

### Awards

Name of Award	Organizers	Date of Award
銘傳大學 102 學年度系級優良導師	銘傳大學	2014.09
銘傳大學 101 學年度全校優良導師	銘傳大學	2013.09
銘傳大學 100 學年度系級優良導師	銘傳大學	2012.09
100 學年度大學院校智慧電子系統設計 佳作	智慧電子總聯盟	2012.07
2007 亞洲名人錄	2007 亞洲成就人士名人錄	2007.03

### Research Achievements:Conference Paper

Article Title	Journal Name	Author	Category	Publication Date
Leakage Current Mechanism and Effect of Y2O3 Doped with Zr High-K Gate Dielectrics	Microelectronics Reliability	K. C. Lin, P. C. Juan, C. H. Liu, M. C. Wang, and C. H. Chou	SCI	2015.08
The Impacts of CESL Thickness and Gate Height on Channel Stress in Strained N-MOSFET	Journal of Nanoscience and Nanotechnology	K. C. Lin, M. J. Twu, R. H. Deng, and C. H. Liu	SCI	2015.04
Impact of Stress Induced by Stressors on Hot Carrier Reliability of Strained nMOSFETs	International Journal of Nanotechnology	K.C. Lin, M.J. Twu, P.C. Juan, H.W. Hsu, H.S. Huang, M.C. Wang, C.H. Liu	SCI	2014.03
The Analysis of Channel Stress induced by CESL in N-MOSFET	Applied Mechanics and Materials	M. J. Twu, W. C. Kao, K. C. Lin, K. D. Chen, Y. T. Kua, and C. H. Liu	EI	2014.01
Optimization of BiFeO3 MFIS Capacitors Doped Niobium by Using Taguchi Method	Applied Mechanics and Materials	K. C. Lin, C. H. Ko, M. J. Twu, P. C. Juan, H. Sekiguchi, and C. H. Chou	EI	2014.01

Phenomena of N-type Metal-Oxide-Semiconductor-Field-Effect-Transistors with Contact Etch Stop Layer Stressor for Different Channel Lengths	Thin Solid Films	H. W. Hsu, K. C. Lin, C. C. Lee, M. J. Twu, H. S. Huang, S. Y. Chen, M. R. Peng, H. H. Teng, and C. H. Liu	SCI	2013.10
The Analysis of the Process-Induced Channel Stress in N-MOSFET	Advanced Materials Research	M. J. Twu, R. H. Deng, Z. H. Chen, M. C. Tsai, K. C. Lin, and C. H. Liu	EI	2013.06
The Simulation Analysis of MOSFET Channel Stress for Different Oxide/Nitride/Oxide (ONO) Spacer Thicknesses	Advanced Materials Research	J. Y. Chen, Z. H. Chen, K. C. Lin, M. J. Twu, Y. H. Hung, P. Y. Chou, G. T. Chen, Y. S. Liu, and C. H. Liu	EI	2013.06
The Effect of Ternary Material (Zr, Y, and O) High-k Gate Dielectrics	Advanced Materials Research	K. C. Lin, C. H. Chou, J. Y. Chen, C. J. Li, J. Y. Huang, and C. H. Liu	EI	2013.06
Time dependent dielectric breakdown (TDDB) characteristics of metal – oxide – semiconductor capacitors with HfLaO and HfZrLaO ultra-thin gate dielectrics	Solid-State Electronics	H. W. Hsu, H. S. Huang, H. W. Chen, C. P. Chen, K. C. Lin, S. Y. Chen, M. C. Wang, and C. H. Lin	SCI	2012.11
Leakage current conduction behaviors of 0.65 nm equivalent-oxide-thickness HfZrLaO gate dielectrics	Solid-State Electronics	K. C. Lin, J. Y. Chen, H. W. Hsu, H. W. Chen, and C. H. Lin	SCI	2012.11
Adaptive Fuzzy Cerebellar Model Articulation Controller for Two-Wheeled Robot	Advanced Materials Research	Jen-Yang Chen, Kuei-Chih Lin, Pu-Sheng Tsai, Chuan-Hsi Liu,	EI	2012.02

		and Jing-Ming Ouyang		
Electrical characterization and carrier transportation in Hf-silicate dielectrics using ALD gate stacks for 90 nm node MOSFETs	Applied Surface Science	H.W. Chen, S.Y. Chen, K.C. Chen, H.S. Huang, C.H. Liu, F.C. Chiu, K.W. Liu, K.C. Lin, L.W. Cheng, C.T. Lin, G.H. Ma,	SCI EI	2008.07
The multi-tone signal generators using noise-shaping technique	IEE Proc.-Circuits Devices Syst	Wen-Bin Lin and Bin-Da Liu	SCI EI	2004.02
Coefficients generation for the 4th-order leapfrog sigma-delta A/D converters	IEICE Trans. Fundamentals	Wen-Bin Lin and Bin-Da Liu	SCI EI	2004.01
Design of the High-Order Leapfrog Sigma-Delta A/D Converters	Journal of Chin-Min College	Wen-Bin Lin		2002.06

#### Research Achievements:Journal Article

Article Title	Journal Name	Author	Category	Publication Date
四旋翼探測機	銘傳大學 2015 國際學術研討會	顏紹宇、陳勁宏、詹項年、黃士庭、林奎至		2015.03
The leakage current mechanism and effect of Y2O3 doped with Zr high-k gate dielectrics	2014 International Electron Devices and Materials Symposium (2014 IEDMS)	Kuei-Chih Lin, C. H. Chou, P. C. Juan, and C. H. Liu		2014.11
Physically Based Modeling for Stress Assessment in MOS Devices (Invited)	2014 IEEE International Conference on Electron Devices and Solid-State Circuits (2014 EDSSC)	Chang-Chun Lee, Kuei-Chih Lin, and Chuan-Hsi Liu		2014.06

紅外線與溫度控制之風扇控制系統	銘傳大學 2014 國際學術研討會	廖士杰, 高瑜廷, 黃譽瑾, 張皓翔, 林奎至		2014.03
利用紅外線與超音波感測之監攝系統	銘傳大學 2014 國際學術研討會	王晨宇, 蕭皓謙, 蔡宜庭, 孟至偉, 林奎至		2014.03
自動感測黑線及偵查障礙之語音自走車	銘傳大學 2014 國際學術研討會	馮權德, 顏嘉宏, 張益誠, 林奎至		2014.03
The Analysis of MOSFET Channel Stress for the Effect of Different Oxide/Nitride/Oxide (ONO) Spacer Thicknesses	TACT 2013 International Thin Films Conference	Kuei-Chih Lin, and Ming-Jenq Twu		2013.10
The impact of CESL and gate height on channel stress in strained N-MOSFET	TACT 2013 International Thin Films Conference	Ming-Jenq Twu, and Kuei-Chih Lin		2013.10
The Effect of Ternary Material (Zr, Y, and O) High-k Gate Dielectrics and Different Stack Structures	8th Int. Conf. on Si Epitaxy and Heterostructures/6th Int. Conf. on Control of Semiconductor interfaces (ICSI-8/ISCSI-6)	Kuei-Chih Lin, Ming-Jenq Twu, Chun-Hua Chou, and Chuan-His Liu		2013.06
Analysis of Geometric Effects on Channel Stress Due to the Strained CESL and Spacer in MOSFET	8th Int. Conf. on Si Epitaxy and Heterostructures/6th Int. Conf. on Control of Semiconductor interfaces (ICSI-8/ISCSI-6)	Ming-Jenq Twu, Kuei-Chih Lin, and Chuan-His Liu		2013.06
Relationship between Stress Distribution and Hot-Carrier for Strained nMOSFETs	8th Int. Conf. on Si Epitaxy and Heterostructures/6th Int. Conf. on Control of	H. W. Hsu, H. S. Huang, S. Y. Chen, M.		2013.06

	Semiconductor interfaces (ICSI-8/ISCSI-6)	C. Wang, K. C. Li, K. C. Lin, and C. H. Liu		
擴增實境式齒輪單元 悅趣互動教材之開發 與設計	第十七屆全球華人計 算機教育應用大會 (GCCCE2013)	陳珍源, 趙 貞怡, 劉傳 璽, 林奎至, 呂貴富		2013.05
增廣實境結合遊戲式 教學於槓桿單元之設 計	第十二屆離島資訊技 術與應用研討會	陳珍源, 劉 傳璽, 李遠 坤, 林奎至, 紀舜傑, 呂 貴富		2013.05
銦摻入極薄氧化釷高 介電係數閘極介電層 之效應	銘傳大學 2013 國際學 術研討會	林奎至, 李 承儒, 王文 奕, 陳珍源, 劉傳璽		2013.03
不同側壁厚度對 MOS 場效電晶體通道應力 之模擬與分析	2012 民生電子研討會	黃彥翰, 周 柏佑, 劉宜 昇, 陳冠廷, 陳姿含, 林 奎至, 劉傳 璽		2012.11
The Effect of Aluminum Incorporation in HfO <sub>2</sub> High-k Gate Dielectrics of MOS Devices	International Conference on Automatic Control and Artificial Intelligence	Hsiao- Hsuan Teng, Wen- Yi Wang, Kuei-Chih Lin, Pi- Chun Juan, Hung-Wen Hsu, and Chuan-Hsi Liu	EI	2012.03
Comparison of Effects between Lanthanum and Aluminum Incorporation into HfO <sub>2</sub> Gate Dielectrics	International Conference on Automatic Control and Artificial Intelligence	Y. S. Hu, M. H. Hung, H. W. Hsu, K. C. Lin, P. C. Juan, and C. H. Liu	EI	2012.03

Electrical Properties and Leakage Current Mechanism of Y2O3 Gate Dielectrics	International Conference on Automatic Control and Artificial Intelligence	J. Y. Huang, K. C. Lin, P. C. Juan, H. W. Hsu, and C. H. Liu	EI	2012.03
Adaptive Fuzzy Cerebellar Model Articulation Controller for Two-Wheeled Robot	International Conference on Manufacturing Science and Engineering	Jen-Yang Chen, Kuei-Chih Lin, Pu-Sheng Tsai, Chuan-Hsi Liu, and Jing-Ming Ouyang	EI	2012.03
基於 AVR 的智慧電腦插座	銘傳大學 2012 國際學術研討會	林奎至、周峻華、李承儒、楊竣皓		2012.03
紅綠燈自走車	銘傳大學 2012 國際學術研討會	謝鎧任、李冠權、李柏賢、鄧博瑞、林奎至		2012.03
Adaptive Fuzzy Control of Two-Wheeled Balancing Vehicle	International Conference on Instrumentation, Measurement, Computer, Communication and Control	Jen-Yang Chen, Chuan-Hsi Liu, Chien-Chun Chen, and Kuei-Chih Lin		2011.10
Design Of The Two-Tone Oscillators By Using Sigma-Delta Technique	Proc. International Conference on System Science and Engineering	Kuei-Chih Lin		2011.06
逆變器電路之研究與製作	銘傳大學 2011 國際學術研討會	林奎至、? 浩育、蔡則胤、李志浩、董彥和、呂		2011.03

		華元、康哲彰		
新式訊號取樣方法之發展與研究	2010 年銘傳大學 2010 國際學術研討會	林奎至、戴呈兆、秦國璋、邱柏豪、王聖文、楊適文、黃奕鈞、劉于誠		2010.03
四階 Sigma-Delta 數位/類比調變器之分析、模擬與電路設計	銘傳大學 2009 國際學術研討會論文集	林奎至、翁銘鴻		2009.03
高階超取樣高解析度調變器的設計與分析	銘傳大學 2009 國際學術研討會論文集	林奎至、方俊隆、李彥東、高慧寧、高鳴鮮、傅凱		2009.03
高效能 CMOS 運算放大器設計與實作	銘傳大學 2008 國際學術研討會論文集	林奎至、林柏良、蔡長錚		2008.03
On the design and analysis of the 4th - order leapfrog sigma-delta modulator	In Proc International Conference on Communications, Circuits and Systems	Kuei-Chih Lin and Chuan H. Liu		2006.06
The two-tone oscillators using sigma-delta and TDM techniques	2005 第三屆微電子技術發展與應用研討會論文集	Wen-Bin Lin and Chuan H. Liu		2005.05
Stability analysis for the high-order leapfrog sigma-delta A/D converters	in Proc. 2003 the 5th International Conference on ASIC	Wen-Bin Lin and Bin-Da Liu		2003.10
The high-resolution multi-tone signal generators	Proc. 2002 IEEE Asia Pacific Conference on Circuits and Systems	Wen-Bin Lin and Bin-Da Liu		2002.10
The 4th-order leapfrog sigma-delta A/D	Proc. 2001 International Symp. On	Wen-Bin Lin and Bin-Da Liu		2001.11

converters stabilized by linear methodology	Communications and Information Technology			
A peak-detection sampling approach for data compression	Proc. the 6th VLSI Design/CAD Symposium	Chuen-Hsien Su, Tai-Haur Kuo, Wen-Bin Lin, and Vincent Chen		1995.08
Design and analysis of high order leapfrog topologies for sigma-delta A/D converters	Proc. 1994 IEEE Asia-Pacific Conference on Circuits and Systems	Wen-Bin Lin, Tai-Haur Kuo, Chuen-Hsien Su, and Ji-Rong Chen		1994.12
The fourth order sigma-delta A/D converter based on leapfrog topologies	Proc. The 5th VLSI Design/CAD Symposium	Chuen-Hsien Su, Ji-Rong Chen, Tai-Haur Kuo, and Wen-Bin Lin		1994.08