＊ 邱顯欽教授

所有發表期刊論文

Journal articles & book chapters:

期刊論文(Journal Papers):

2000 年

1. Hsien-Chin Chiu, Feng-Tso Chien, Shih-Cheng Yang, Chin-Wei Kuo, and Yi-Jen Chan, “Reducing source and drain resistances in InGaP/InGaAs doped-channel HFETs using δ-doping Schottky layer,” *Electronics. Lett*., vol.36, pp.1320-1322, 2000. (NSC89-2219-E-008-003)

2. Hsien-Chin Chiu, Shih-Cheng Yang, Yi-Jen Chan, Jenn-Ming Kuo,“High schottky barrier $Al_{0.5}In_{0.5}P$/InGaAs doped-channel HFETs with superior microwave power performance,” *Electronics. Lett*., vol.36, pp.1968-1969, 2000. (NSC89-2219-E-008-003)

2001 年

1. Shih-Cheng Yang, Hsien-Chin Chiu, Feng-Tso Chien, Yi-Jen Chan, Jenn-Ming Kuo “RIE Gate-Recessed $(Al_{0.3}Ga_{0.7})_{0.5}In_{0.5}P$/InGaAs Double Doped-Channel FETs Using CHF_3+BCl_3 Mixing Plasma,” *IEEE, Electron Device Lett.*, vol. 22, pp. 170-172, 2001. (NSC90-2219-E-008-001)

2. Hsien-Chin Chiu, Shih-Cheng Yang, Feng-Tso Chien, Yi-Jen Chan, “High Power Density of AlGaAs/InGaAs Doped-channel FETs with Low DC Power Supply” *Electronics. Lett*., vol.37, pp.597-598, 2001. (NSC90-2219-E-008-001)

3. Hsien-Chin Chiu, Shih-Cheng Yang, Yi-Jen Chan, and Hao-Hsiung Lin, “High Power $In_{0.49}Ga_{0.51}P/In_{0.15}Ga_{0.85}As$ Heterostructure Doped-channel FETs” *IEICE Transaction. on Electronics*, vol. E84-C, pp.1312-1317, 2001. (NSC90-2219-E-008-001)

4. Feng-Tso Chien, Hsien-Chin Chiu, Shin-Cheng Yang, Chii-Wen Chen, and Yi-Jen Chan “Device Linearity and Gate Voltage Swing Improvement by $Al_{0.3}Ga_{0.7}As/In_{0.15}Ga_{0.85}As$ Double Doped-channel Design” *IEICE Transaction. on Electronics*, vol. E84-C, pp.1306-1311, 2001. (NSC90-2219-E-008-001)

5. Hsien-Chin Chiu, Shih-Cheng Yang, and Yi-Jen Chan, “AlGaAs/InGaAs Heterostructure Doped-channel FETs Exhibiting Good Electrical Performance at

High Temperatures" *IEEE Trans. Electron Device* , vol 48, pp.2210-2215, 2001. (NSC90-2219-E-008-001)

6. Shih-Cheng Yang, Hsien-Chin Chiu, Yi-Jen Chan, Hao-Hsiung Lin, Jenn-Ming Kuo "$(Al_xGa_{1-x})_{0.5}In_{0.5}P/In_{0.15}Ga_{0.85}As$ (x=0, 0.3, 1.0) Heterostructure Doped-Channel FETs for Microwave Power Applications" *IEEE Trans. Electron Device* ,vol 48, pp.2906-2910, 2001. (NSC90-2219-E-008-001)

2002 年

1. Hsien-Chin Chiu, Shih-Cheng Yang, Feng-Tso Chien, and Yi-Jen Chan, "Improved Device Linearity of AlGaAs/InGaAs HFETs By a Second Mesa Etching" *IEEE, Electron Device Lett.*, vol. 23, pp. 1-3, 2002. (NSC90-2219-E-008-001) *(impact factor =2.093)*

2. Hsien-Chin Chiu, Ming-Jyh Hwu, Shih-Cheng Yang, and Yi-Jen Chan, "Enhanced Power Performance of Enhancement-Mode $Al_{0.5}Ga_{0.5}As$/ $In_{0.15}Ga_{0.85}As$ pHEMTs Using A Low-k BCB Passivation".*IEEE, Electron Device Lett.*, vol. 24, pp.243-245, 2002. (NSC90-2219-E-008-001)*(impact factor =2.093)*

3. Hsien-Chin Chiu, Shih-Cheng Yang and Yi-Jen Chan, "High power density and largevoltage swing of enhancement-mode AlGaAs/InGaAs pHEMTs for 3.5V L-band applications," Jpn. J. Appl. Phys. vol. 41, Pt.1, No. 5A, pp.2902-2903, 2002. (NSC90-2219-E-008-001)

2003 年

1. Hsien-Chin Chiu, Tsung-Jung Yeh, Shih-Cheng Yang, Ming-Jyh Hwu, and Yi-Jen Chan, "High Performance BCB-Bridged AlGaAs/InGaAs Power HFETs" *IEEE Trans. Electron Device* vol. 50, pp.1532-1536, 2003. (NSC91-2215-E-008-026) *(impact factor =1.936)*

2. Shih-Cheng Yang, Hsien-Chin Chiu, Ming-Jyh Hwu, Wen-Kai Wang, Cheng-Kuo Lin, and Yi-Jen Chan, "Submicron RIE Recessed InGaP/InGaAs Doped-channel FETs" *IEEE Trans. Electron Device* ,vol. 50, pp.1555-1558, 2003. (NSC91-2215-E-008-026)

3. Hsien-Chin Chiu, Shih-Cheng Yang, Yi-Jen Chan, Shu-Han Chen, Wei Sheng Liu, and Jen-Inn. Chyi, "The Microwave Power Performance Comparisons of $Al_xGa_{1-x}As/In_{0.15}Ga_{0.85}As$ (x=0.3, 0.5, 0.7, 1.0) Doped-Channel HFETs" *IEEE Trans. Electron Device* ,vol. 51, pp.156-158, 2004. (NSC91-2215-E-008-026) *(impact factor =2.215)*

4. Ming-Jyh Hwu, Hsien-Chin Chiu, Shih-Cheng Yang and Yi-Jen Chan, “A Novel Double-Recessed 0.2 μm T-Gate Process for Heterostructure InGaP/InGaAs Doped-Channel FET Fabrication” *IEEE, Electron Device Lett.*, vol. 24, pp. 381-383, 2003. (NSC91-2215-E-008-026)

5. Hsing-Yuan Tu, Tao-Hsuan Chou, Yo-Sheng Lin, Hsien-Chin Chiu, Ping-Yu Chen, and Shey-Shi Lu, “DC and RF Characteristics of E-mode $Ga_{0.51}In_{0.49}P/In_{0.15}Ga_{0.85}As$ Pseudomorphic HEMT’s (pHEMT’s)” *IEEE, Electron Device Lett.*, vol. 24, pp. 132-134, 2003. (NSC91-2215-E-008-026)

6. Ming-Jyh Hwu, Hsien-Chin Chiu, Shih-Cheng Yang, Yi-Jen Chan and Liann-Be Chang, “Improved Gate Leakage and Microwave Power Performance by Inserting A Thin Praseodymium Gate Metal Layer in AlGaAs/InGaAs DCFETs” Jpn. J. Appl. Phys. vol. 43, No.1, pp.111-112, 2003. (NSC91-2215-E-008-026)

7. Hsien-Chin Chiu, Shih-Cheng Yang, Cheng-Kuo Lin, Ming-Jyh Hwu, Yi-Jen Chan, “0.2 mm Gate-Length InGaP/InGaAs DCFET for C-Band MMIC Amplifier Applications” *IEEE Trans. Electron Device* ,vol. 50, pp.1599-1603, 2003. (NSC91-2215-E-008-026) *(impact factor =1.936)*

2004 年

1. Hsien-Chin Chiu, Shih-Cheng Yang, Cheng-Kuo Lin, Ming-Jyh Hwu, H. K. Chiou, Yi-Jen Chan, “K-Band Monolithic InGaP/InGaAs DCFET Amplifier Using BCB Coplanar Waveguide Technology” *IEEE, Electron Device Lett.*, vol. 25, pp. 253-255, 2004. (NSC91-2215-E-008-026) *(impact factor =2.732, 15/209)*

2005 年

1. W. S. Tung, H. C. Chiu, Y. C. Chiang, “Implementation of millimeter-wave bandpass filter with MMIC technology” *Electronics. Lett*., vol.41, pp.744-745, 2005. *(Impact Factor = 0.98,72/209)*

2. Hsien-Chin Chiu, Yi-Chyun Chiang, Chan-Shin Wu, “A low insertion loss switch using ordering InGaP/AlGaAs/InGaAs pHEMT technology” *Solid-State Electronics*, vol.49, pp. 1391-1395, 2005. (NSC-93-2215-E-182-010) *(impact factor =1.212, 53/209)*

3. Hsien-Chin Chiu, Yi-Chyun Chiang, Chan-Shin Wu, “High Breakdown Voltage $(Al_{0.3}Ga_{0.7})_{0.5}In_{0.5}P$/ InGaAs Quasi Enhancement-Mode pHEMT with Field-Plate Technology” *IEEE, Electron Device Lett.*, vol. 26, pp. 701-703, 2005. (NSC-93-2215-E-182-010) *(impact factor =2.538, 15/209)*

4. Hsien-Chin Chiu, Chia-Shih Cheng, Yuan-Jui Shih, “Power and Linearity Comparisons of Gate- and Source-terminated Field-plate Pseudomorphic HEMTs”, *Semicond. Sci. Technol.*, vol. 20, pp. 1183-1186, 2005. (NSC-93-2215-E-182-010) *(impact factor =2.152, 22/209)*

5. Feng-Tso Chien, Jin-Mu Yin, Hsien-Chin Chiu, and Yi-Jen Chan, “Device Performance Improvement of InGaP/InGaAs DCFETs”,*IEEE, Electron Device Lett.*, vol. 26, pp. 861-863, 2005. *(impact factor =2.538, 15/209)*

6. Hsien-Chin Chiu, Chia-Shih Cheng, Yuan-Jui Shih, “High Uniformity $(Al_{0.3}Ga_{0.7})_{0.5}In_{0.5}P$/ InGaAs Enhancement-Mode Pseudomorphic HEMTs by Selective Succinic Acid Gate Recess” *Electrochemical and Solid-State lett.*, vol. 9, pp. G59-G61, 2006. (NSC94-2215-E- 182-005) *(impact factor =2.2, 10/22)*

7. Hsien-Chin Chiu, Chia-Shih Cheng, Yuan-Jui Shih, “High Uniformity Enhancement- and Depletion-Mode InGaP/InGaAs pHEMTs Using Selective Succinic Acid Gate Recess Process” *Semicond. Sci. Technol.*, vol. 21, pp. 55-59, 2006. (NSC94-2215-E- 182-005)*(impact factor =1.2, 60/208)*

8. Chia-Shih Cheng, Yuan-Jui Shih, Hsien-Chin Chiu, “A Modified Angelov Model for InGaP/InGaAs Enhancement- and Depletion-Mode pHEMTs Using Symbolic Defined Device Technology” , *Solid-State Electronics*, vol 50, pp. 254-258, 2006. (NSC94-2215-E-182-005) *(impact factor =1.247, 58/208)*

2006 年

1. F. T. Chien, C. N. Liao, C. L. Wang, H. C. Chiu, “ High performance power MOSFETs by wing-cell structure design”, *IEICE Transaction. on Electronics*, vol. E89-C, no. 5, pp. 591-595, 2006. *(impact factor =0.479, 132/208)*

2. Hsien-Chin Chiu, Chia-Shih Cheng, “Microwave Performance of $(Al_{0.3}Ga_{0.7})_{0.5}In_{0.5}P$, $In_{0.5}Ga_{0.5}P$, $Al_{0.28}Ga_{0.72}As$ Enhancement-mode Pseudomorphic HEMT with Succinic Acid Gate Recess Process” *J. Electrohem. Soc*. vol 153, pp. G897-G900, 2006. (NSC94-2215-E- 182-005) *(impact factor =2.19, 2/19)*

3. Hsien-Chin Chiu, Liann-Be Chang, Yuan-Chang Huang, Chung-Wen Chen, Yu-Jen Li*, Yi-Jen Chan, “Improved Schottky Leakage Current of $ln_{0.5}Al_{0.5}As/In_{0.5}Ga_{0.5}As$ Metamorphic HEMTs Using $(NH_4)_2S_x$ Treatment” *Electrochemical and Solid-State Lett*, vol. 9, pp.G309-G311 2006. (NSC94-2215-E- 182-005) *(impact factor =2.152, 10/22)*

4. Chien-Cheng Wei, Hsien-Chin Chiu, Wu-Shiung Feng, " High Linearity Performance of 0.13 um CMOS devices using Field-Plate Technology", *IEEE, Electron Device Lett.*, vol. 27, pp. 843-845, 2006. *(impact factor =2.825, 7/208)*

5. Hsien-Chin Chiu, Chia-Shih Cheng, Chien-Cheng Wei, "Microwave Performance of AlGaAs/InGaAs Pseudomorphic HEMT with Tunable Field-Plate Voltage" *Semicond. Sci. Technol.*, vol. 21, pp. 1432-1436, 2006. (NSC 95-2221-E-182 -058) *(impact factor =1.2, 60/208)*

2007 年

1. Liann-Be Chang, Chia-Hwa Chang, Ming-Jer Jeng, Hsien-Chin Chiu, and Hung-Fei Kuo, "Barrier Height Enhancement of $Al_xGa_{1-x}N$/GaN Schottky Diodes Prepared by $P_2S_5(NH_4)_2S$ Treatments, *Electrochemical and Solid-State Lett*, vol. 10, pp.H79-H81 2007.*(impact factor =2.0, 9/22)*

2. Chien-Cheng Wei, Hsien-Chin Chiu, Wu-Shiung Feng, "A Low Noise 3.1 to 10.6 GHz pMOS Distributed Amplifier for Ultra-Wideband Applications" *Microwave and Optical Technology Letter*, vol 49, pp. 1641-1644, 2007. *(impact factor =0.568, 125/206)*

3. C. N. Liao, F. T. Chien, C. L. Wang, H. C. Chiu, Y. J. Chan, "A novel power MOSFET structure with shallow junction dual well design", *IEICE Transaction. on Electronics*, vol. E90-C, no. 5, pp. 937-941, 2007. *(impact factor =0.508,129/206)*

4. Chia-Sung Wu, Hsing-Chung Liu, Zhi-Ping Liu, Hsien-Chin Chiu, "Compact K-band bandpass filter on high-k $LiNbO_3$ substrate" *Solid-State Electronics*, vol.51, pp. 965-968, 2007. *(impact factor =1.259, 63/227)*

5. Chien-Cheng Wei, Hsien-Chin Chiu, Wu-Shiung Feng, "A 12-GHz Low Phase-Noise Voltage-Controlled Oscillator Using Novel Field-Plate CMOS Transistors" IEEE Trans. Electron Device ,vol. 54, pp.2803-2807, 2007. (impact factor =2.165,20/227)

6. Chia-Song Wu, Hsien-Chin Chiu, "A Power Amplifier MMIC Using the CPW Structure Technology", *Microwave Journal*, vol.50, pp.112-124, 2007. *(impact factor =0.191,202/227)*

2008 年

1. Hsien-Chin Chiu, Chung-Wen Chen, Yuan-Chang Huang, "Power Performance of Double Heterojunction High Electron Mobility Transistor with Various

Lower/Upper Planar Doping Ratio Designs", *IEEE Trans. Electron Device*, vol.55, pp.256-260, 2008.*(impact factor =2.73, 28/229)*

2. Hsien-Chin Chiu, Chia-Shih Cheng, Chien-Cheng Wei, Yuan-Jui Shih, Shao-Wei Lin, and Feng-Tso Chien, "An 3-5 GHz Ultra Wideband Low Noise Amplifier Using InGaP/InGaAs Enhancement-Mode pHEMT Technology" *Microwave Journal*, vol.51, no.6, pp.86-98, 2008. *(impact factor =0.52, 164/229)*

3. Chien-Cheng Wei, Hsien-Chin Chiu, and Wu-Shiung Feng, "An Improved BSIM4 Model for 0.13-μm RF CMOS Using a Simple Lossy Substrate Extraction Method" *Microwave Journal*, vol.51,no.5 pp.170-185, 2008. *(impact factor =0.52, 164/229)*

4. Chia-Song Wu, Hsing-Chung Liu, Hsien-Chin Chiu, Wei-Hsien Lee, "Distributed Trans-impedance Amplifiers Using InGaP/InGaAs Enhancement-mode pHEMT Technology" *Microwave Journal*, vol.51, pp.140-151, 2008. *(impact factor =0.52, 164/229)*

5. Hsien-Chin Chiu, Shao-Wei Lin, Chia-Shih Cheng, Chien-Cheng Wei "Microwave Performance of Field-Plate 0.13-μm MOS Transistors with Varying Field-Plate Extension" *Solid-State Electronics*, vol 52, pp. 725-729, 2008 *(impact factor =1.424, 81/229)*

6. Hsien-Chin Chiu, Chia-Shih Cheng , Yi-Tzu Yang , and Chien-Cheng Wei, "A 10 GHz Low Phase-Noise CMOS Voltage-Controlled Oscillator Using Dual-Transformer Technology" *Solid-State Electronics*, vol 52, pp. 765-770, 2008 *(impact factor =1.424, 81/229)*

7. Hsien-Chin Chiu, Yuan-Chang Huang, Chung-Wen Chen, and Liann-Be Chang, "Electrical Characteristics of Passivated Pseudomorphic HEMTs with $P_2S_5/(NH_4)_2S_x$ Pretreatment", *IEEE Trans. Electron Device*, vol.55, pp.721-726, 2008. *(impact factor =2.73, 28/229)*

8. Feng-Tso Chien, Chien-Nan Liao, Jin-Mu Yin, Hsien-Chin Chiu and Yao-Tsung Tsai, "$In_{0.49}Ga_{0.51}P/In_{0.15}Ga_{0.85}As$ doped channel FETs with a metal plug alloy process" *Semicond. Sci. Technol.*, vol. 23, 035009 (5pp), 2008 *(impact factor =1.434, 79/229)*

9. Feng-Tso Chien, Chien-Nan Liao, Chi-Ling Wang, Hsien-Chin Chiu,Yao-Tsung Tsai, "Low On-Resistance Trench Power MOSFETs Design" *Electronics. Lett*., vol.44, pp.232-234, 2008. *(impact factor =1.14, 108/229)*

10. Hsien-Chin Chiu, Yuan-Chang Huang, Liann-Be Chang, and Feng-Tso Chien, “GaAs Pseudomorphic HEMT With Insulating Gate Films Formed By $P_2S_5/(NH_4)_2S_X$ Sulfurization of Recessed GaAs Surface”, *Semicond. Sci. Technol.*, vol. 23, 035029 (5pp), 2008 *(impact factor =1.434, 79/229)*

11. Hsien-Chin Chiu, Shao-Wei Lin, Chia-Shih Cheng, Chien-Cheng Wei,“ Comprehensive Study of Gate-terminated and Source-terminated Field-Plate 0.13-μm NMOS Transistors” *Semicond. Sci. Technol.*, vol. 23, 035030 (5pp), 2008. *(impact factor =1.434, 79/229)*

12. Hsien-Chin Chiu, Chien-Cheng Wei, Chia-Shih Cheng, Yu-Fei Wu, “Phase-Noise Improvement of GaAs pHEMT K-Band Voltage Controlled Oscillator Using Tunable Field-Plate Voltage Technology”, *IEEE, Electron Device Lett.*, vol. 29, pp. 426-429, 2008. *(impact factor =3.049, 23/229)*

13. Chien-Cheng Wei, Hsien-Chin Chiu, Yi-Tzu Yang, Jeffrey. S. Fu ,and Wu-Shiung Feng, “ An UWB CMOS Voltage-Controlled Oscillator with 2-6GHz Tuning-Range Using Active Inductor Technology”,*Microwave and Optical Technology Letter*, vol 50, pp. 2311-2315, 2008. *(impact factor =0.743, 144/229)*

14. Hsien-Chin Chiu, Che-Kai Lin, Chao-Wei Lin, Ming-Yang Chen, “Enhanced optical responsivity of InAlAs/InGaAs metamorphic HEMT using ITO transparent gate technology”, *Appl. Phys. Lett.*, vol, 93, 043506, 2008, *(impact factor =3.726, 10/95)*

15. Hsien-Chin Chiu, Chih-Wei Yang, Yung-Hsiang Lin, Ray-Ming Lin, Liann-Be Chang, “Device Characteristics of AlGaN/GaN MOS-HEMTs Using High-k Praseodymium Oxide Layer” *IEEE Trans. Electron Device,* vol.55, pp.3305-3309, 2008. *(impact factor =2.73, 28/229)*

16. Hsien-Chin Chiu, Chao-Wei Lin, Che-Kai Lin, Liann-Be Chang, “Comprehensive Study of GaAs MOSFETs using Gadolinium Oxide and Praseodymium Oxide Layers” *J. Electrohem. Soc*. vol 155, pp. H955-G958, 2008. *(impact factor =2.437, 1/16)*

2009 年

1. Hsien-Chin Chiu, Jeffrey. S. Fu, Chung-Wen Chen, “ RF Performance of GaAs pHEMT Switches with Various Upper/Lower δ-Doped Ratio Designs”, *Solid-State Electronics*, vol 53, pp.181-184, 2009 *(impact factor =1.424, 81/229)*

2. Hsien-Chin Chiu, Chia-Shih Cheng, Shao-Wei Lin, Chien-Cheng Wei, “A High-linearity Single-Pole-Double-Throw Pseudomorphic HEMT Switch Based on

Tunable Field-Plate Voltage Technology", *IEEE Trans. Electron Device*, vol.56, pp.541-545, 2009. *(impact factor =2.73, 28/229)*

3. Chun-Ting Pan, Ren-Jie Hou, Yue-Ming Hsin and Hsien-Chin Chiu, "Characteristics of AZO/GaN Heterojunction Bipolar Transistors"*Electronics. Lett*., vol.45, pp.744-745, 2009. *(impact factor =1.14, 108/229)*

4. Hsien-Chin Chiu, Chao-Hung Chen, Chih-Wei Yang, Che-Kai Lin, " The Characteristics of Dual δ-Doped InGaP/InGaAs pHEMTs with Various Doping Profile" *J. Electrohem. Soc*. vol 156, pp. H512-H515, 2009. *(impact factor =2.437, 1/16)*

5. Chia-Song Wu, Hsing-Chung Liu, Hsien-Chin Chiu and Yi-Feng Lin, "Ka-band Bandpass Filter Using a CPW Structure Technology with Copper on an Al_2O_3 Substrate", *Microwave Journal*, vol.52, pp.102, 2009. *(impact factor =0.52, 164/229)*

6. Hsien-Chin Chiu, Po-Yu Ke, Che-Yu Kuo, Jeffrey S. Fu, Chih-Wei Yang and Feng-Tso Chien, "Voltage-controlled oscillator phase noise improvement using GaAs 0.5 μm Pt-buried gate enhancement-mode pHEMT", *Semicond. Sci. Technol.*, vol. 24, 095003 (5pp), 2009. *(impact factor =1.434, 79/229)*

7. Hsien-Chin Chiu, Chih-Wei Yang, Chao-Hung Chen, Che-Kai Lin, Cheng-Shun Wang, Jeffrey S. Fu, "High Thermal Stability AlGaAs/InGaAs Enhancement-Mode pHEMT Using Iridium Buried-gate Technology", *J. Electrohem. Soc*. vol 156, pp. H877-G880, 2009. *(impact factor =2.437, 1/16)*

8. Chien-Cheng Wei, Hsien-Chin Chiu, Yi-Tzu Yang, and Jeffrey S. Fu, "A Novel Complementary Colpitts Differential CMOS VCO with Low Phase Noise Performance", *Microelectronics Journal*, vol. 40, pp.1698-1704, 2009 *(impact factor =0.859, 132/229)*

2010 年

1. Hsien-Chin Chiu, Chao-Wei Lin, Chao-Hung Chen, Chih-Wei Yang, Che-Kai Lin, Jeffrey S. Fu, Liann-Be Chang, Ray-Ming Lin, Kuang-Po Hsueh, "Low Hysteresis Dispersion La_2O_3 AlGaN/GaN MOS-HEMTs", *J. Electrohem. Soc*. vol 157, pp. H160-H164, 2010. *(impact factor =2.437, 1/16)*

2. Hsien-Chin Chiu, Chih-Pin Kao, " A Wide Tuning Range 69 GHz Push-Push VCO using 0.18μm CMOS Technology", *IEEE Microwave and Wireless Components Letters*, vol. 20, pp.97-99, 2010. *(impact factor =2.302, 40/229)*

3. Chia-Shih Cheng, Hsien-Chin Chiu, Shao-Wei Lin, Jeffrey S. Fu, “Improved Linearity Performance of AlGaAs/InGaAs Pseudomorphic HEMT Driver Amplifier Using Tunable Field-plate Voltage Technology”, has been accepted to be published in*Microwave Journal*, 2010. *(impact factor =0.52, 164/229)*

4. Chien-Cheng Wei, Hsien-Chin Chiu, Shao-Wei Lin, Ting-Huei Chen, Jeffrey S. Fu, Feng-Tso Chien, “A Comparison Study of CMOS T/R Switches Using Gate/Source-terminated Field-Plate Transistors” *Microelectron. Eng.*, vol. 87, pp.225-229, 2010. *(impact factor =1.583, 68/229)*

5. Jeffrey S. Fu, Po-Yu Ke, Che-Yu Kuo, and Hsien-Chin Chiu, “An X-band Ultra-low Phase Noise Differential Colpitts VCO Using 0.15-μm pHEMT Technology”, has been accepted to be published in International Journal of Electronics, vol. 96, No. x, pp.xxx-xxx, 2010. *(impact factor =0.567, 160/229)*

6. Feng-Tso Chien, Da-Wei Lin, Chih-Wei Yang, Jeffrey S. Fu and Hsien-Chin Chiu, “A Low Insertion Loss GaAs pHEMT Switch Utilizing Dual n+-Doping AlAs Etching Stop Layers Design” *Solid-State Electronics*, vol 54, pp.231-234, 2010 *(impact factor =1.424, 81/229)*

7. Chien-Cheng Wei, Hsien-Chin Chiu, Hui-Chen Hsu, Wu-Shiung Feng, Jeffrey S. Fu, “ A Fully Integrated 24-GHz Differential Active Sub-harmonic Mixer Located in CMOS Multi-layer Marchand Baluns”, has been accepted to be published in *IET Microwaves, Antennas & Propagation*, *(impact factor =0.813, 136/229)*

8. Hsien-Chin Chiu, Chia-Shih Cheng, “On-State and Off-State Breakdown Voltages in GaAs pHEMTs with Various Field-plate and Gate-recess Extension Structures”, *IEEE, Electron Device Lett.*, vol. 31, pp. 186-188, 2010. *(impact factor =3.049, 23/229)*

9. Jia-Shuan Wu, Chia-Song Wu, Yung-Hsiang Lin, Hsien-Chin Chiu, Ray-Ming Lin, “An Improvement Passive Inductor Microwave Performance on GaN Substrates Using Ion Implantation Technology”, has been accepted to be published in International Journal of Electronics, vol. 96, No. x, pp.xxx-xxx, 2010. *(impact factor =0.567, 160/229)*

10. Jeffrey S. Fu, Che-Yu Kuo, Shao-Wei Lin, Po-Yu Ke, Hsien-Chin Chiu, “A Wideband Gilbert Cell Mixer with an Integrated Marchand Balun Using 0.5 m GaAs Enhancement-Mode pHEMT Technology”*Microwave and Optical Technology Letter*, vol 52, pp. 311-315, 2010. *(impact factor =0.743, 144/229)*

11. Hsien-Chin Chiu, Chao-Hung Chen, Chih-Wei Yang, Jeffrey S. Fu, Cheng-Shun Wang, “Electrical and Reliability Characteristics of GaAs MOSHEMTs Utilizing High-k IIIB and IVB Oxide Layers” has been accepted to be published in *Microelectronics Reliability*, vol. 96, No. x, pp.xxx-xxx, 2010. *(impact factor =1.29, 92/229)*

12. Jeffrey S. Fu, Dong-Hua Yang, Chin-I Yeh, Hsien-Chin Chiu, Kuo-Sheng Chin, Hsuan-Ling Kao and Jui-Ching Cheng, "Non-uniform Chebyshev Distributed Chirped Dumbbell-Shaped Photonic Bandgap Structure (PBGs) Low Pass Filter," *COMPEL-International Journal For Computation and Mathematics in Electrical and Electronic Engineering*, USA, Feb. 2010, pp. 295-305 *(impact factor=0.441, 178/229)*

13. S. Maikap, S. Z. Rahaman, Hsien-Chin Chiu, C. H. Lin, T. Y. Wu, Y. S. Chen, P. J. Tzeng, F. Chen, M. J. Kao, M. -J. Tsai, “Bipolar resistive switching memory using Cu metallic filament in $Ge_{0.4}Se_{0.6}$ solid electrolyte”, has been accepted to be published in *Electrochemical and Solid-State Lett*, vol. 13, 2010. *(impact factor =2.001, 11/22)*

14. Hsien-Chin Chiu, Chao-Hung Chen, Chih-Wei Yang, Chao-Wei Lin, Che-Kai Lin, Cheng-Shun Wang, Jeffrey S. Fu, “GaAs Enhancement-Mode MOSHEMT with Pt/ZrO_2/Ti/Au Composited Gate Structure”, *Electrochemical and Solid-State Lett*, vol. 13, pp.H188-H190, 2010.*(impact factor =2.001, 11/22)*

15. Hsien-Chin Chiu, Chih-Wei Yang, Chao-Hung Chen, Che-Kai Lin, Jeffrey S. Fu, Hsing-Yuan Tu, Shiang-Feng Tang, “High Thermal Stability AlGaAs/InGaAs Enhancement-Mode PHEMT Using Palladium-gate Technology” has been accepted to be published in *Microelectronics Reliability*, vol. 96, No. x, pp.xxx-xxx, 2010. *(impact factor =1.29, 92/229)*

16. Feng-Tso Chien, Chien-Liang Chan, Chi-Ling Wang, Chien-Nan Liao, Yao-Tsung Tsai, Hsien-Chin Chiu, “Low Gate Leakage Current HFET Structure Fabricated by Using a Step-free Airbridge Gate Process”,*Journal of the Korean Physical Society*, vol. 56, no. 3, pp. 887-890 , 2010. *(impact factor =1.328, 26/68)*