-Dong Park**, "A Compact Circularly Polarized MIMO Dielectric Resonator Antenna over Electromagnetic Bandgap Surface for 5G Applications," IEEE Access, vol.7, no.1, October 2019, pp. 140889-140898.
- [36] Young Jo Choe, Hyohyun Nam, and **Jung-Dong Park**, "A Compact 5 GHz Power Amplifier using a Spiral Transformer for Enhanced Power Supply Rejection in 180-nm CMOS Technology," Electronics 2019, 8(9), 1043.
- [35] Hyohyun Nam, Junsik Park, **Jung-Dong Park**, "A 2-18 GHz Compressed Sensing Receiver with Broadband LO chain in 0.13- $\mu\text{m}$  SiGe BiCMOS," IEEE Microw. Wireless Compon. Letters, vol. 29, no. 9, September 2019, pp. 620-622.
- [34] Hyohyun Nam, Dong-Sik Ko, and **Jung-Dong Park**, "A Compact W-band Mixer-First Receiver in 65-nm CMOS," Microw. Opt. Technol. Lett., vol.61, no.7, July 2019, pp.1702-1705.
- [33] Van-Son Trinh and **Jung-Dong Park**, "An X-band Single-Pull Class A/B Power Amplifier in 0.18 $\mu\text{m}$  CMOS," Microw. Opt. Technol. Lett., vol.61, no.7, July 2019, pp.1736-1740.
- [32] Van-Viet Nguyen, Hyohyun Nam, Bok-Hyung Lee, and **Jung-Dong Park**, "A 5.8-17.6 GHz Cascaded Bidirectional Distributed Gain Amplifier utilizing Asymmetric Stages in 65nm CMOS," Microw. Opt. Technol. Lett., vol.61, no.7, July 2019, pp.1683-1687.
- [31] **Jung-Dong Park**, Muhib Ur Rahman, Hsiang Nerng Chen, "Isolation Enhancement of Wide-Band MIMO Array Antennas Utilizing Resistive Loading," IEEE Access, vol.7, no.1, June 2019, pp.81020-81026.
- [30] Van-Son Trinh, Hyohyun Nam, and **Jung-Dong Park**, "A 20.5 dBm X-band Power Amplifier with a 1.2-V Supply in 65-nm CMOS Technology," IEEE Microw. Wireless Compon. Letters, vol. 29, no. 3, pp. 234–236, March 2019.

**2018**

- [29] Hyohyun Nam, Changhwan Shin, and **Jung-Dong Park**, "Impact of the Metal-Gate Material Properties in FinFET (versus FD-SOI MOSFET) on High- $\kappa$ /Metal-Gate Work-Function Variation," IEEE Transactions on Electron Devices, vol. 65, no. 11, November 2018, pp.4780 - 4785.

- [28] Van-Viet Nguyen, Hyohyun Nam, Young Jo Choe, Bok-Hyung Lee, **Jung-Dong Park**, 2018. "An X-band Bi-Directional Transmit/Receive Module for a Phased Array System in 65-nm CMOS." *Sensors* 18, no. 82569, October 2018.
- [27] MuhibUr Rahman, Dong-Sik Ko, and **Jung-Dong Park**, "A compact tri-band bandpass filter utilizing double mode resonator with 6 transmission zeros," *Microw. Opt. Technol Lett.*, vol.60, issue 7, October 2018, pp.1767-1771.
- [26] MuhibUr Rahman, and **Jung-Dong Park**, "The Smallest Form Factor UWB Antenna with Quintuple Rejection Bands for IoT Applications Utilizing RSRR and RCSRR," *Sensors*, 2018, 18(3), 911; DOI:10.3390/s18030911.
- [25] MuhibUr Rahman, and **Jung-Dong Park**, "A Compact Tri-Band Bandpass Filter using Two StubLoaded Dual Mode Resonators, *Progress In Electromagnetics Research M*, Feb. 2018.
- [24] Hyohyun Nam, and **Jung-Dong Park**, "A 1-13 GHz CMOS Low-Noise Amplifier using Compact Transformer-based Inter-stage Networks," *IEICE Electronics Express*, Jan. 2018.

## 2017

- [23] MuhibUr Rahman, and **Jung-Dong Park**, "A Compact Multiple Notched Ultra-Wide Band Antenna with an Analysis of the CSRR-TO-CSRR Coupling for Portable UWB Applications," *Sensors*, 2017, 17(10), 2174; DOI:10.3390/s17102174.
- [22] Youngtaek Lee, Jaesung Jo, Karam Cho, Sangheon Oh, **Jung-Dong Park**, Changhwan Shin, "Experimental Observation of Negative Capacitance in Organic/Ferroelectric Capacitor for Steep Switching MOSFET," *Journal of Nanoscience and Nanotechnology*, vol. 17, no. 5, 2017, pp.34693471.

## 2016

- [21] Eunah Ko, Hyunjae Lee, **Jung-Dong Park**, and Changhwan Shin, "Vertical tunnel FET: Design optimization with triple metal-gate layers," *IEEE Trans. Electron Devices*, vol. 63, no. 12, December 2016, pp. 5030-5035.
- [20] Hyunjae Lee, **Jung-Dong Park**, and Changhwan Shin, "Performance booster for vertical tunnel field-effect transistor: Field-enhanced high- $\kappa$  layer," *IEEE Electron Device Letters*, vol. 37, no. 11, November 2016, pp.1383 - 1386.
- [19] Hyohyun Nam, Youngtaek Lee, **Jung-Dong Park**, and Changhwan Shin, "Study of Work-Function Variation in High- $\kappa$  Metal-Gate Gate-All-Around Nanowire MOSFET," *IEEE Transactions on Electron Devices*, vol. 63, no. 8, August 2016, pp.3338 - 3341.
- [18] Hyunjae Lee, **Jung-Dong Park**, and Changhwan Shin, "Study of Random Variation in

Germanium Source Vertical Tunnel FET," IEEE Transactions on Electron Devices, vol. 63, no. 5, July 2016, pp.1827 - 1834.

- [17] Cho, Karam Park, **Jung-Dong Park**, and Changhwan Shin, "Atomic Layer Deposition of TiO<sub>2</sub> using Titanium Isopropoxide and H<sub>2</sub>O: Operational Principle of Equipment and Parameter Setting," Journal of Semiconductor Technology and Science.Vol.16, No.3, June 2016, pp.346-351.

## 2015

- [16] Youngtaek Lee, Hyohyun Nam, **Jung-Dong Park**, and Changhwan Shin, "Study of Work-Function Variation for High-k/Metal-Gate Ge-Source Tunnel Field-Effect Transistors," IEEE Transactions on Electron Devices, vol. 62, no. 7, July 2015, pp.2143 - 2147.
- [15] Jaesung Jo, Woo Young Choi, **Jung-Dong Park**, Jae Won Shim, Hyun-Yong Yu, and Changhwan Shin, "Negative Capacitance in Organic/Ferroelectric Capacitor to Implement Steep Switching MOS Devices," Nano Letters, vol. 15, no.7, June 2015, pp.4553-4556.
- [14] Sangheon Oh, Jaesung Jo, Hyunjae Lee, Gyo Sub Lee, **Jung-Dong Park**, and Changhwan Shin, "Worst Case Sampling Method with Confidence Ellipse for Estimating the Impact of Random Variation on Static Random Access Memory (SRAM)," Journal of Semiconductor Technology and Science.vol.15, no3, 2015, pp.374-380.

## ~2014

- [13] **Jung-Dong Park**, "Design of Switching-Mode CMOS Frequency Multipliers in Sub-Terahertz Regime," IEICE Electronics Express, vol. 11, no. 18, Sept. 2014.
- [12] **Jung-Dong Park**, " 260GHz Spatially Combined Transmitter with a V-band Distributed OOK Modulator," IEICE Electronics Express, vol. 11, no. 18, Sept. 2014.
- [11] **Jung-Dong Park**, Ali M. Niknejad, "Y-band On-chip Dual Half-width Leaky-wave Antenna in a Nanoscale CMOS Process," IEEE Antennas and Wireless Propagation Letters, vol. 12, November 2013.
- [10] **Jung-Dong Park**, Ali M. Niknejad, "A Wideband W-Band Low Noise Amplifier with Slow-wave CPW in 65nm LP CMOS," Microw. Opt. Technol. Lett., vol. 55, no. 8, August. 2013.
- [9] **Jung-Dong Park**, Ali M. Niknejad, "Theory and Design of N-Push BJT Clamping Harmonic Generator for Silicon Terahertz ICs," IEEE Microw. Wireless Compon. Lett., vol. 22, no. 12, December 2012.
- [8] **Jung-Dong Park**, Shinwon Kang, and Ali M. Niknejad, "A 0.38 THz Fully Integrated Transceiver Utilizing a Quadrature Push-Push Harmonic Circuitry in SiGe BiCMOS," IEEE



- Journal of SolidState Circuits, vol. 47, no. 10, October 2012, pp.2344~2354.
- [7] **Jung-Dong Park**, Ali M. Niknejad, "A Ladder Shaped Network for ESD Protection of Millimeterwave CMOS ICs," Electronics Letters, vol.45, no.15, July 2009, pp.795~797.
- [6] Marcu, D. Chowdhury, C. Thakkar, **J.-D. Park**, L.-K. Kong, M. Tabesh, Y. Wang, A. Afshar, A. Gupta, A. Arbabian, S. Gambini, R. Zamani, E. Alon, A. M. Niknejad, "A 90nm CMOS Low-Power 60GHz Transceiver with Integrated Baseband Circuitry," IEEE Journal of Solid-State Circuits, vol. 44, no.12, December 2009.
- [5] **Jung-Dong Park**, Wan Joo Kim, "An Efficient Method of Eliminating the Range Ambiguity for a Low-Cost FMCW Radar Using VCO Tuning Characteristics," IEEE Trans. Microw. Theory Techn., vol. 54, no. 10, October 2006, pp. 3623-3629.
- [4] Y.-H. Baek, B.-H. Lee, J.-H. Oh, B.-O. Lim, D.-An, **J.-D. Park**, S.-D. Kim, J.-K. Rhee, "W-band resistive mixer using metamorphic HEMT," Current Applied Physics, 6, September 2006, pp.821826.
- [3] D. An, S.-C. Kim, **J.-D. Park**, M.-K Lee, H.-C. Park, S.-D. Kim, W.-J. Kim, and J.-K Rhee, "A Novel 94-GHz MHEMT Resistive Mixer Using a Micromachined Ring Coupler," IEEE Microw. Wireless Compon. Lett., vol. 16, no. 8, August 2006, pp.467-469.
- [2] B.H. Lee, D. An, M.K. Lee, B.O. Lim, J.H. Oh, S.D. Kim, J.K. Rhee, **J.-D. Park**, S.R. Lee, "Low Conversion Loss and High LO-RF Isolation 94GHz Active Down Converter," IEEE Trans. Microw. Theory Tech., vol. 54, no. 6, June 2006, pp. 2422-2430.
- [1] **Jung-Dong Park**, Wan Joo Kim, "An Efficient Method of Decreasing the Problems of Transmitter Signal Leakages on Low Cost Homodyne FMCW Radar with a Single Antenna Configuration," Microw. Opt. Technol. Lett., vol. 46, no. 5, Sept., 2005, pp. 512-515.

### *International Conferences*

- [8] **Jung-Dong Park**, Shinwon Kang, Siva V Thyagarajan, Elad Alon, Ali M. Niknejad, "A 260 GHz Fully Integrated CMOS Transceiver for Wireless Chip-to-Chip Communication," in Proc. IEEE Symposium on VLSI Circuits, Honolulu, June 2012.
- [7] **Jung-Dong Park**, Shinwon Kang, Ali M. Niknejad, "A 0.38 THz Fully Integrated Transceiver Utilizing Quadrature Push-Push Circuitry," in Proc. IEEE Symposium on VLSI Circuits, Koyto, June 2011.
- [6] Omar Bakr, Mark Johnson, **Jung-Dong Park**, Ehsan Adabi, Kevin Jones, Ali Niknejad, "A Scalable, Low Cost Architecture for High Gain Beamforming Antennas," in Proc. 2010 IEEE International Symposium on Phased Array Systems & Technology, October 2010.

- [5] C. Marcu, D. Chowdhury, C. Thakkar, L.-K. Kong, M. Tabesh, **J.-D. Park**, Y. Wang, A. Afshar, A. Gupta, A. Arbabian, S. Gambini, R. Zamani, A. M. Niknejad, E. Alon, "A 90nm CMOS LowPower 60GHz Transceiver with Integrated Baseband Circuitry," in Proc. ISSCC Dig. Tech. Papers, Feb. 2009, pp. 314-316.
- [4] D.-S. Ko, M.-K. Lee, D.An, B.-H. Lee, B.-O. Lim, S.-J. Lee, S.-W. Moon, B.-C. Jun, S.-H. Bang, **J.-D Park**, W.-J Kim, S.-D. Kim, J.-K. Rhee, "94GHz Single-Balanced Diode Mixer for FMCW Radar Applications," in Proc. Asia Pacific Microwave Conference, 2007.
- [3] M.K. Lee, **J.-D. Park**, D.An, B.H.Lee, S.C.Kim, B.O.Lim, S.J.Lee, Y.S. Chae, W.J. Kim, Y. H.Kim, J.K.Rhee, "W-band Waveguide-to-Coplanar Waveguide Transition for 94 GHz MIMIC applications," in Proc. HUT-ICCE 2006, Hanoi, Vietnam, October 2006.
- [2] Mun-Kyo Lee, **Jung-Dong Park**, Dan An, Bok-Hyung Lee, Sang-Jin Lee, Tae-Jong Baek, WanJoo Kim, Yong-Hoh Kim, Hyung-Moo Park, Jin-Koo Rhee, "A 94 GHz Diode Mixer For Low LO Power Operation," in Proc. 2005 Asia-Pacific Microw. Conf., Suzhou, China, December 2005.
- [1] **Jung-Dong Park**, Wan Joo Kim, Chang Won Lee, "A Novel Method for Beat Frequency Error Correction for a Low Cost FMCW Radar Using VCO Sweep Characteristics," in Proc. 2nd Eur. Radar Conf., Paris, 2005.

### *Korean Journal and Letter Articles*

- [9] 뉴엔반비엣, 남효현, 이복형, 이문교, 최선열, 송정문, **박정동**, "비대칭 이득증폭 단위셀을 이용한 2-13 GHz 양방향 증폭기," 대한전자공학회논문지, 55(12), 2018.12, pp.65-71.  
(2019년 대한전자공학회 반도체소사이터 최우수 논문상)
- [8] 남효현, 김형규, 김당오, 류현준, 김주혜, **박정동**, "65nm CMOS공정을 이용한 FMCW 레이더 및 라디오미터 일체형 센서용 광대역 IF 가변 이득 증폭기," 대한전자공학회논문지, 55(10), 2018.10, pp.61-66.
- [7] 남효현, 박준식, 송규하, 박정동, "압축 센싱 수신기용 광대역 전단부 집적화 설계," 전자공학 회논문지 제55권 제4호(통권 제485호), 2018.4, pp.37-43.
- [6] 남효현, 박준식, 송규하, **박정동**, "4 채널 36 Gb/s 27-1 초고속 의사 이진수열 (PRBS) 발생 기의 집적화 설계," 전자공학회논문지 제55권 제1호(통권 제482호), 2018.1.
- [5] **박정동**, 박준식, "실리콘 공정기술 기반 초고속 압축센싱 수신기의 집적화 연구," 전자공학회 지, 제3권 10호, 2016.10, pp.35-42.
- [4] 안단, 이복형, 임병욱, 이문교, 이상진, 진진만, 고두현, 김성찬, **박정동**, 신동훈, 박형무, 박현 창, 김삼동, 이진구 "높은 LO-RF 격리 특성의 W-band MMIC Single-

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