

Publications:

Journals:

REFERENCES

[2012]

- [1] Sheng-Lyang Jang, Yao-Tsu Chen, Chia-Wei Chang, and Jhin-Fang Huang," A Balanced Dual-Resonance Colpitts VCO in $0.18 \mu\text{m}$ CMOS," *in press, Microwave and Optical Technology Lett.*, 2012.
- [2] S.-L. Jang, J.-S. Yuan, S.-D. Yen, H.-S. Tang, S.-Y. Chen, G.-W. Huang , "Experimental Evaluation of Hot Electron Reliability on Differential Clapp-VCO", *in press, Microelectronics Reliability*, pp.-, 2012.
- [3] Sheng-Lyang Jang and Li-Te Chou," Bottom-Series Coupled Quadrature VCO Using the Inductive Gate Voltage Boosting Technique," *in press, Int. J. Electronics.*, Volume Issue , p., 2012.
- [4] Chia-Wei Chang and Sheng-Lyang," A Differential BiCMOS Divide-by-4 Injection-Locked Frequency Divider," *in press, Microwave and Optical Technology Lett.*, 2012.
- [5] Sheng-Lyang Jang, Jhin-Fang Huang, Chia-Wei Chang," Phase Noise Formula for Dual-Resonance Injection Locked Frequency Dividers," *Microwave and Optical Technology Lett.vol. 54*, pp.2491-2494, Nov., 2012.
- [6] Li-Te Chou, Jhin-Fang Huang, and Sheng-Lyang Jang," Wide-band Divide-by-2 Quadrature Injection-Locked Frequency Dividers with Large Output Voltage Swing," vol. 54, pp.2284-2287, Oct., 2012.
- [7] Sheng-Lyang Jang, Do Anh Tu, Chia-Wei Chang and Jhin-Fang Huang," Dual-Band CMOS Voltage-Controlled Oscillator with Comparable Outpower at Both Bands," vol. 54, pp.2349-2352, Oct., 2012.
- [8] Sheng-Lyang Jang, Meng-Hsin Chen, Chia-Wei Chang, and Miin-Horng Juang," A Complementary Cross-Coupled Voltage-Controlled Oscillator Using Differential Active Inductor," *Microwave and Optical Technology Lett.*, pp.2038-2042, Sept., 2012.
- [9] Sheng-Lyang Jang, Ching-Lun Cheng, Chia-Wei Chang, and Jhin-Fang Huang," A Dual-Resonance CMOS Voltage-Controlled Oscillator With Enhanced Performance Through New Varactor Topology," *Microwave and Optical Technology Lett.*, pp.1590-1592, July, 2012.
- [10] Chia-Wei Chang, Sheng-Lyang Jang, and Miin-Horng Juang, " Divide-by-4 Injection-Locked Frequency Divider Using Two Linear Mixers," *Microwave and Optical Technology Lett.*, pp.1359-1362, June, 2012.
- [11] Sheng-Lyang Jang, Wei-Chih Liu, Jhin-Fang Huang, and Chia-Wei Chang, " A CMOS Transconductance-Enhanced Colpitts-Like Quadrature VCO," *Microwave and Optical Technology Lett.*, pp.1453-1455, June, 2012.
- [12] Sheng-Lyang Jang, and Li-Te Chou, " Low-Power Quadrature VCO Formed With Two Injection-Locked Frequency Dividers," *Microwave and Optical Technology Lett.*, pp.1170-1173, May, 2012.
- [13] Sheng-Lyang Jang, San-Sheng Lin, Chia-Wei Chang and Shih-Hsiang Hsu, " A Complementary Cross-Coupled Quadrature VCO Using Ring Inductor Coupling Method," *Microwave and Optical Technology Lett.*, pp.839-842, April, 2012.
- [14] Jyun-Yuan Jhang, Thomas Hsue, and Sheng-Lyang Jang, " Bias-Free Analog Predistorters with L-type Attenuator for RF Power Amplifiers," *Microwave and Optical Technology Lett.*, pp.920-923, April, 2012.
- [15] S.-L. Jang, D. A. Tu, C.-W. Chang, and M.-H. Juang, " A Low Power Push-Push Differential VCO Using Current-Reuse Circuit Design Technique," *PIERC 27*. pp.85-97, 2012.
- [16] Sheng-Lyang Jang, Chao-Wei Hsieh, Chia-Wei Chang, and C.-W. Hsue, " A $0.18 \mu\text{m}$ SiGe BiCMOS HBT VCO Using Diode Degeneration," *Microwave and Optical Technology Lett.*, pp. 605-608, March, 2012.
- [17] Sheng-Lyang Jang, Chia-Wei Chang, Chih-Chieh Shih, and Ching-Wen Hsue, " Quadrature VCO Based on an LC-Ring in $0.18 \mu\text{m}$ CMOS Technology," *Microwave and Optical Technology Lett.*, pp.474-477, Feb., 2012.
- [18] Sheng-Lyang Jang, Chong-Wei Huang, Chia-Wei Chang, and Ching-Wen Hsue, " A Parallel-Injection Injection Locked Frequency Divider in $0.35 \mu\text{m}$ SiGe HBT Process," *Microwave and Optical Technology Lett.*, pp.379-383, Feb., 2012.
- [19] Sheng-Lyang Jang, Chia-Wei Chang, Chong-Wei Huang, and Ching-Wen Hsue, " A Dual-Resonance Injection-Locked Frequency Doubler in $0.18 \mu\text{m}$ CMOS Technology," *Microwave and Optical Technology Lett.*, pp.193-196, Jan., 2012.

[2011]

- [20] S.-L. Jang, Y.-S. Lin, C.-W. Chang, and M.-H. Juang, " A Three-Phase Voltage-Controlled Oscillator Using a Composite LC Transmission-Line Resonator," *PIERL 27*, page 151-160, 2011.

- [21] Sheng-Lyang Jang, San-Sheng Lin, Chia-Wei Chang, and Shih-Hsiang Hsu, "Quadrature VCO Formed With Two Colpitts VCO Coupled via an LC-Ring Resonator," PIERC 24, page 185-196, 2011.
- [22] Chia-Wei Chang, Sheng-Lyang Jang, and Chao-Wei Hsieh, "Wide-locking Range $\div 3$ Active-Inductor Injection-Locked Frequency Divider Using the Push-Push Oscillator," *Microwave and Optical Technology Lett.*, pp.2771-2773, Dec, 2011.
- [23] M. H. Juang, D. H. Shen, and S. L. Jang, "Formation of lateral thin-film 700-V insulated-gate bipolar transistors by using retrograde p-well double implantation scheme", *Microelectronics Engineering*, 88, 3119–3112, 2011.
- [24] Sheng-Lyang Jang, Yao-Ting Chiu, Chia-Wei Chang, and Ching-Wen Hsue, "CMOS Quadrature VCO Using the Injection MOSFET Coupling," *Microwave and Optical Technology Lett.*, pp.2631-2634, Nov., 2011.
- [25] Sheng-Lyang Jang, Ta-Yu Cheng, Chia-Wei Chang, and Ching-Wen Hsue, "A Three-Phase Complementary Colpitts VCO Implemented with a LC-Ring Resonator," *Microwave and Optical Technology Lett.*, pp.2308-2310, Oct., 2011.
- [26] **Sheng-Lyang Jang, Chih-Chieh Shih, Cheng-Chen Liu, Chia-Wei Chang, and Ching-Wen Hsue,** "CMOS Quadrature VCOs Using the Varactor Coupling Technique," *IEEE Microw. Wireless Compon. Lett.*, vol. 21, no. 9, pp. 498-500, Sept. 2011.
- [27] Sheng-Lyang Jang, Wei-Chih Liu, Chia-Wei Chang and Jhin-Fang Huang, "A 0.35 μm CMOS Cross-Coupled Complementary Colpitts Voltage Controlled Oscillator," *Microwave and Optical Technology Lett.*, pp.2189-2192, Sept., 2011.
- [28] Sheng-Lyang Jang, Li-Te Chou, Jhin-Fang Huang, Chia-Wei Chang, "A Dual-Band Dual-Resonance Quadrature Injection-Locked Frequency Divider," *IEICE Trans. on Electron.*, Vol.E94-C, No.8, pp.1336-1339, Aug. 2011.
- [29] Sheng-Lyang Jang, Chia-Wei Chang, Yu-Sheng Chen, Jhin-Fang Huang, Jau-Wei Hsieh, and Chong-Wei Huang, "A 0.18 μm CMOS Wide-band Injection-Locked Frequency Divider Using Push-Push Oscillator," *IEICE Trans. on Electron.*, Vol.E94-C, No.8, pp.1332-1335, Aug. 2011.
- [30] Sheng-Lyang Jang, Hsiu-An Yeh, Chia-Wei Chang, M.-H. Juang, and Han-Sheng Chen, "A Quadrature CMOS Clapp Voltage-Controlled Oscillator," *Microwave and Optical Technology Lett.*, pp.1909-1911, Aug., 2011.
- [31] Sheng-Lyang Jang, Ching-Lun Cheng, Chia-Wei Chang, and Miin-Horng Juang, "A 0.35- μm CMOS Frequency Divider Implemented with the Waffle Injection MOSFET," *Microwave and Optical Technology Lett.*, pp.1610-1613, July, 2011.
- [32] Sheng-Lyang Jang, Ren-Kai Yang, Chia-Wei Chang, Miin-Horng Juang, and Cheng-Chen Liu, "Dual-Band Transformer-Coupled Quadrature Injection-Locked Frequency Dividers," *Microwave and Optical Technology Lett.*, pp.1561-1564, July, 2011.
- [33] Cheng-Chen Liu, Sheng-Lyang Jang, Cheng-Cih Wang, and Miin-Horng Juang, "A Transconductance-Boosted Complementary Colpitts Voltage-Controlled Oscillator," *Microwave and Optical Technology Lett.*, pp.1183-1186, May, 2011.
- [34] Cheng-Chen Liu, Cheng-Cih Wang, Sheng-Lyang Jang, and Miin-Horng Juang, "A SiGe Injection-Locked-Oscillator Using HBT Injector Operated in Saturation Region," *Microwave and Optical Technology Lett.*, pp.734-737, April, 2011.
- [35] Sheng-Lyang Jang, Ying-Hsiang Liao, Chia-Wei Chang and M.-H. Juang, "Low Power Self-Injection-Locked CMOS Armstrong Voltage-Controlled Oscillator," *Microwave and Optical Technology Lett.*, pp.728-731, April, 2011.
- [36] M.-H. Juang, J. Yu, S.-L. Jang, "Improvement of trench MOS barrier Schottky rectifier by using high-energy counter-doping trench-bottom implantation," *Current Applied Physics* 11 (2011) 698-701.
- [37] Sheng-Lyang Jang, Yu-Sheng Chen, Cheng-Chen Liu, and Miin-Horng Juang, "A 33% Tuning Range Voltage-Controlled Oscillator Robust to Environmental Variation," *Microwave and Optical Technology Lett.*, pp.517-519, March, 2011.
- [38] Sheng-Lyang Jang, Chun-Wei Hsu, Chia-Wei Chang and Ching-Wen Hsue, "Wide-Band $\div 3$ Injection Locked Frequency Divider in 0.35 μm SiGe BiCMOS," *Microwave and Optical Technology Lett.*, pp.609-611, March, 2011.
- [39] Sheng-Lyang Jang, Chia-Wei Chang, Hsiu-An Yeh, Miin-Horng Juang, and Yi-Jhe Song, "CMOS Quadrature VCOs Using the Diode Coupling Technique," *Microwave and Optical Technology Lett.*, pp.551-553, March, 2011.
- [40] M. H. Juang, Y. S. Peng, D. C. Shye, J. L. Wang, C. C. Hwang, and S. L. Jang, "Submicron-meter tunneling field-effect poly-Si thin-film transistors with a thinned channel layer", *Microelectronics Engineering*, 88, 32–35, 2011.
- [41] Sheng-Lyang Jang, Cheng-Hsin Liu, Chia-Wei Chang, and Miin-Horng Juang, "A Low Voltage, Low Power Divide-by-4 LC-tank Injection-Locked Frequency Divider," *Int. J. Electronics.*, Volume 98 Issue 4, p.521-527, April 2011.
- [42] Sheng-Lyang Jang, Chih-Chieh Shih, Cheng-Chen Liu, and Miin-Horng Juang, "CMOS Injection-Locked Frequency Divider with Two Series-LC Resonators," *Microwave and Optical Technology Lett.*, pp.290-293, Feb., 2011.
- [43] **Sheng-Lyang Jang, Chia-Wei Chang, Jyun-Yan Wun, and Miin-Horng Juang,** "Quadrature Injection-Locked Frequency Dividers Using Dual-Resonance Resonator," *IEEE Microw. Wireless Compon. Lett.*, vol. 21, no. 1, pp. 37-39, Jan. 2011.

[2010]

- [44] M. H. Juang, Y.S. Peng, J.L. Wang, D.C. Shye, C.C. Hwang, S.L. Jang " Submicron-meter polycrystalline-SiGe thin-film transistors with tunneling field-effect-transistor structure ,," Solid-State Electron. 54, 1686–1689, 2010.
- [45] M.-H. Juang, Y.S. Peng, J.L. Wang, D.C. Shye, C.C. Hwang, S.-L. Jang, " Microcrystalline-Si thin-film transistors formed by using palladium silicided source/drain contact electrode ,," Solid-State Electron. 54, 1532–1535, 2010.
- [46] Sheng-Lyang Jang, Han-Sheng Chen, Cheng-Chen Liu, and M.-H. Juang" A 0.35 μm CMOS Divide-by-3 LC Injection Locked Frequency Divider Using Linear Mixers," *Microwave and Optical Technology Lett.*, pp.2740-2743, Dec., 2010.
- [47] Sheng-Lyang Jang, Chih-Chieh Shih, Chia-Wei Chang, Cheng-Chen Liu, and Jhin-Fang Huang, " A Dual-Band Divide-by-2 Injection Locked Frequency Divider in 0.35 μm SiGe BiCMOS," *Microwave and Optical Technology Lett.*, pp.2762-2765, Dec., 2010.
- [48] Sheng-Lyang Jang, Li-Te Chou and Chia-Wei Chang, " Colpitts VCO with Gate-Series High-Quality Factor LC Resonator," *Microwave and Optical Technology Lett.*, vol. 52, no. 10, pp., 2170-2173, 2010.
- [49] M.-H. Juang, C. W. Chang, J. L. Wang, D. C. Shye, C. C. Hwang, S. L. Jang, " Formation of n-channel polycrystalline-Si thin-film transistors by dual source/drain implantation ,," Solid-State Electron. 54, 516–519, 2010.
- [50] M. H. Juang, C. W. Chang, D. C. Shye, J. L. Wang, C. C. Hwang, and S. L. Jang, "Study of polycrystalline-Si thin film transistors with different channel layer thickness at low bias voltage", Microelectronics Engineering, 87, 1896–1900, 2010.
- [51] **Sheng-Lyang Jang, Yu-Sheng Chen, Chia-Wei Chang, and Cheng-Chen Liu, " A Wide-Locking Range ± 3 Injection-Locked Frequency Divider Using Linear Mixer," IEEE Microw. Wireless Compon. Lett., vol. 20, pp.390-392, July, 2010.**
- [52] Sheng-Lyang Jang, Cheng-Chen Liu, Yi-Jhe Song, and M.-H. Juang , " A Low Voltage Balanced Clapp VCO in 0.13 μm CMOS Technology," *Microwave and Optical Technology Lett.*, vol. 52, no. 7, pp., 1623-1625, 2010
- [53] **Sheng-Lyang Jang, Chih-Chieh Shih, Cheng-Chen Liu, and Miin-Horng Juang, " A 0.18 μm CMOS Quadrature VCO Using the Quadruple Push-Push Technique," IEEE Microw. Wireless Compon. Lett., vol. 20, pp.343-345, June, 2010.**
- [54] Sheng-Lyang Jang, Chia-Wei Chang, Yi-Jhe Song, Cheng-Chen Liu, and Chun-Wei Hsu, "On the Injection Methods in a Top Series-Injection Locked Frequency Divider", Microelectronics Reliability, 50, pp.589–593,2010.
- [55] Sheng-Lyang Jang, Cheng-Chen Liu, Ren-Kai Yang, Chih-Chieh Shih, and Chia-Wei Chang, "A 0.35 μm CMOS Divide-by-2 Quadrature Injection-Locked Frequency Divider Based on Voltage-Current Feedback Topology", Microelectronics Reliability, 50, pp.594–598, 2010. (SCI, impact factor=1.011)
- [56] M.-H. Juang, C.C. Hwang, D.C. Shye, J.L. Wang, and S.L. Jang, " Formation of 30-V power DMOSFET's by implementing p-counter-doped region within n-type drift layer ,," Solid-State Electron. 54, pp. 724-727, 2010.
- [57] M.-H. Juang, P.-S. Hu, S.L. Jang, " Formation of polycrystalline-Si thin-film transistors with tunneling field effect transistor structure," *Thin Solid Films*, 518 pp. 3978 – 3981, 2010.
- [58] Sheng-Lyang Jang, Yuan-Kai Wu, Chia-Wei Chang, Jhin-Fang Huang, and Cheng-Chen Liu, " A 90nm CMOS Dual-band Divide-by-2 and -4 Injection-locked Frequency Divider," *Microwave and Optical Technology Lett.*, vol. 52, no. 6, pp.1421-1425, 2010.
- [59] Sheng-Lyang Jang, Jhao-Jhang Chen, Cheng-Chen Liu and Miin-Horng Juang, " Injection-Locked Frequency Tripler With Series- Tuned Resonator in 0.13 μm CMOS Technology," *Microwave and Optical Technology Lett.*, pp.1107-1110, May, 2010.
- [60] **S.-L. Jang, and C.-W. Chang, " A 90nm CMOS LC-tank Divide-by-3 Injection-locked Frequency Divider with Record Locking Range," IEEE Microw. Wireless Compon. Lett., vol. 20, pp.229-231, April, 2010.**
- [61] M.-H. Juang, C.W. Chang, C.W. Huang, J. L. Wang, D.C. Shye, C.C. Hwang, S. L. Jang, " Formation of sub-micrometer polycrystalline-SiGe thin-film transistors by using a thinned channel layer ,," Solid-State Electron. 54, pp. 303-306, 2010.
- [62] M.-H. Juang, C.W. Huang, M.-L. Wu, C.C. Hwang, J.L. Wang, D.C. Shye, S.-L. Jang, " Formation of n-channel polycrystalline-Si thin-film transistors by using retrograde channel scheme with double implantation," Microelectronic Engineering, 87, pp.620-623, 2010.
- [63] **S.-L. Jang, C.-Jen Huang, C.-W. Hsue, and C.-W. Chang, " A 0.3V Cross-coupled VCO using Dynamic Threshold MOSFET," IEEE Microw. Wireless Compon. Lett., pp. 166-168, March 2010.**
- [64] Sheng-Lyang Jang, Cheng-Chen Liu, and Jhin-Fang Huang, " Divide-by-3 Injection-Locked Frequency Divider Using Two Linear Mixers," *IEICE Trans. on Electron.*, Vol.E93-C, No.1,pp. 136-139, Jan. 2010.
- [65] Yuan-Kai Wu, Jhin-Fang Huang, Chia-Wei Chang and Sheng-Lyang Jang, " An 8-phase $\div 4$ SiGe HBT Ring-Oscillator-Based Injection Locked Frequency Divider," *Microwave and Optical Technology Lett.*, vol. 52, No.1, pp. 201-204, 2010.
- [66] Cheng-Chen Liu, Sheng-Lyang Jang, Jhao-Jhang Chen, and Miin-Horng Juang, " A 0.6V Low Power Armstrong VCO in 0.18 μm CMOS," *Microwave and Optical Technology Lett.*, vol. 52, No.1, pp. 116-119, 2010.
- [67] Chuang-Jen Huang, Ching-Wen Hsue, Cheng-Chen Liu, and Sheng-Lyang Jang, " A 17GHz Colpitts VCO Using Reverse- and Forward-biased Diode Tuning in 0.18 μm CMOS," *Microwave and Optical Technology Lett.*, vol. 52, No.1, pp. 38-41, 2010.

[2009]

- [68] Sheng-Lyang Jang, Chi-Wen Lin, Cheng-Chen Liu, and Miin-Horng Juang, " Tail-injected Divide-by-4 Quadrature Injection Locked Frequency Divider," *Int. J. Electronics.* Vol. 96, No. 12, pp.1225-1235, 2009.
- [69] Sheng-Lyang Jang,Tai-Sung Lee, Ching-Wen Hsue and Cheng-Chen Liu, " A Low Voltage Quadrature VCO Implemented with Series Frequency Doublers," *IEEE Microw. Wireless Compon. Lett.*, vol. 19, No. 12, pp.819-821, Dec. 2009.
- [70] Sheng-Lyang Jang, Yuan-Kai Wu, Cheng-Chen Liu and Jhin-Fang Huang, " A Dual-Band CMOS Voltage-Controlled Oscillator Implemented with Dual-Resonance LC Tank," *IEEE Microw. Wireless Compon. Lett.*, vol. 19, No. 12, pp.816-818, Dec. 2009.
- [71] Sheng-Lyang Jang, Tai-Sung Lee, Ching-Wen Hsue and Chia-Wei Chang, " A Low Voltage and Low Power Bottom-Series Coupled Quadrature VCO," *IEEE Microw. Wireless Compon. Lett.*, vol. 19, No. 11, 722-724, Nov., 2009.
- [72] Sheng-Lyang Jang, Chia-Wei Chang and Sheng-Ming Yang, " Low Power Wide-Locking Range CMOS Quadrature Injection-Locked Frequency Divider," *Microwave and Optical Technology Lett.*, vol. 51, No.10, pp. 2420-2423, 2009.
- [73] Sheng-Lyang Jang, Cheng-Chen Liu, Jhin-Fang Huang, Yuan-Kai Wu, and Jhao-Jhang Chen, " Quadrature VCOs Using Single-Ended Injected Injection-Locked Frequency Dividers," *IEICE Trans. on Electron.*, Vol.E92-C, No.9, pp.1226-1229, Sept. 2009.
- [74] Sheng-Lyang Jang, Chuang-Jen Huang, Cheng-Chen Liu, and Ching-Wen Hsue, " A 0.22V Quadrature VCO in 90nm CMOS Process," *IEEE Microw. Wireless Compon. Lett.*, vol. 19, No. 9, 566-568, Sept., 2009.
- [75] Miin-Horng Juang, C.W. Huang, C.W. Chang, D.C. Shye, C.C. Hwang, J.L. Wang, S.L. Jang, " The formation of polycrystalline-Si thin-film transistors by using large-angle-tilt-implantation of dopant through gate sidewall spacer," *Solid-State Electron.*, vol. 53, No. 9, pp. 1036-1040, Sept., 2009.
- [76] Sheng-Lyang Jang, Chien-Feng Lee, and Chia-Wei Chang , " A K-Band Differential Colpitts Cross-Coupled VCO in $0.13\mu\text{m}$ CMOS," *Solid-State Electron.*, vol. 53, No. 9, pp. 931-934, Sept., 2009.
- [77] Sheng-Lyang Jang, Ren-Kai Yang, Cheng-Chen Liu, and Ching-Wen Hsue, " A Low Power SiGe BiCMOS Series-Tuned Divide-by-3 Injection Locked Oscillators ,"*Microwave and Optical Technology Lett.*, vol. 51, No.9, pp. 2239-2242, 2009.
- [78] Sheng-Lyang Jang, Cheng-Chen Liu, Shin-Hsin Huang, and Miin-Horng Juang, " Quadrature Cross-Coupled VCO Implemented with Body Injection-locked Frequency Dividers ,"*Microwave and Optical Technology Lett.*, vol. 51, No.8, pp. 1918-1921, 2009.
- [79] Sheng-Lyang Jang, Jyun-Yan Wun, Cheng-Chen Liu, and Miin-Horng Juang, " A Low Power LC-tank SiGe BiCMOS Injection Locked Frequency Divider," *Microwave and Optical Technology Lett.*, vol. 51, No.8, pp. 1970-1973, 2009.
- [80] S.-L. Jang, Chang-Hao Yang, Cheng-Chen Liu and M.-H. Juang, " A Wide-locking Range 6-Phase $\div 3$ Injection Locked Frequency Divider," *Int. J. Electronics.* Vol. 96 , No. 7, pp. 691-697, July 2009.
- [81] Sheng-Lyang Jang, Yi-Jhe Song, and Cheng-Chen Liu, " A differential Clapp VCO in $0.13\mu\text{m}$ CMOS Technology," *IEEE Microw. Wireless Compon. Lett.*, pp. 404-406, June, 2009.
- [82] Sheng-Lyang Jang, Kuan-Chun Shen, Chia-Wei Chang, and Miin-Horng Juang, " A 6-Phase $\div 3$ injection locked frequency divider in SiGe BiCMOS technology," *Microwave and Optical Technology Lett.*, pp. 1555-1557, June, 2009.
- [83] Sheng-Lyang Jang, Ren-Kai Yang, Chia-Wei Chang and Miin-Horng Juang, " Multi-modulus LC injection-locked frequency dividers using single-ended injection," *IEEE Microw. Wireless Compon. Lett.*, pp. 311-313, May, 2009.
- [84] Sheng-Lyang Jang, Chien-Feng Lee and Jhong-Chen Luo, "A CMOS LC Injection-Locked Frequency Divider with the Division Ratio of 2 and 3," *Microwave and Optical Technology Lett.*, pp. 1263-1267, May 2009.
- [85] Sheng-Lyang Jang, Chia-Wei Chang, Ming-Hsiang Suchen and Kuan-Chun Shen, "A Differential VCO Using the Drain-Connected-to-Body MOSFET," *Microwave and Optical Technology Lett.*, pp. 1174-1177, May 2009.
- [86] Sheng-Lyang Jang, Cheng-Chen Liu, Ming-Hsiang Suchen, and Shih-Hsin Huang," An Eight-Phase CMOS Voltage Controlled Oscillator," *Microwave and Optical Technology Lett.*, pp. 1225-1228, May 2009.
- [87] Sheng-Lyang Jang, Chih-Yeh Lin, Cheng-Chen Liu, and Jhin-Fang Huang, " Dual-Band CMOS Injection-Locked Frequency Divider With Variable Division Ratio," *IEICE Trans. on Electron.*, Vol.E92-C, No.4, pp.550-557, Apr. 2009.
- [88] Sheng-Lyang Jang, Kuan-Chun Shen, and Cheng-Chen Liu," A 5.2GHz Low Power VCO in $0.18\mu\text{m}$ CMOS Process," *Microwave and Optical Technology Lett.*, pp. 1052-1055, April 2009.
- [89] Sheng-Lyang Jang, Chun-Yi Wu, Cheng-Chen Liu, and Miin-Horng Juang, " A 5.6GHz Low Power Balanced VCO in $0.18\mu\text{m}$ CMOS," *IEEE Microw. Wireless Compon. Lett.*, pp. 233-235, April, 2009.
- [90] Sheng-Lyang Jang, Shin-Hsin Huang, Cheng-Chen Liu and Miin-Horng Juang, " CMOS Colpitts Quadrature VCO Using the Body Injection-Locked Coupling Technique," *IEEE Microw. Wireless Compon. Lett.*, pp. 230-232, April, 2009.

- [91] Sheng-Lyang Jang, Cheng Chen Liu and Chia-Wei Chung, "A Tail-injected Divide-by-4 SiGe HBT Injection Locked Frequency Divider," *IEEE Microw. Wireless Compon. Lett.*, pp. 236-238, April, 2009.
- [92] Miin-Horng Juang, S.-H. Cheng, and S.-L. Jang, "Formation of polycrystalline-Si thin-film-transistors with a retrograde channel doping profile ,," *Solid-State Electron.* 53, No. 3, pp. 371-375, 2009.
- [93] S.L. Jang, C.W. Chang, W.C. Cheng, C.F. Lee and M. H. Juang, " Low Power Divide-By-3 Injection-Locked Frequency Dividers Implemented with Injection Transformers," *Electronics Lett.*, vol. 45, pp. 240-241, Feb. 2009.
- [94] Sheng-Lyang Jang, Jhong-Chen Luo, Chia-Wei Chang, Chien-Feng Lee and Jhin-Fang Huang, " LC-tank Colpitts Injection-Locked Frequency Divider with Even and Odd Modulo," *IEEE Microw. Wireless Compon. Lett.*, vol. 19, no. 2, pp. 113-115, Feb. 2009.
- [95] Sheng-Lyang Jang, Cheng-Pin Liu, Chien-Feng Lee and Ching-Wen Hsue, " Quadrature and Eight-phase VCOs Implemented with SiGe Injection Locked Frequency Dividers," *Microwave and Optical Technology Lett.*, pp. 395-399, Feb. 2009.
- [96] M. H. Juang, P.-S. Hu, and H. C. Cheng, "Formation of lateral SiGe tunneling field-effect transistors on the SiGe/oxide/Si-substrate," *Semicond. Sci. Technol.* 24, No. 2, 025019, Feb., 2009.
- [97] Sheng-Lyang Jang, Chi-Wen Lin, Cheng Chen Liu, and M.-H. Juang, " An active-inductor injection locked frequency divider with variable division ratio," *IEEE Microw. Wireless Compon. Lett.*, vol. 19, no. 1, pp. 39-41, Jan. 2009.
- [98] Chien-Feng Lee, and Sheng-Lyang Jang," A 24-GHz 90-nm CMOS injection-locked frequency divider," *Microwave and Optical Technology Lett.*, pp. 32-36, Jan. 2009.

[2008]

- [99] Sheng-Lyang Jang, Cheng-Chen Liu and Ching-Wen Hsue," LC-Tank Injection Locked Frequency Divider with Variable Division Ratio," *Microwave and Optical Technology Lett.*, pp. 3232-3236, Dec. 2008.
- [100]Sheng-Lyang Jang and Cheng-Chen Liu , " Wide-Locking Range Divide-by-4 Injection-Locked Frequency Dividers," *Microwave and Optical Technology Lett.*, pp. 3229-3232, Dec. 2008.
- [101]Sheng-Lyang Jang, S.-S. Huang, Chien-Feng Lee, and M.-H. Juang " CMOS Quadrature VCO implemented with two first-harmonic injection-locked oscillators," *IEEE Microw. Wireless Compon. Lett.*, pp.695-697, Oct. 2008.
- [102]Sheng-Lyang Jang, Sheng-Chien Wu, Chien-Feng Lee and M.-H. Juang , " CMOS top-series coupling quadrature injection-locked frequency divider," *Microwave and Optical Technology Lett.*, pp. 2554-2557, Oct. 2008.
- [103]Sheng-Lyang Jang, Pei-Xi Lu, Chien-Feng Lee and M.-H. Juang , " Divide-by-3 LC injection locked frequency divider with a transformer as an injector's load," *Microwave and Optical Technology Lett.*, pp. 2722-2725, Oct. 2008.
- [104]S.-L. Jang and C.-C. Liu," Active-Inductor-Capacitor Tank Colpitts Injection Locked Frequency Divider," *Microwave and Optical Technology Lett.*, pp. 2376-2379, Sept, 2008.
- [105]S.-L. Jang, S.-S. Huang, J.-F. Lee and M.-H. Juang , " LC-tank Colpitts injection-locked frequency divider with record locking range," *IEEE Microw. Wireless Compon. Lett.*, pp.560-562, Aug. 2008.
- [106]Sheng-Lyang Jang, Chia-Wei Chang, Sheng-Chien Wu, Chien-Feng Lee, Lin-yen Tsai, and Jhin-Fang Huang, "Quadrature Hartley VCO and injection-locked frequency divider," *IEICE Trans. on Electron.*, Vol.E91-C, No.8, pp.1371-1374, Aug. 2008.
- [107]M. H. Juang, I.-S. Tsai, and H. C. Cheng, "The formation of polycrystalline-Si thin-film transistors with a thinned channel layer," *Semicond. Sci. Technol.* 23, No. 8, 105003, Aug., 2008.
- [108]M. H. Juang, I.-S. Tsai, S. L. Jang and H. C. Cheng, "Formation of thin-film transistors with a polycrystalline hetero-structure channel layer," *Semicond. Sci. Technol.* 23, No. 8, 085017, July, 2008.
- [109]Sheng-Lyang Jang, Chih-Yeh Lin, and Chien-Feng Lee, " A low voltage 0.35um CMOS frequency divider with the body injection technique," *IEEE Microw. Wireless Compon. Lett.*, vol. 18, no. 7, pp.470-472, July, 2008.
- [110]Chien-Feng Lee and Sheng-Lyang Jang," A low voltage divide-by-3 injection-locked frequency divider," *Microwave and Optical Technology Lett.*, pp. 1905-1908, July, 2008.
- [111]Sheng-Lyang Jang, Chia-Wei Chang, Chien-Feng Lee, and Jhin-Fang Huang, " Divide-by-3 LC Injection Locked Frequency Divider Implemented with 3D Inductors," *IEICE Transaction on Electronics.*, Vol.E91-C, No.6,pp.956-962, Jun. 2008.
- [112]Sheng-Lyang Jang, Chia-Wei Tai, and Chien-Feng Lee," Divide-by-3 injection locked frequency divider implemented with active inductor," *Microwave and Optical Technology Lett.*, Vol. 50, no. 6, pp.1682-1685, June, 2008.
- [113]Sheng-Lyang Jang, Ming-Hsiang Suchen, and Chien-Feng Lee, " Colpitts injection locked frequency divider implemented with a 3D helical transformer ,," *IEEE Microw. Wireless Compon. Lett.*, vol. 18, no. 6, pp.410-412, June, 2008.
- [114]Sheng-Lyang Jang, S.-S. Huang, Sheng-Chien Wu, Chien-Feng Lee and M.-H. Juang , " A low power X-band CMOS differential VCO ,," *Microwave and Optical Technology Lett.*, Vol. 50, no. 5, pp.1389-1392, May, 2008.

- [115] Chien-Feng Lee and Sheng-Lyang Jang, "A novel divide-by-3 Hartley injection-locked frequency divider," *Microwave and Optical Technology Lett.*, Vol. 50, no. 4, pp.906-909, April. 2008.
- [116] Sheng-Lyang Jang, Wei-Chi Chen, and Chien-Feng Lee, "Divide-by-3 LC injection locked frequency divider with inductor over MOS topology," *Microwave and Optical Technology Lett.*, Vol. 50, no. 4, pp.988-992, April. 2008.
- [117] Sheng-Lyang Jang, Fei-Hung Chen, and J.-F. Huang, "A transformer-coupled LC-tank injection locked frequency divider," *Microwave and Optical Technology Lett.*, Vol. 50, no. 3, pp.592-595, Mar. 2008.
- [118] Sheng-Lyang Jang, and C.-C. Liu, "A varactorless CMOS direct-injection locked frequency divider," *Microwave and Optical Technology Lett.*, Vol. 50, no. 3, pp.608-611, Mar. 2008.
- [119] Sheng-Lyang Jang, Fei-Hung Chen, Chien-Feng Lee, and M.-H. Juang, "An LC-tank injection locked frequency divider with record locking range percentage," *Microwave and Optical Technology Lett.*, Vol. 50, no. 3, pp.806-809, Mar. 2008.
- [120] S.-L. Jang, C.-C. Liu, and J.-F. Huang "A wide locking range quadrature injection locked frequency divider with tunable active inductor," *IEICE Transaction on Electronics.*, Vol.E91-C, No.3, pp.373-377, Mar. 2008.
- [121] **Sheng-Lyang Jang, Chien-Feng Lee, and Wei-Hsung Yeh**, "A divide-by-3 injection locked frequency divider with single-ended input," *IEEE Microw. Wireless Compon. Lett.*, pp. 142-144, Feb. 2008.
- [122] S.-L. Jang, Jui-Cheng Han, Chien-Feng Lee, and J.-F. Huang, "A small die area and wide locking range CMOS frequency divider," *Microwave and Optical Technology Lett.*, Vol. 50, no. 2, pp.541-544, Feb. 2008.
- [123] M. H. Juang, C. L. Chen, and S. L. Jang, "Study of shallow trench isolation technology with a poly-Si sidewall buffer layer," *Semicond. Sci. Technol.* 23, no. 1, 015002, 2008.
- [124] Sheng-Lyang Jang, W. Yeh and Chien-Feng Lee, "A low power CMOS divide-by-3 LC-tank injection locked frequency divider," *Microwave and Optical Technology Lett.*, Vol. 50, no. 1, pp.259-262, Jan. 2008.
- [125] Sheng-Lyang Jang, Lin-yen Tsai and Chien-Feng Lee, "A CMOS switched resonator frequency divider tuned by the switch gate bias," *Microwave and Optical Technology Lett.*, Vol. 50, no. 1, pp.222-225, Jan. 2008.
- [126] Sheng-Lyang Jang, Y.-J. Wu and Chien-Feng Lee, "A 3.5GHz low power and phase noise differential CMOS VCO," *Microwave and Optical Technology Lett.*, Vol. 50, no. 1, pp.153-156, Jan. 2008.

[2007]

- [127] C.-F. Lee, S.-L. Jang, and M.-H. Juang, "A wide locking range differential Colpitts injection locked frequency divider," *IEEE Microw. Wireless Compon. Lett.*, Vol. 17, No. 11, pp. 790-792, Nov. 2007. (2003 SCI Impact factor : 1.457)
- [128] S.-L. Jang, Che Yi Lin, C.-F. Lee, and M.-H. Juang, "A complementary Hartley injection-locked frequency divider," *Microwave and Optical Technology Lett.*, pp.2817-2820, Nov. 2007. (2003 SCI Impact factor : 0.5)
- [129] Sheng-Lyang Jang, Shao-Hua Lee, Chun-Yuan Chiu and Chien-Feng Lee, "A dual band CMOS complementary Colpitts voltage controlled oscillator," *Microwave and Optical Technology Lett.*, pp.2634-2637, Nov. 2007.
- [130] S.-L. Jang, Y.-J. Wu, C.-F. Lee and M.-H. Juang, "A Clapp LC-tank injection locked frequency divider," *Microwave and Optical Technology Lett.*, pp.2625-2628, Nov. 2007.
- [131] Sheng-Lyang Jang, Yun-Hsueh Chuang, Shao-Hwa Lee and Yeu-Hua, Chiang, "A current reused CMOS quadrature injection locked frequency divider," *Microwave and Optical Technology Lett.*, pp.1804-1806, Aug. 2007.
- [132] **Sheng-Lyang Jang, and Chien-Feng Lee** , "A wide locking range LC-tank injection locked frequency divider," *IEEE Microw. Wireless Compon. Lett.*, pp.613-615, Aug., 2007.
- [133] Shao-hua Lee, Sheng-Lyang Jang, Chien-Feng Lee, and M.-H. Juang, "Wide locking range divide-by-4 injection locked frequency dividers," *Microwave and Optical Technology Lett.*, Vol. 49, No. 7, pp. 1533-1536, July 2007.
- [134] Yun-Hsueh Chung, Sheng-Lyang Jang, and Shao-Hua Lee, "A wide band injection locked frequency divider with variable inductor load," *IEEE Microw. Wireless Compon. Lett.*, pp.460-462, June, 2007.
- [135] Sheng-Lyang Jang, Shao-hua Lee, and Yen-Ruei Wu, "A CMOS LC-tank frequency divider with 3D helical inductors," *Microwave and Optical Technology Lett.* Vol. 49, No. 6, pp. 1477-1480, June 2007.
- [136] Shao-Hua Lee, Sheng-Lyang Jang, and Yun-Hsueh Chung , "A low voltage divide-by-4 injection locked frequency divider with quadrature outputs," *IEEE Microw. Wireless Compon. Lett.*, pp.373-375, May, 2007.
- [137] Sheng-Lyang Jang and C.-F. Lee, "A low voltage and power LC VCO implemented with dynamic threshold voltage MOSFETs," *IEEE Microw. Wireless Compon. Lett.*, pp.376-378, May, 2007.
- [138] S.-L. Jang, Y.-H. Chuang, S.-H. Lee, and J.-J. Chao, "Circuit techniques for CMOS divide-by-4 frequency divider," *IEEE Microw. Wireless Compon. Lett.*, pp.217-219, March 2007.

- [139] S.-H. Lee, S.-L. Jang, Y.-H. Chuang, J.-J. Chao, J.-F. Lee, and M.-H. Juang "A low power injection locked LC-tank oscillator with current reused topology," *IEEE Microw. Wireless Compon. Lett.*, pp.220-222, March 2007.
- [140] Shao-Hwa Lee, Yun-Hsueh Chuang, Sheng-Lyang Jang, Ming-Tsung Chuang, and Ren-Hong Yen, "A quadrature CMOS VCO using transformer coupling and current reuse topology," *IEICE Trans. Commun.*, VOL. E90-B, pp.346-348, Feb. 2007.(0.358)
- [141] Shao-Hua Lee, Yun-Hsueh Chuang, Sheng-Lyang Jang and Chien-Cheng Chen, " Low-phase noise Hartley differential CMOS voltage controlled oscillator," *IEEE Microw. Wireless Compon. Lett.*, pp. 145-147, Feb. 2007.
- [142] S.-L. Jang, Y.-H. Chung, S.-H. Lee, L.-R. Chi, and J.-F. Lee, " An integrated 5/2.5GHz direct-injection locked quadrature LC VCO , " *IEEE Microw. Wireless Compon. Lett.*, pp.142-144, Feb. 2007.
- [143] Y.-H. Chuang, S.-L Jang, S.-H. Lee, R.-H. Yen and J.-J. Jhao, " 5 GHz low power CMOS differential Armstrong VCOs with balanced current-reused topology , " *IEEE Microw. Wireless Compon. Lett.*, pp. 139-141, Feb. 2007.
- [144] S.-L. Jang, S.-H. Lee, C.-C.Chiu, and Y.-H. Chuang," A 6 GHz low power differential VCO," *Microwave and Optical Technology Lett.*, pp.76-79, Jan. 2007.

[2006]

- [145] Yun-Hsueh Chuang, Shao-Hwa Lee, Ren-Hong Yen, Sheng-Lyang Jang, and M.-H. Juang," A low-voltage quadrature CMOS VCO based on voltage-voltage feedback topology , " *IEEE Microw. Wireless Compon. Lett.*, pp.696-698, Dec. 2006.
- [146] Shao-Hua Lee, Sheng-Lyang Jang, Yun-Hsueh Chung, and Chung-Ching Chiu," A frequency divider implemented with a sub-harmonic mixer and a divide-by-2 divider , " *IEEE Microw. Wireless Compon. Lett.*, pp.699-701, Dec. 2006.
- [147] Y.-H. Chuang, S.-H. Lee, S.-L. Jang, J.-J. Chao and M.-H. Juang," A ring-oscillator-based wide locking range frequency divider," *IEEE Microw. Wireless Compon. Lett.*, vol. 16, no. 8, pp. 470-472, Aug. 2006.
- [148] Y.-H. Chuang, S.-H. Lee, R.-H. Yen, S.-L. Jang, J.-F. Lee and M.-H. Juang," A wide locking range and low voltage CMOS direct injection-locked frequency divider , " *IEEE Microw. Wireless Compon. Lett.*, vol. 16, no. 5, pp. 299-301, May 2006.
- [149] M. H. Juang, W. C. Chueh, and S. L. Jang, "The formation of trench-gate power MOSFETs with a SiGe channel region," *Semicond. Sci. Technol.* 21 (2006), 799-802.
- [150] M. H. Juang, T. Y. Lin, and S. L. Jang, "Formation of Mo gate electrode with adjustable work function on thin Ta₂O₅ high-k dielectric films," *Solid-State Electronics*, vol. 50, 114-118, 2006.

[2005]

- [151] Heng-Fa Teng, S.-L. Jang and M.H. Juang, " An analytical high frequency noise model for hot-carrier stressed MOSFETs," *Japan Journal Applied Physics*, Vol.44, No. 1A, pp.38-43, 2005.

[2004]

- [152] M. H. Juang, W. T. Chen, C.I. Ou-Yang, S. L. Jang, M. J. Lin, H. C. Cheng, "Fabrication of trench-gate power MOSFETs by using a dual doped body region," *Solid-State Electronics*,47, 1079-1085, 2004.

[2003]

- [153] Heng-Fa Teng, S.-L.Jang, and M.H. Juang " A unified model for high-frequency current noise of MOSFETs," *Solid-State Electronics*,47, 2043-2048, 2003.
- [154] Heng-Fa Teng and S.-L. Jang, " A non-local channel thermal noise for nMOSFET's," *Solid-State Electronics*, pp. 815-819, 2003.
- [155] Chorng-Jye Sheu and S.-L. Jang, " Modeling of electron gate current and post-stress drain current of p-type silicon-on-insulator MOSFETs," *Solid-State Electronics*, pp. 705-711, 2003.

[2002]

- [156] M.H. Juang, C.I. Ou-Yang and S.-L. Jang, " A design consideration of channel doping profile for sub-0.12um partially depleted SOI n-MOSFET's," *Solid-State Electronics*, pp.1117-1121, 2002.
- [157] S.-L. Jang, and Shao-Hua Li, " Gate-coupled and zener diode triggering silicon controlled rectifiers for electrostatic discharge protection circuits," *Solid-State Electron.* 263-267, 2002.

[2001]

- [158] S.-L. Jang, L.-S. Lin, and S.-H. Li, " Temperature-dependent dynamic triggering characteristics of SCR-type ESD protection circuits," *Solid-State Electron.* 45, pp. 2005-2009, 2001.

- [159] S.-L. Jang, L.-S. Lin, and S.-H. Li, " MOSFET triggering silicon controlled rectifiers for electrostatic discharge protection circuits," Solid-State Electron. 45, pp.1799-1803, 2001.
- [160] S.-L. Jang, L.-S. Lin, S.-H. Li, and H.-M. Chen, " Dynamic triggering characteristics of SCR-type ESD protection circuits," Solid-State Electron. 45, pp.1091-1097, 2001.
- [161] S.-L. Jang, S.-H. Li and L.-S. Lin, " SCR-type ESD protection circuits with variable holding voltage," Solid-State Electron. 45, pp.689-696, 2001.

[2000]

- [162] S.-L. Jang and J.-K. Lin, " Temperature-dependence of steady-state characteristics of SCR-type ESD protection circuits," Solid-State Electron. 44, pp.2139-2146, 2000.
- [163] C.-J. Sheu and S.-L. Jang, " A MOSFET gate current model with the direct tunneling mechanism," Solid-State Electron. 44, pp.1819-1824, 2000.
- [164] C.-J. Sheu and S.-L. Jang, " A physics-based electron gate current model for fully depleted SOI MOSFET's," Solid-State Electron. 44, pp.1799-1806, 2000.
- [165] S.-L. Jang, C.-J. Sheu, and C.-B. Twu " A compact drain-current model for stacked-gate flash memory cells," Solid-State Electron. 44, pp.1447-1453, 2000.
- [166] S.-L. Jang and C.-J. Sheu, " A nonlocal gate current and oxide trapping charge generation model for LDD and single-drain nMOSFETs," Solid-State Electron. 44, pp.1305-1314, 2000.
- [167] S.-L. Jang, M.-S. Gau, and C.-K. Lin, " Novel diode-chain triggering SCR circuits for ESD protection," Solid-State Electron. 44, pp.1297-1303, 2000.
- [168] C.-G. Chyau, S.-L. Jang and C.-J. Sheu, " A physics-based short-channel SOI MOSFET model for fully-depleted single drain and LDD devices," Solid-State Electron. 44, pp.487-499, 2000.

[1999]

- [169] S.-L. Jang and H.-H. Lin, " Modeling of drain leakage current in SOI pMOSFETs," Solid-State Electron. 43, pp.2147-2154, 1999.
- [170] S.-L. Jang, B.-R. Huang, and J.-J. Ju, " A unified analytical fully-depleted and partially-depleted SOI MOSFET model," IEEE Trans. Electron Devices, Sept., pp.1872-1876, 1999.
- [171] C.-G. Chyau and S.-L. Jang, " A physics-based short-channel current-voltage model for buried-channel MOSFETs," Solid-State Electron. 43, pp.1177-1188, 1999.
- [172] S.-L. Jang, C.-G. Chyau, and C.-J. Sheu, " Complete deep-submicron metal-oxide-semiconductor field-effect-transistor drain current model including quantum mechanical effects," Jpn. J. Appl. Phys. Part. 1, vol. 38, No. 2A, pp.687-688, 1999.
- [173] S.-L. Jang and S.-S. Liu, " A novel approach for modeling accumulation-mode SOI MOSFETs," Solid-State Electron. 43, pp. 87-96, 1999.
- [174] Hong-Kee Jiou , Sheng-Lyang Jang and Shau-Shen Liu, " An analytical symmetric double-gate SOI MOSFET model , " Int. J. Electronics. Vol. 86, No. 6, pp.671-683, 1999.

[1998]

- [175] S.-L. Jang, S.-S. Liu and C.-J. Sheu, " A compact LDD MOSFET I-V model based on nonpinned surface potential," IEEE Trans. Electron Devices, Vol. 45, No. 12, pp. 2489-2498, 1998.
- [176] C.-G. Chyau and S.-L. Jang, " A compact pre- and post-stress I-V model for submicrometer buried-channel pMOSFET's," IEEE Trans. Electron Devices, Vol. 45, No. 10, pp. 2167-2178, 1998.
- [177] S.-S. Liu, S.-L. Jang, and C.-G. Chyau, " Compact LDD nMOSFET degradation model," IEEE Trans. Electron Devices, Vol. 45, No. 7, pp.1538-1547, 1998.
- [178] S.-L. Jang and S.-S. Liu, "New submicron and deep-submicron metal-oxide-semiconductor field-effect-transistor I-V and C-V model," Jpn. J. Appl. Phys. No. 36A, pp. 3942-3947, 1998.
- [179] S.-L. Jang, H.-K. Chen and M.-C. Hu, " Low-frequency 1/f noise model for short-channel LDD MOSFETs," Solid-State Electron. No. 6, pp.891-899, 1998.
- [180] S.-S. Liu, S.-L. Jang and C.-G. Chyau, "A new post-stress drain current model for surface-channel p-type metal-oxide-semiconductor field-effect-transistors," Jpn. J. Appl. Phys. No. 5A, pp. 2439-2444, 1998.
- [181] S.-L. Jang and S.-S. Liu, " An analytical surrounding gate MOSFET model," Solid-State Electron. vol. 42, no. 5, pp. 721-726, 1998.
- [182] S.-L. Jang, C.-G. Chyau, S.-S. Liu, and C.-M. Chiu, "A compact buried-channel lightly-doped-drain metal-oxide-semiconductor- field-effect-transistor model," Jpn. J. Appl. Phys. Part. 1, No. 4A, pp. 1772-1780, 1998.
- [183] M.-C. Hu and S.-L. Jang, " An analytical fully-depleted SOI MOSFET model considering the effects of self-heating and source/drain resistance," IEEE Trans. Electron Devices, No. 4, p.797-801, 1998.

- [184] M.-C. Hu and S.-L. Jang, "Deep-submicrometer fully-depleted SOI MOSFET drain current model for digital/analog circuit simulation," Int. J. Electronics. Vol. 84, No. 3, pp.167-185, 1998.
- [185] S.-L. Jang, H.-K. Chen, and K.-M. Chang, "Low-frequency noise characteristics of hot carrier-stressed buried-channel pMOSFETs," Solid-State Electron. vol. 42, no. 3, pp. 411-418, 1998.
- [186] Y.-S. Chen and S.-L. Jang, "Modeling the asymmetric drain currents of hot-carrier stressed pMOSFETs operated in forward- and reverse-mode," Solid-State Electron. vol. 42, pp.35-41, 1998.
- [187] S.-S. Liu and S.-L. Jang, "Deep-submicron lightly-doped-drain and single-drain metal-oxide-semiconductor transistor drain current model for analog and digital circuit simulation," Jpn. J. Appl. Phys. Vol. 37, No. 1,64, 1998.

[1997]

- [188] S.-L. Jang and M.-C. Hu, "An analytical drain current model for submicrometer and deep submicrometer MOSFET's," IEEE Trans. Electron Devices, vol. 44, no. 11, pp. 1896-1902, 1997.
- [189] S.-L. Jang, M.-C. Hu and S.-S. Liu, "An analytical symmetric double-gate SOI MOSFET Model," Jpn. J. Appl. Phys. vol. 36, No. 10, pp.6250-6253, 1997.
- [190] M.-C. Hu and S.-L. Jang, "A complete substrate current model for submicron and deep submicron MOSFETs," Int. J. Electronics. Vol. 83, pp.159-176, 1997.
- [191] M.-C. Hu, S.-L. Jang, and C.-G. Chyau, "A physical short-channel current-voltage model for LDD MOSFET's" Jpn. J. Appl. Phys. vol. 36, Pt.1, No. 6A, pp. 3448-3459, 1997.
- [192] M.-C. Hu, S.-L. Jang, Y.-S. Chen, S.-S. Liu, and J.-M. Lin, "An analytical fully-depleted SOI MOSFET model considering the effects of self-heating, source/drain resistance, impact ionization and parasitic BJT," Jpn. J. Appl. Phys. pp.2606-2613, 1997.
- [193] S.-L. Jang, M.-C. Hu, S.-S. Liu, and Y.-S. Chen, "A simple, analytical, and complete deep-submicrometer fully-depleted SOI MOSFET model considering velocity overshoot," Jpn. J. Appl. Phys. vol.36, p.1015, 1997.
- [194] S.-S. Liu, M.-C. Hu, and S.-L. Jang, "An analytical, physics-based linear current-voltage model for hot-carrier damaged LDD nMOSFETs", Solid-State Electron. Vol. 41, No. 5, pp.973-979, 1997.

[1996]

- [195] S.-L. Jang, T.-H. Tang, Y.-S. Chen and C.-J. Sheu, "Modeling of hot-carrier stressed characteristics of submicrometer p-MOSFETs," Solid-State Electron. No. 7, pp.1043-1049, 1996.
- [196] S.-L. Jang, W.-M. Chen, H.-H Lin and C. H. Huang, "Low-frequency noise characteristics of AlInAs/InGaAs heterojunction bipolar transistors," Solid-State Electron. Vol. 39, No.11, pp. 1581-1592, 1996.
- [197] Y.-S. Chen, Tz-Hua Tang and S.-L. Jang, "Modeling of hot-carrier-stressed characteristics of nMOSFETs," Solid-State Electron. Vol.39, No. 1, pp.75-81, 1996.

[1995]

- [198] S.-L. Jang, K. -Y. Chang, and J. K. Hsu, "Evidence of optical generation-recombination noise," Solid-State Electron. Vol. 38, No. 8, pp.1449-1453, 1995.
- [199] S.-L. Jang, S.-S. Liu, and C.-J. Tsai, "Dynamic high-current stressing damage and post-stress relaxation in p-n-p silicon bipolar junction transistors," Solid-State Electron. Vol. 38, pp.1387-1393, 1995.
- [200] S.-L. Jang, M.-C. Hu and Y.-S. Chen, "Current-voltage model of short-channel MOSFETs operated in the linear region," Solid-State Electron. No. 6, pp.1239-1245, 1995.

[1994]

- [201] S.-L. Jang, "Analytical analysis of collector-base capacitance and cut-off frequency of n^+ - p^- - n^- - n^- bipolar junction transistors," Solid-State Electron. Vol. 37, pp.15141-1545, 1994.
- [202] S.-L. Jang, and P.-C. Chang, "Degradation of npn bipolar junction transistors under dynamic high current stress," Solid-State Electron. Vol. 37,pp.295-301, 1994.
- [203] P.-C. Chang, S.-L. Jang, and Y.-S. Chen, "Degradation of bipolar junction transistors under dynamic high current stress and biased in open collector condition," Solid-State Electron. Vol. 37, pp.303-319, 1994.

[1993]

- [204] S.-L. Jang, "Formulation of mobility fluctuation 1/f noise in bipolar junction transistors," Solid State Electron. Vol. 36, pp.1541-1545, 1993.
- [205] S.-L. Jang, and F.-C. Liu, "Temperature dependence of the base current reversal and breakdown characteristics in n-p-n transistors," Solid State Electron. Vol. 36, pp. 617-621, 1993.
- [206] S.-L. Jang, "Current-voltage characteristics of Si bipolar junction transistors operated in the cutoff mode," Solid State Electron. Vol. 36, pp.291-292, 1993.
- [207] S.-L. Jang, "On the common-emitter breakdown voltage of bipolar junction transistors," Solid State Electron. Vol. 36, pp.213-216, 1993.
- [208] S.-L. Jang, and J.-Y. Wu, "Low-frequency current and intensity noise in AlGaAs laser diodes," Solid State Electron. Vol. 36, pp.189-196, 1993.
- [209] Sheng-Lyang Jang, Ping-Chen Chang, " Low-frequency noise characteristics of lightly-doped-drain MOSFETs " Solid State Electron. Vol. 36, pp.1007-1010, 1993.
- [210] S.-L. Jang, "Analytical Low-frequency 1/f noise model for lightly doped drain MOSFETs operating in the linear region," Solid State Electron. Vol. 36, pp.899-903, 1993.
- [211] S.-L. Jang, Y.-S. Chen and P.-C. Chang, "Optical effects on the current voltage characteristics of lightly doped drain MOSFETs," Solid State Electron. Vol. 36, pp.727- 734, 1993.

[1992]

- [212] S.-L. Jang, and F.-C. Liu and J.-Y. Wu, "Current reversals in p-n-p transistors," Solid State Electron. Vol. 35, pp.1781-1793, 1992.
- [213] S.-L. Jang, and K.-L. Chern, "Breakdown characteristics of emitter-base and collector-base junctions of silicon bipolar junction transistors," Solid State Electron. Vol. 35, pp. 615-622, 1992.

[1991]

- [214] S.-L. Jang, and K.-L. Chern, "Hot-carrier-induced photovoltage in silicon bipolar junction transistors," Solid State Electron. Vol. 34, pp.1387-1392, 1991.
- [215] S.-L. Jang, "Effect of avalanche-induced light emission on the multiplication factor in bipolar junction transistors," Solid State Electron. Vol. 34, pp.1191-1196, 1991.
- [216] S.-L. Jang, "On the theory for the surface photovoltage technique based on the flat quasi-Fermi level approximation," Solid State Electron. Vol. 34, pp.373-377, 1991.

[1990]

- [217] S.-L. Jang, "A model of 1/f noise in polysilicon resistor, " Solid State Electron. Vol. 33, pp.1155-1162, 1990.
- [218] S.-L. Jang, and G. Bosman, "The effect of field-dependent emission on the current-voltage characteristics of a $p^+ - p^- - p^+$ Si:Au:B device," IEEE Trans. Electron Devices, Vol. 37, No.1, pp.222-226, 1990.

[1989]

- [219] S.-L. Jang, and G. Bosman, "Experimental evidence for a second-donor level of gold in silicon," J. Appl. Phys. 65- (12), pp.4809-4813, 1989.
- [220] S.-L. Jang, and G. Bosman, "Low field investigation of the gold donor level in silicon by noise and resistance measurements," J. Appl. Phys. 65(1), pp.201-204, 1989.

Non sci paper

- [221] Chia-Wei Chang, Jhin-Fang Huang, Sheng-Lyang Jang, Ying-Hsiang Liao and Miin-Horng Juang, "CMOS Direct-Injection Divide-by-3 Injection-Locked Frequency Dividers," Journal of Management Science and Instrumentation, vol. 1 Supplement, p.118-120, Sep. 2010.

(二)議會論文

- [222] Chia-Wei Chang, Sheng-Lyang Jang, Chia-Cheng Chen, and Chun-Yu Chuang, " Low-Power Wide Operation Range 0.35 μm SiGe HBT Injection Locked Frequency Divider," 2011 International Electron Devices and Materials Symposium (IEDMS 2011).
- [223] Sheng-Lyang Jang, Li-Te Chou, and Jen-Hsian Hsieh, " A Low Power Injection Locked Frequency Divider Using the Shunt Peaking Transformer," 2011 International Electron Devices and Materials Symposium (IEDMS 2011).
- [224] Sheng-Lyang Jang, Chia-Wei Chang, Tsung-Chao Fu and Han-Sheng Chen " A CMOS Colpitts-Clapp Quadrature Voltage-Controlled Oscillator," 2011 workshop on consumer electronics. 2011 民生電子研討會
- [225] Sheng-Lyang Jang, Chia-Wei Chang, Chu Duc Chinh, and Hsuan-Yu Hsieh" A Series-Tuned Cross-Coupled VCO in 0.18 μm CMOS Technology," 2011 the 22th VLSI Design/CAD Symposium.

- [226] Chia-Wei Chang, Sheng-Lyang Jang, Ying-Hsiang Liao, and Yu-Sheng Lin " Low-Voltage Hartley CMOS Voltage-Controlled Oscillator with Dual-Resonance *LC* Tank," 2011 the 22th VLSI Design/CAD Symposium.
- [227] Sheng-Lyang Jang, Chia-Wei Chang, Chun-Wei Hsu, and Yao-Tsu Chen, " A 0.35 μm SiGe BiCMOS Dual-Resonance LC-Tank Injection Locked Frequency Divider," 2011 the 22th VLSI Design/CAD Symposium.
- [228] Che-Sheng Chung, Sheng-Lyang Jang, " A Numerical Survey of Self-Consistent Calculation to a Functional n-Type Tissue," in press, IEEE INEC 2011 Proceedings, 2011.
- [229] Chia-Wei Chang, Sheng-Lyang Jang, Chong-Wei Huang, and Chih-Chieh Shih, " Dual-resonance LC-tank frequency divider implemented with switched varactor bias," IEEE Int. VLSI- DAT, 2011. pp.1 – 4.
- [230] **Sheng-Lyang Jang, Chia-Wei Chang, Ching-Lun Cheng, Ching-Wen Hsue, and Chun-Wei Hsu,** " A Wide-locking Range Divide-by-2 LC-tank Injection-Locked Frequency Divider," in press, IEEE Int. VLSI- DAT, 2011.
- [231] Sheng-Lyang Jang, Chia-Wei Chang, Ching-Lun Cheng, Ching-Wen Hsue, and Chun-Wei Hsu, " A Wide-locking Range SiGe BiCMOS Divide-by-3 Injection-Locked oscillatora," IEEE Int. VLSI- DAT, 2011. pp.1-4.
- [232] Chia-Wei Chang, Sheng-Lyang Jang, Wei-Chih Liu, Jhin-Fang Huang and Chong-Wei Huang, " CMOS Quadrature Injection-Locked Frequency Divider with Record Locking Range Percentage," 2010 International Electron Devices and Materials Symposium (IEDMS 2010).
- [233] Chia-Wei Chang, Sheng-Lyang Jang, Chong-Wei Huang and Ching-Wen Hsue, " Integrated 24 GHz LC VCO and 8 GHz Divide-by-3 Frequency Divider," 2010 International Electron Devices and Materials Symposium (IEDMS 2010).
- [234] Sheng-Lyang Jang, Chia-Wei Chang, San-Sheng Lin, Jau-Wei Hsieh and Chuang-Jen Huang, " A Series-tuned LC-tank Divide-By-2 SiGe BiCMOS Injection Locked Frequency Divider," 2010 International Electron Devices and Materials Symposium (IEDMS 2010).
- [235] Sheng-Lyang Jang, Han-Sheng Chen, Miin-Horng Juang, Chia-Wei Chang and Yi-Shan Fang, " A 0.18 μm CMOS Differential Colpitts VCO Using Gate-Connected LC Resonator," 2010 International Electron Devices and Materials Symposium (IEDMS 2010).
- [236] Chia-Wei Chang, Jhin-Fang Huang, Sheng-Lyang Jang, Ying-Hsiang Liao and Miin-Horng Juang, " CMOS Direct-Injection Divide-by-3 Injection-Locked Frequency Dividers," The Second International Conference on Smart IT Applications (SITA 2010).
- [237] Chia-Wei Chang, Sheng-Lyang Jang, Jau-Wei Hsieh and Miin-Horng Juang, " A 21GHz Series-Tuned VCO in 0.13 μm CMOS Technology," 2010 the 21th VLSI Design/CAD Symposium.
- [238] Chia-Wei Chang, Sheng-Lyang Jang, Ching-Lun Cheng and Miin-Horng Juang, " A Wide-locking Range Varactorless Injection-Locked Frequency Divider Using a Switched Inductor," 2010 the 21th VLSI Design/CAD Symposium.
- [239] Sheng-Lyang Jang, Cheng-Chen Liu, Ying-Hsiang Liao, and Ren-Kai Yang, " A Wide-locking Range Divide-by-2 LC-tank Injection-Locked Frequency Divider," IEEE Int. VLSI- DAT, pp.87-90, 2010.
- [240] Sheng-Lyang Jang, Chia-Wei Chang, Yi-Jhe Song, Chun-Wei Hsu, and Cheng-Chen Liu, " On the Injection Methods in a Top Series-Injection Locked Frequency Divider," 2009 IEDMS.
- [241] Sheng-Lyang Jang, Chia-Wei Chang, Yi-Jhe Song, Yu-Sheng Chen, and Cheng-Chen Liu, " Low Power 0.35 μm CMOS Divide-by-3 Injection-Locked Frequency Dividers," 2009 IEDMS.
- [242] Sheng-Lyang Jang, Cheng-Chen Liu, Ren-Kai Yang, Chih-Chieh Shih, and Chia-Wei Chang " A 0.35 μm CMOS Divide-by-2 Quadrature Injection-Locked Frequency Divider," 2009 IEDMS.
- [243] Sheng-Lyang Jang, Cheng-Chen Liu, Jhao-Jhang Chen, Han-Sheng Chen, and Chia-Wei Chang " High Oscillation Frequency Active-Inductor Injection Locked Frequency Divider in 0.13 μm CMOS," 2009 IEDMS.
- [244] Sheng-Lyang Jang, Cheng-Chen Liu, Yi-Jhe Song, and Miin Horng Juang, " An LC-tank Colpitts Injection-Locked Frequency Divider at Low Drain-Source Bias," 2009 the 20th VLSI Design/CAD Symposium.
- [245] Sheng-Lyang Jang, Ren-Kai Yang, Cheng-Chen Liu, Hsiu-An Yeh, and Ching-Wen Hsue, " Dual-Band Colpitts Injection-Locked Frequency Divider Using the Feedback Switching," 2009 the 20th VLSI Design/CAD Symposium.
- [246] Sheng-Lyang Jang, Chuang-Jen Huang, Cheng-Chen Liu, and Ching-Wen Hsue, Ying-Hsiang Liao, " A Differential VCO Using Two Complementary Cross-Coupled VCOs in 0.18um CMOS," 2009 the 20th VLSI Design/CAD Symposium.
- [247] Sheng-Lyang Jang, Cheng-Chen Liu and Chia-Wei Tai, " Implementation of 6-port 3D transformer in injection-locked frequency divider," IEEE Int. VLSI- DAT, 2009.
- [248] Sheng-Lyang Jang, Chuang-Jen Huang, and Cheng-Chen Liu , " A 0.35 μm CMOS divide-by-3 LC injection-locked frequency divider," IEEE Int. VLSI- DAT, 2009.
- [249] Sheng-Lyang Jang, Che Yi Lin, and Chien-Feng Lee, " A 0.35um CMOS switched-inductor dual-band LC-tank frequency divider," IEEE Int. VLSI- DAT, pp. 240-242, 2008.
- [250] Sheng-Lyang Jang, Chun-Yuan Chiu, and Chien-Feng Lee , " A complementary Colpitts VCO implemented with ring inductor," IEEE Int. VLSI- DAT, 2008.
- [251] Hwan-Mei Chen, Chin-Chun Lin, Jia-Cing Lin, Sheng-Lyang Jang, "A double-looped complementary -Gm VCO," IEEE, int. conf. electron devices and solid-state circuits, 2007. Page(s):1009 – 1011.
- [252] Sheng-Lyang Jang, Hwan-Mei Chen, Jui-Cheng Han and Chien-Feng Lee, You-Da Jhuang, "A 5GHz low phase noise Hartley quadrature CMOS VCO," IEEE, int. conf. electron devices and solid-state circuits, 2007.
- [253] H.-M. Chen , C.-C. Lin, J.-C. Lin and Sheng-Lyang Jang, " A 5.2GHz QVCO with bottom-series coupling coupling and switch transistor tail current," 2007 IEDMS.
- [254] Cheng Chen Liu , Che-Yi Lin, Chien-Feng Lee and Sheng-Lyang Jang, " A dual LC tanks CMOS VCO," 2007 IEDMS.
- [255] Cheng-Chen Liu, Chien-Feng Lee and Sheng-Lyang Jang, " An ultra low voltage CMOS injection locked frequency divider," 2007 IEDMS.
- [256] Yun-Hsueh Chuang, Shao-Hua Lee, Chien-Feng Lee, Sheng-Lyang Jang , and Min-Horng Juang, " A new CMOS VCO topology with capacitive degeneration and transformer feedback," IEEE Int. VLSI- DAT, pp.216-219, 2007.
- [257] Yun-Hsueh Chuang, Sheng-Lyang Jang, Shao-Hua Lee and Chien-Feng Lee, " low phase noise differential CMOS VCO based on tapped-inductor resonator," IEEE Int. VLSI- DAT, pp.220-223, 2007.

- [258] S.-L. Jang, Y.-H. Chuang, C.-C. Chen, J.-F. Lee, and S.-H. Lee , " A CMOS dual-band voltage controlled oscillator ,," 2006 IEEE APCCAS, D2-AM1-RM2.3 Dec., Singapore.
- [259] S.-H. Lee, Y.-H. Chuang, L.-R. Chi, S.-L. Jang, and J.-F. Lee , " A Low-Voltage 2.4GHz VCO with 3D Helical Inductors ,," 2006 IEEE APCCAS, D2-AM1-RM2.4 Dec., Singapore.
- [260] H.-M Chen, S.-H. Lee, and S.-L. Jang, " A double-feedback voltage controlled oscillators ,," Int. Conf. Solid state devices and materials, pp. 596-597, Yikohama, Japan, 2006.
- [261] S.-H. Lee, C.-C. Chiu, Y.-H. Chuang, S.-L. Jang, and J. -F. Lee, " A 5.2GHz Low Voltage and Low Power Differential Colpitts VCO ,," 2006 Cross Strait Tri-regional Radio Science and Wireless Technology Conference (CSTRWC'06), pp.33-36, Macao, P.R.C..
- [262] S.-L. Jang, Y.-H. Chuang, R.-H. Yen, and S.-H. Lee, "A 1.4GHz CMOS extremely-low voltage transformer-feedback VCO," 2006 Cross Strait Tri-regional Radio Science and Wireless Technology Conference (CSTRWC'06), pp.25-28, Macao, P.R.C..
- [263] S.-H. Lee , Y.-H. Chuang, Y-H Chiang, S.-L. Jang, and J.-F. Lee, " A 5GHz CMOS LC-VCO Using New Differentially-Tuned Varactor," 2006 Cross Strait Tri-regional Radio Science and Wireless Technology Conference (CSTRWC'06), pp.37-40, Macao, P.R.C..
- [264] Yun-Hsueh Chuang, Shao-Hua Lee, Chien-Feng Lee, Sheng-Lyang Jang , and Min-Horng Juang. " A new CMOS VCO topology with capacitive degeneration and transformer feedback," pp.33-36, 2006 Int. VLSI- DAT.
- [265] Sheng-Lyang Jang, Yun-Hsueh Chuang, Chien-Feng Lee and Shao-Hua Lee, " A 4.8GHz low-phase noise quadrature Colpitts VCO," pp.281-284, 2006 Int. VLSI- DAT.
- [266] S.-L. Jang, Y.-H. Chuang, Y. C. Wang,J. -F. Lee and S.-H. Lee, " Design of a dual-band LC-tank voltage controlled oscillator with the current reuse technique," Third conference on communication application, March 2005.Taiwan,pp.43-45
- [267] W.-C. Huang, Y.-H. Chuang, S.L. Jang, J. -F. Lee and S.-H. Lee, " Improvement of LC-VCO phase noise by layout optimization," Third conference on communication application, March 2005.Taiwan,pp.32-36
- [268] Sheng-Lyang Jang, Shao-Hua Li and Syue-Ming Lu, " Latchup Immune SCR Devices in CMOS Technology," APEMC, p.426-p.431, Dec. 2005.Taiwan.
- [269] S.-L. Jang, R.-H. Yen, Y.-H. Chuang, , J.-F. Lee, and S.-H. Lee," A low voltage 0.55V CMOS voltage controlled oscillator with transformer feedback" 2005 International Symposium on Communications (ISCOM2005).
- [270] Sheng-Lyang Jang, Chih-Ting Hu and Yun-Hsieh Chuang, " A New Current Source Temperature Compensation Circuit for Ring VCO," 2005 International Symposium on Communications (ISCOM2005).
- [271] S.-L. Jang, Y.-H. Chuang, Y.-C. Wang, J.-F. Lee, and S.-H. Lee, "A low power and low phase noise complementary colpitts quadrature VCO" 2005 International Symposium on Communications (ISCOM2005).
- [272] S.-L. Jang, C.-C. Lin, S.-H. Lee, Y.-H. Chuang and C.-F. Lee, " The design of Multi-layer transformer coupling oscillator," 2005 International Symposium on Communications (ISCOM2005)-00174.
- [273] S.-L. Jang, C.-C. Lin, S.-H. Lee, Y.-H. Chuang and C.-F. Lee, " A technique to reduce the turn-on time of VCO by the transient body-bias," 2005 International Symposium on Communications (ISCOM2005).
- [274] S.-L. Jang, Y.-H. Chuang, Y.-C. Wang, J.-F. Lee, and S.-H. Lee," Design of a dual-band LC-tank voltage controlled oscillator with the current reuse technique" 2005. ISMOT-142, 10th International Symposium on Microwave and Optical Technology (ISMOT 2005) August 22-25, 2005 Fukuoka, Japan
- [275] Y.-H. Chuang, S.-L. Jang, W.-C. Huang, S.-H. Lee and M.-H. Chuang." A wide-band fully-integrated CMOS oscillator tuned by voltage controlled transformer," 2005. ISMOT-159, August 22-25, 2005 Fukuoka, Japan
- [276] Y.-H. Chuang, J.-W. Hsu, S.-H. Lee, and S.-L. Jang, "A wide band fully-integrated CMOS oscillator tuned by switched transformer," 2005 Cross Strait Tri-regional Radio Science and Wireless Technology Conference (CSTRWC'05), pp.E2-9-E2-11, Beijing, P.R.C..
- [277] S.-L. Jang, C.-C. Lin, S.-H. Lee, Y.-H. Chuang, and C.-F. Lee, " Design of 1.8-GHz low Voltage controlled oscillators using the negative differential resistance concept," 2005 Cross Strait Tri-regional Radio Science and Wireless Technology Conference (CSTRWC'05), pp.E2-9-E2-11, Beijing, P.R.C..
- [278] Y.-H. Chuang, S.-L. Jang, W.-C. Huang, S.-H. Lee and M.-H. Chuang, " A wide-band fully-integrated CMOS oscillator tuned by voltage controlled transformer" 1st applied science and technology conference(ASTC)-photonics and communications, B02, 2004, Kaohsiung, Taiwan.
- [279] Heng-Fa Teng and S. -L. Jang "An analytical high frequency noise model for hot-carrier stressed MOSFETs,"IEEE, 7th International Conference on Solid-State and integrated Circuits Technology Proceedings, pp. 1135-1138, Oct. Beijing, China. (2004)
- [280] Shao-Hua Lee, S.-L. Jang, Yun-Hsueh Chuang and Jian-Feng Li, " A new LC-tank voltage controlled oscillator," 2004 IEEE APCCS, pp. 425 – 427.
- [281] Yun-Hsueh Chuang, S.-L. Jang, Jian-Feng Li and Shao-Hua Lee, " A low voltage 900MHz voltage controlled ring oscillator with wide tuning range," 2004 IEEE APCCS, P.1.26, Taiwan R.O.C..
- [282] Shao-Hua Lee, S.-L. Jang, Yun-Hsueh Chuang and Jian-Feng Li, " A 2.4GHz LC voltage controlled oscillator," 2004 Cross Strait Tri-regional Radio Science and Wireless Technology Conference (CSTRWC'04), pp.E2-9-E2-11, Taiwan R.O.C..
- [283] Yun-Hsueh Chuang, S.-L. Jang, Jian-Feng Li and Shao-Hua Lee, " A low voltage 900MHz voltage controlled ring oscillator with wide tuning range," 2004 Cross Strait Tri-regional Radio Science and Wireless Technology Conference (CSTRWC'04), pp.E2-1-E2-4, Taiwan R.O.C..
- [284] Heng-Fa Teng and S.-L. Jang, " A high-frequency noise model for SOI MOSFETs with thin silicon film," EDMS,pp. 826-829, Keelung Taiwan R.O.C., 2003.
- [285] Heng-Fa Teng and S.-L. Jang, " A non-local channel thermal noise for nMOSFET's," IEDMS,257-260, Taipei, Taiwan R.O.C., 2002.
- [286] S.-L. Jang, J.-Y. Wu, and F.-C. Liu, " Electrical 1/f noise in AlGaAsP/GaInP visible laer diodes," Proceedings of electron devices and material symposium, p.464, 1991, Taiwan, R.O.C..

- [287] K. -L. Chern, J. F. Huang and S.-L. Jang, " A study of two-layer lumped inductor," Proceedings of International symposium on communication, pp. 1-4, 1991, Taiwan, R.O.C.
- [288] S.-L. Jang and S.-S. Liu, " A complete C-V model for submicrometer and deep submicrometer MOSFETs," EDMS, pp. 429-432, 1997, Chung-Li, Taiwan, R.O.C..
- [289] Y.-S. Chen and S.-L. Jang, " A complete asymmetric drain current model for post-stress submicron pMOSFET's," Int. Symp. VLSI Technology, Systems, and Application, pp.250-254, 1997.

(三)美國專利

- [290] James Liu, Jimmy Hsieh, Sheng-Lyang Jang, and Hsueh-Ming Lu, "Latch-up-free ESD protection circuit using SCR," US patent# 7102864, Date Issued: September 5, 2006.
- [291] Sheng-Lyang Jang, and Shao-Hua Lee, " Dual-band voltage controlled oscillator utilizing switched feedback technology", US patent, #7227425. Issued on June 5, 2007.
- [292] Sheng Lyang Jang, and Yun Hsueh Chuang, " Low power consumption frequency divider circuit", US patent #7446617. Date Issued: November 4, 2008.
- [293] Sheng Lyang Jang, Yun Hsueh Chuang, and Shao-Hua Lee, " Injection locked frequency divider", US patent #7522007. Date Issued: April 21, 2009.
- [294] Sheng Lyang Jang, Chun-Chieh Chao, Yun Hsueh Chuang, and Shao-Hua Lee, " Injection locked frequency divider", US patent #7522008. Date Issued: April 21, 2009.
- [295] Sheng Lyang Jang, Shao-Hua Lee, Yun Hsueh Chuang, and Chung-Ching Chiu, " Back-gate coupling voltage control oscillato", US patent #7545230, Date Issued: June 9, 2009.
- [296] Sheng Lyang Jang, Yun Hsueh Chuang, Ren-Hong Yen and Shao-Hua Lee, " Multi-phase voltage-control oscillator", US patent #7551038. Date Issued: June 23, 2009.
- [297] Sheng Lyang Jang, Yun Hsueh Chuang, Ren-Hong Yen and Shao-Hua Lee, " Injection-locked frequency divider", US patent #07557668. Date Issued: July 7, 2009.
- [298] Sheng Lyang Jang, and Shao-Hua Lee, " Dual-band voltage controlled oscillator", US patent # 7589598. Date Issued: September 15, 2009.
- [299] Sheng Lyang Jang, and Cheng-Chen Liu, " Injection-locked frequency divider", US patent # 7659784. Date Issued: February 9, 2010.
- [300] Sheng Lyang Jang, and Cheng-Chen Liu, Jui-Cheng Han " Injection-locked frequency divider embedded an active inductor", US patent # 7683681. Date Issued: March 23, 2010.
- [301] Sheng Lyang Jang, Yun Hsueh Chuang, Shao-Hua Lee, " Injection-locked frequency divider", US patent # 7705686. Date Issued: April 27, 2010.
- [302] Sheng Lyang Jang, Chien-Feng Lee, " Injection-locked frequency divider with a wide injection-locked frequency range", US patent # 7710211. Date Issued: May 4, 2010.
- [303] Sheng Lyang Jang, Cheng-Chen Liu, " Injection-locked frequency divider", US patent # 7782101. Date Issued: August 24, 2010.
- [304] Sheng Lyang Jang, Yun Hsueh Chuang, Ren-Hong Yen and Shao-Hua Lee, " Multi-phase voltage-control oscillator", US patent # 7920030. Date Issued: April 5, 2011.
- [305] Sheng Lyang Jang, Cheng-Chen Liu and Yi-Jhe Song, " Multi-phase signal generator and voltage-controlled oscillator thereof", US patent # 8035456. Date Issued: October 11, 2011 .

(四)台灣專利

- [306] 劉碩彰, 謝志明, 張勝良, 呂學銘, 靜電放電保護電路, Taiwan patent number 專利證書號 I221668.
- [307] 張勝良, 莊昀學:雙共振腔架構雙頻帶 LC 槽壓控振盪器電路. Sheng-Lyang Jang, Yuanhsueh Chuang, The two stacked LC-tank dual band voltage controlled oscillator, Taiwan patent number 專利證書號 I261962. issued date:11, Sep., 2006
- [308] 張勝良, 李少華:利用切換回授路徑技術的雙頻帶壓控振盪器” A dual-band voltage controlled oscillator utilizing switched feedback technology”, 2008, Taiwan patent number 專利證書號 I298579.
- [309] 張勝良, 莊昀學:具有低功率損耗之除頻器電路” , 2008/03/16, Taiwan patent number 專利證書號: I318053.
- [310] 張勝良, 李少華, 莊昀學, 邱仲慶:背閘極耦合之壓控振盪器” , 2010/07/01, Taiwan patent number 專利證書號: I326979.
- [311] 張勝良, 莊昀學, 顏仁宏, 李少華:注入鎖定除頻器” , 2010/09/01, Taiwan patent number 專利證書號: I329975.
- [312] 張勝良, 劉政辰, 韓瑞誠:注入鎖定除頻器” , 2010/12/01, Taiwan patent number 專利證書號: I334275.
- [313] 張勝良, 李少華:多頻壓控振盪器” , 2010/12/01, Taiwan patent number 專利證書號: I327414.
- [314] 張勝良, 莊昀學, 李少華:注入鎖定除頻器” , 2011/12/01, Taiwan patent number 專利證書號: I336991.
- [315] 張勝良, 劉政辰, 韓瑞誠:注入鎖定除三除頻器” , 2011/03/01, Taiwan patent number 專利證書號: I338453.

- [316]張勝良, 莊昀學, 李少華: “注入鎖定除頻器” , 2011/03/21, Taiwan patent number 專利證書號: I339505.
- [317]張勝良, 呂沛檄, 劉政辰: “注入鎖定除頻器” , 2011/07/01, Taiwan patent number 專利證書號: I344749.
- [318]張勝良, 劉政辰: “注入鎖定除頻器” , 2011/07/21, Taiwan patent number 專利證書號: I345883.
- [319]張勝良, 李建鋒: “具有寬注入鎖定頻率範圍之注入鎖定除頻器” , Taiwan patent number 專利證書號: I353113.

(五)專書

- [320]Sheng-Lyang Jang: Trap parameter extraction of deep defects in semiconductors using noise measurements, publisher: University of Florida, 1989.