

### Awards

Name of Award	Organizers	Date of Award
Who' s Who in Asia, 2nd edition, 2012	Marquis Who's Who	2011.05
銘傳大學 99 學年度學術研究成果獎勵	銘傳大學	2011.03
Top 100 Engineers 2010	IBC	2010.06
2000 Outstanding Intellectuals of the 21st Century 2010	IBC	2010.06
銘傳大學 98 學年度學術研究成果獎勵	銘傳大學	2010.03
Who' s Who in the World, 27th edition.	Marquis Who's Who	2009.12
銘傳大學 97 學年度學術研究成果獎勵	銘傳大學	2009.03
Leading Scientists of the World 2008	International Biographical Centre	2008.04
銘傳大學 96 學年度學術研究成果獎勵	銘傳大學	2008.03
Who's Who in Science and Engineering 2008-2009	Marquis Who's Who	2007.09

### Research Achievements:Conference Paper

Article Title	Journal Name	Author	Category	Publication Date
Trap exploration in amorphous boron-doped ZnO film	Materials	Fu-Chien Chiu* and Wen-Ping Chiang	SCI	2015.08
A split island layout style of butting/inserted substrate pickups for NMOSFET ESD reliability	Advances in Materials Science and Engineering	Chih-Yao Huang*, Fu-Chien Chiu, Bo-Chen Lin, and Po-Kung Song	SCI	2015.05
Conduction mechanisms in resistance switching memory devices using transparent boron doped zinc oxide films	Materials	Fu-Chien Chiu	SCI	2014.11

Resistive switching characteristics in boron doped zinc oxide films	Applied Mechanics and Materials	Fu-Chien Chiu	EI	2014.06
Effect of Titanium Content on the Impedance Characteristics of High- $\kappa$ TbTixOy Electrolyte-Insulator-Semiconductor pH Sensors	2014 Tenth International Vacuum Electron Sources Conference (IVESC 2014)	Chih-Wei Wang, Tung-Ming Pan*, Fu-Chien Chiu, and Lifeng Chi	EI	2014.06
Structural properties and electrical characteristics of high-k GdTiO3 gate dielectrics for InGaZnO thin-film transistors	2014 Tenth International Vacuum Electron Sources Conference (IVESC 2014)	Ching-Hung Chen, Jim-Long Her, Tung-Ming Pan*, Fu-Chien Chiu, and Koichi Koyama	EI	2014.06
Electrical analyses of charge trapping and stress-induced leakage current in CeO2 gate dielectric	Journal of the Chinese Institute of Engineers	Fu-Chien Chiu* and Shu-Hao Chang	SCI	2014.04
A Review on Conduction Mechanisms in Dielectric Films	Advances in Materials Science and Engineering	Fu-Chien Chiu	SCI	2014.02
Negative resistance characterization and defective trap exploration in ZnO nonvolatile memory devices	International Journal of Nanotechnology	Fu-Chien Chiu*, Chih-Yao Huang, Wen-Yuan Chang, and Tung-Ming Pan	SCI	2014.01
A Substrate-and-Gate Triggering NMOS Device for High ESD Reliability in Deep Submicrometer Technology	Advances in Materials Science and Engineering	Chih-Yao Huang* and Fu-Chien Chiu	SCI	2013.12
Resistance switching characteristics in ZnO-based nonvolatile memory devices	Advances in Materials Science and Engineering	Fu-Chien Chiu	SCI	2013.11

Charge-trapping devices using multilayered dielectrics for nonvolatile memory applications	Advances in Materials Science and Engineering	Wen-Chieh Shih, Chih-Hao Cheng, Joseph Ya-min Lee and Fu-Chien Chiu*,	SCI	2013.11
Surface state capture cross-section at the interface between silicon and hafnium oxide	Advances in Materials Science and Engineering	Fu-Chien Chiu	SCI	2013.11
A high latchup-immune ESD protection SCR-incorporated BJT in deep submicron technology	Proc. 20th IEEE IPFA	Chih-Yao Huang*, Fu-Chien Chiu, Ji-Fan Chi, Yi-Jou Huang, Quo-Ker Chen, and Jen-Chou Tseng	EI	2013.07
Trap exploration of ZnO-based resistance switching memory devices	Proc. IEEE 5th INEC (International Nano Electronics Conference)	Fu-Chien Chiu*, Wen-Yuan Chang, Peng-Wei Li, Chih-Chi Chen, and Wen-Ping Chiang	EI	2013.01
Reliability characteristics and conduction mechanisms in resistive switching memory devices using ZnO thin films	Nanoscale Research Letters	Fu-Chien Chiu*, Peng-Wei Li, and Wen-Yuan Chang	SCI	2012.12
Conduction mechanism of resistive switching films in MgO memory devices	Journal of Applied Physics	Fu-Chien Chiu*, Wen-Chieh Shih, and Jun-Jea Feng	SCI	2012.05
An SCR-incorporated BJT device for robust ESD protection with high latchup immunity in high-voltage technology	IEEE Transactions on Device and Materials Reliability	Chih-Yao Huang*, Fu-Chien Chiu, Quo-Ker Chen, Ming-Fang	SCI	2012.03

		Lai, and Jen-Chou Tseng		
Metal-oxide-high-k-oxide-silicon memory device using a Ti-doped Dy <sub>2</sub> O <sub>3</sub> charge trapping layer and Al <sub>2</sub> O <sub>3</sub> blocking layer	IEEE Transactions on Electron Devices	Fa-Hsyang Chen, Tung-Ming Pan, and Fu-Chien Chiu	SCI	2011.11
Polarity of bipolar resistive switching characteristics in ZnO memory films	Journal of The Electrochemical Society	Wen-Yuan Chang*, Ching-Shiang Peng, Cheng-Hung Lin, Jui-Ming Tsai, Fu-Chien Chiu, and Yu-Lun Chueh	SCI	2011.09
Conduction mechanisms and reliability characteristics in MgO resistive switching memory devices	Proc. 18th IEEE IPFA	Fu-Chien Chiu*, Jun-Jea Feng, Wen-Chieh Shih, Po-Yueh Cheng, and Chih-Yao Huang	EI	2011.07
Reliability characterizations of resistive switching devices using zinc oxide thin film	Proc. 18th IEEE IPFA	Fu-Chien Chiu*, Peng-Wei Li, Wen-Yuan Chang, Tai-Bor Wu, Chih-Chi Chen, and Chih-Yao Huang	EI	2011.07
Reliability characteristics of cerium dioxide thin films	Proc. 18th IEEE IPFA	Fu-Chien Chiu*, Shu-Hao Chang, and Chih-Yao Huang	EI	2011.07
Structural properties and electrical characteristics of	Applied Surface Science	Tung-Ming Pan*, Wei-Tsung Chang,	SCI EI	2011.02

high-k Dy <sub>2</sub> O <sub>3</sub> gate dielectrics		and Fu-Chien Chiu		
Structural and electrical properties of thin Ho <sub>2</sub> O <sub>3</sub> gate dielectrics	Thin Solid Films	Tung-Ming Pan*, Wei-Tsung Chang, and Fu-Chien Chiu	SCI EI	2010.11
Thickness and temperature dependence of dielectric reliability characteristics in cerium dioxide thin film	IEEE Transactions on Electron Devices	Fu-Chien Chiu*	SCI EI	2010.10
Stress-Induced Leakage Current and Charge Trapping in Cerium Dioxide Thin Film	ECS Transactions	Fu-Chien Chiu* and Shu-Hao Chang	EI	2010.10
Reliability Characteristics of D <sub>2</sub> O-Radical Annealed ALD HfO <sub>2</sub> Dielectric	ECS Transactions	C. H. Tu, Fu-Chien Chiu*, Chun-Heng Chen, C. H. Hou, Z. J. Lee, Hung-Wen Chen, Shuang-Yuan Chen, H. S. Huang, Tai-Bor Wu	EI	2010.04
Temperature and thickness dependence of cerium oxide dielectric breakdown	ECS Transactions	Chun-Heng Chen, Wen-Chieh Shih, Huey-Liang Hwang, and Fu-Chien Chiu*	EI	2010.04
CeO <sub>2</sub> Optical Properties and Electrical Characteristics	ECS Transactions	Wen-Chieh Shih, Chun-Heng Chen, Fu-Chien Chiu*, Chih-Ming Lai, and Huey-Liang Hwang,	EI	2010.04

New Metal – High-k – High-k – Oxide – Semiconductor (MHHOS) Capacitors and Field Effect Transistors using Al/Y2O3/Ta2O5/SiO2/Si Structure for Non-volatile Memory Applications	ECS Transactions	Wen-Chieh Shih, Fu-Chien Chiu*, and Huey-Liang Hwang	EI	2010.04
Analysis of breakdown characteristics in high-k dielectric under electrostatic discharge impulse stress	Journal of Applied Physics	Chun-Heng Chen, Ming Han Liao, Fu-Chien Chiu*, and Huey-Liang Hwang,	SCI EI	2010.02
Optical and electrical characterizations of cerium oxide thin films	Journal of Physics D: Applied Physics	Fu-Chien Chiu* and Chih-Ming Lai	SCI EI	2010.02
An SCR-buried BJT device for robust ESD protection with high latchup immunity in high-voltage technology	Proc. 16th IEEE IPFA (International Symposium on the Physical & Failure Analysis of Integrated Circuits)	Chih-Yao Huang, Quo-Ker Chen, Ming-Fang Lai, Fu-Chien Chiu and Jen-Chou Tseng	EI	2009.07
Reliability Characterization of Stress-Induced Charge Trapping in HfO2 by Electrostatic Discharge Impulse Stresses	Journal of Applied Physics	Chun-Heng Chen, Huey-Liang Hwang, and Fu-Chien Chiu*	SCI	2009.05
Interfacial and electrical characterization in metal-oxide-semiconductor field-effect transistors with CeO2 gate dielectric	Japanese Journal of Applied Physics	Fu-Chien Chiu*, Shuang-Yuan Chen, Chun-Heng Chen, Hung-Wen Chen, Heng-Sheng Huang, and Huey-Liang Hwang	SCI	2009.04

Current conduction mechanisms in Pr <sub>2</sub> O <sub>3</sub> /oxynitride laminated gate dielectrics	Journal of Applied Physics	Fu-Chien Chiu*, Chun-Yen Lee, and Tung-Ming Pan	SCI	2009.04
National Project on 45 to 32 nm Metal Oxide Semiconductor Field Effect Transistors for Next Century IC Fabrications	Proc. IEEE Conference on Electron Devices and Solid-State Circuits (EDSSC) 2008	Huey-Liang Hwang, C. W. Wang, K. H. Chang, C. H. Tsai, K. C. Leou, Kuei-Shu Chang-Liao, C.C. Lu, S.C. Chang, Fu-Chien Chiu, Chuan-Hsi Liu, Albert Chin, K. M. Chang, and B. N. Chen	EI	2008.12
Interfacial and Electrical Characterization of HfO <sub>2</sub> -Gated MOSCs and MOSFETs by C-V and Gated-Diode Method	ECS Transactions	S. Y. Chen, H. W. Chen, F. C. Chiu *, C. H. Liu, Z. Y. Hsieh, H. S. Huang and H. L Hwang	EI	2008.10
Interface Characterization of Gated-CeO <sub>2</sub> MOSFETs Using Gated Diode Method and Charge Pumping Technique	ECS Transactions	F. C. Chiu*, H. W. Chen, C. H. Chen, C. H. Liu, S. Y. Chen, B. S. Huang, Z. Y. Hsieh, H. S. Huang and H. L. Hwang	EI	2008.10
Hot Carrier Reliability of ALD HfSiON Gated MOSFETs with Different Compositions	ECS Transactions	Hung-Wen Chen, Shuang-Yuan Chen, C. C. Lu, Chuan-Hsi Liu, Fu-Chien Chiu, H. S. Huang, L.	EI	2008.10

		W. Cheng, C. T. Lin, G. H. Ma,		
Electrical Characterization and Carrier Transportation in Hf-silicate Dielectric 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.	SCI	2008.07
Interface Characterization and Current Conduction in HfO <sub>2</sub> -Gated MOS Capacitors	Applied Surface Science	H. W. Chen, F. C. Chiu, C. H. Liu, S. Y. Chen, H. S. Huang, P. C. Juan and H. L. Hwang	SCI	2008.07
The electrical properties of metal-oxide (SiO <sub>2</sub> )-high-k oxide (Ta <sub>2</sub> O <sub>5</sub> )-oxide (SiO <sub>2</sub> )-semiconductor capacitors and transistors for non-volatile memory applications	International Symposium on Integrated Ferroelectrics (ISIF)	W. C. Shih, T. P. C. Juan, I. Y. K. Chang, F. C. Chiu, C. H. Cheng, Joseph Ya-min Lee	EI	2008.06
Current Conduction Mechanisms in CeO <sub>2</sub> Thin Films	Electrochemical and Solid-State Letters	Fu-Chien Chiu	SCI	2008.06
Electrical characterization of CeO <sub>2</sub> interface properties of metal-oxide-semiconductor field-effect transistors with CeO <sub>2</sub> gate dielectric	Applied Physics Letters	Chun-Heng Chen, Ingram Yin-ku Chang, Joseph Ya-min Lee, and Fu-Chien Chiu	SCI	2008.01
The electrical and interfacial properties of metal-high-k oxide-semiconductor field effect transistors with CeO <sub>2</sub> /HfO <sub>2</sub> laminated gate dielectrics	Applied Physics Letters	Ingram Yin-ku Chang, Chun-Heng Chen, Fu-Chien Chiu, and Joseph Ya-min Lee	SCI	2007.11



Advance in Next Century nanoCMOSFET Research	Applied Surface Science	Huey-liang Hwang, Yan-Kai Chiou, Che-Hao Chang, Chen-Chan Wang, Kun-Yu Lee, Tai-Bor Wu, Raynien Kwo, Minghwei Hong, Kuei-Shu Chang-Liao, Chun-Yuan Lu, Chun-Chang Lu, Fu-Chien Chiu, Chun-Heng Chen, Joseph Ya-min Lee, and Albert Chin.	SCI	2007.10
Reliability properties of metal-oxide-semiconductor capacitors using HfO <sub>2</sub> high-k dielectric	Applied Physics Letters	Chun-Heng Chen, Ingram Yin-Ku Chang, Joseph Ya-Min Lee, Fu-Chien Chiu, Yan-Kai Chiou and Tai-Bor Wu	SCI	2007.09
Electrical characterization and current transportation in metal/Dy <sub>2</sub> O <sub>3</sub> /Si structure	Journal of Applied Physics.	Fu-Chien Chiu	SCI	2007.08
An Investigation of Surface State Capture Cross-Sections for Metal-Oxide-Semiconductor Field-Effect Transistors Using HfO <sub>2</sub> Gate Dielectrics	Microelectronics Reliability	Fu-Chien Chiu, Wen-Chieh Shih, Joseph Ya-min Lee and Huey-Liang Hwang	SCI	2007.05
Electrical Characterization of ZrO <sub>2</sub> /Si Interface Properties in MOSFETs with ZrO <sub>2</sub> Gate Dielectrics	IEEE Electron Device Letters	Chuan-Hsi Liu and Fu-Chien Chiu	SCI	2007.01

Interface Characterization and Carrier Transportation in Metal/HfO <sub>2</sub> /Silicon Structure	Journal of Applied Physics	Fu-Chien Chiu	SCI	2006.12
Advance in Next Century Nano CMOSFET Research and Its Future Prospects for Industry	13th International conference on Solid Films and Surface, San Carlos de Bariloche, Patagonia, Argentina	Huey-liang Hwang, Yan-Kai Chiou, Che-Hao Chang, Chen-Chan Wang, Kun-Yu Lee, Tai-Bor Wu, Ray-Nien Kwo, Ming-Hwei Hong, Kuei-Shu Chang-Liao, Chun-Yuan Lu, Chun-Chang Lu, Yin-Yin Kyi, Albert Chin, Chun-Heng Chen, Joseph Ya-min Lee, and Fu-Chien Chiu	EI	2006.11
Electrical Characterization of Tunnel Insulator in Metal/Insulator Tunnel Transistors Fabricated by Atomic Force Microscope	Applied Physics Letters	Fu-Chien Chiu, Shih-Kai Fan, Kwang-Cheng Tai, Joseph Ya-min Lee and Ya-Chang Chou	SCI	2005.12
The Charge Trapping Effect of Metal - Ferroelectric (PbZr <sub>0.53</sub> Ti <sub>0.47</sub> O <sub>3</sub> ) - Insulator (HfO <sub>2</sub> ) - Silicon (MFIS) Capacitors	Journal of Applied Physics	Pi-Chun Juan, Yu-Ping Hu, Fu-Chien Chiu, and Joseph Ya-min Lee	SCI	2005.08
The Electrical Properties of Metal - Ferroelectric (PbZr <sub>0.53</sub> Ti <sub>0.47</sub> O <sub>3</sub> ) - Insulator - Silicon (MFIS)	Microelectronic Engineering	Pi-Chun Juan, Yu-Ping Hu, Fu-Chien Chiu,	SCI	2005.06

Capacitors with Different Insulator Materials		and Joseph Ya-min Lee		
Electrical properties of metal-HfO <sub>2</sub> -silicon system measured from metal-insulator-semiconductor capacitors and metal-insulator-semiconductor field-effect transistor using HfO <sub>2</sub> gate dielectric	Microelectronics Reliability	Fu-Chien Chiu, Shun-An Lin and Joseph Ya-min Lee	SCI	2005.06
Electrical Conduction Mechanisms of Metal/La <sub>2</sub> O <sub>3</sub> /Si Structure	Journal of Applied Physics	Fu-Chien Chiu, Hong-Wen Chou and Joseph Ya-min Lee	SCI	2005.05
Electron Conduction Mechanism and Band Diagram of Sputter Deposited Al/ZrO <sub>2</sub> /Si Structure	Journal of Applied Physics	Fu-Chien Chiu, Zhi-Hong Lin, Che-Wei Chang, Chen-Chih Wang, Kun-Fu Chuang, Chih-Yao Huang, Joseph Ya-min Lee and Huey-Liang Hwang.	SCI	2005.02
Desing optimization of ESD protection and latchup prevention for a serial I/O IC	Microelectronics Reliability	Chih-Yao Huang, Wei-Fang Chen, Song-Yu Chuan, Fu-Chien Chiu, Jeng-Chou Tseng, I-Cheng Lin, Chuan-Jane Chao, Len-Yi Leu and Ming-Dou Ker	SCI	2004.02

Anomalous Latchup Failure Induced by On-Chip ESD Protection Circuit in a High-Voltage CMOS IC Product	Proc. 9th IEEE IPFA, pp.75-79, Jul. 2002	I-Cheng Lin, Chih-Yao Huang, Chuan-Jane Chao, Ming-Dou Ker, Sung-Yu Chuan, Len-Yi Leu, Fu-Chien Chiu and Jeng-Chou Tseng	EI	2002.08
"Leakage currents in amorphous Ta <sub>2</sub> O <sub>5</sub> thin films"	Journal of Applied Physics,	Fu-Chien Chiu, Jenn-Jyh Wang, Joseph Ya-min Lee and Shich Chuan Wu	SCI	1997.05

#### Research Achievements:Journal Article

Article Title	Journal Name	Author	Category	Publication Date
Reliability characterizations of resistive switching devices using zinc oxide thin film	18th International Symposium on the Physical and Failure Analysis of Integrated Circuits (IPFA 2011), Jul. 4-7 2011, Songdo Convensia, Incheon, Korea.	F. C. Chiu*, P. W. Li, W. Y. Chang, T. B. Wu, C. C. Chen, and C. Y. Huang		2011.07
Conduction mechanisms and reliability characteristics in MgO resistive switching memory devices	18th International Symposium on the Physical and Failure Analysis of Integrated Circuits (IPFA 2011), Jul.4-7 2011, Songdo Convensia, Incheon, Korea.	F. C. Chiu*, J. J. Feng, W. C. Shih, P. Y. Cheng, and C. Y. Huang		2011.07
Reliability characteristics of cerium dioxide thin films	18th International Symposium on the Physical and Failure Analysis of Integrated	F. C. Chiu*, S. H. Chang ,		2011.07

	Circuits (IPFA 2011), Jul. 4-7 2011, Songdo Convensia, Incheon, Korea.	and C. Y. Huang		
Reliability characteristics of ZnO resistive switching devices	2011 IEEE International Nano Electronics Conference (2011 INEC), Jun. 21-24, Taoyuan, Taiwan, 2011.	P. W. Li, W. Y. Chang, T. B. Wu, C. C. Chen, and F. C. Chiu*		2011.06
Resistive switching and reliability characteristics in MgO metal-insulator-metal diodes	2011 IEEE International Nano Electronics Conference (2011 INEC), Jun. 21-24, Taoyuan, Taiwan, 2011.	J. J. Feng, W. C. Shih, P. W. Li, S. H. Chang, P. Y. Cheng, and F. C. Chiu*		2011.06
Electrical characterizations of resistive switching memory devices using ZnO and MgO thin films	2011 Symposium on Nano Device Technology (SNDT 2011), Apr. 21-22, Hsinchu, Taiwan, 2011.	P. W. Li, J. J. Feng, F. C. Chiu*, S. H. Chang, C. C. Chen, W. Y. Chang, T. B. Wu, W. C. Shih, C. H. Chen, and H. L. Hwang		2011.04
Current Transportation and Reliability Characterization of CeO <sub>2</sub> thin film	23rd International Microprocesses and Nanotechnology Conference (MNC 2010), Nov. 9-12, Fukuoka, Japan, 2010.	C. H. Chen, S. H. Chang, H. L. Hwang, C. Y. Huang, Y. C. Lin,		2010.11

		and F. C. Chiu*		
Reproducible Resistive Switching Characteristics of Zinc Oxide Based Memory Device for Non-Volatile Memory Application	2010 International Electron Devices and Materials Symposium (IEDMS 2010), Nov. 18-19, ChungLi, Taiwan, 2010.	P. W. Li, F. C. Chiu*, S. H. Chang, W. Y. Chang, and T. B. Wu		2010.11
Bipolar Resistive Switching of Pt/MgO/Pt Non-volatile Memory Device	2010 International Electron Devices and Materials Symposium (IEDMS 2010), Nov. 18-19, ChungLi, Taiwan, 2010.	J. J. Feng, F. C. Chiu*, S. H. Chang, Y. H. Lin, and W. C. Shih		2010.11
Electrical characterizations of stress-induced defect size in CeO <sub>2</sub> dielectric	2010 International Electron Devices and Materials Symposium (IEDMS 2010), Nov. 18-19, ChungLi, Taiwan, 2010.	Shu-Hao Chang and Fu-Chien Chiu*		2010.11
Stress-Induced Leakage Current and Charge Trapping in Cerium Dioxide Thin Film	218th ECS Meeting, Oct. 10-15, Las Vegas, Nevada, USA, 2010.	S. H. Chang, P. W. Lee, C. C. Feng, C. M. Lai, and F. C. Chiu*		2010.10
氧化鈰介電質中電荷捕獲和應力誘發漏電流之電性分析	2010 Taiwan ESD and Reliability Conference proceedings, Section C -- system-level ESD (2) / Reliability & Product Failure Analysis, Oct. 25-27, Hsinchu, Taiwan, 2010.	張書豪、邱福千*、黃至堯,		2010.10
Electrical Analyses of Charge Trapping and	18th International Vacuum Congress (IVC-	S. H. Chang, P.		2010.08

Stress- Induced Leakage Current in CeO <sub>2</sub> Gate Dielectric	18), Aug. 23-27, Beijing, China, 2010.	W. Lee, C. C. Feng, C. M. Lai, C. Y. Huang, and F. C. Chiu*		
New Metal – High-k – High-k – Oxide – Semiconductor (MHHOS) Capacitors and Field Effect Transistors Using Al/Y <sub>2</sub> O <sub>3</sub> /Ta <sub>2</sub> O <sub>5</sub> /SiO <sub>2</sub> /Si Structure for Non-volatile Memory Applications	217th ECS Meeting, Apr. 25-30, Vancouver, Canada, 2010	W. C. Shih*, F. C. Chiu, and H.L. Hwang		2010.05
CeO <sub>2</sub> Optical Properties and Electrical Characteristics	217th ECS Meeting, Apr. 25-30, Vancouver, Canada, 2010	W. C. Shih, C.H. Chen, F. C. Chiu*, C. M. Lai, and H.L. Hwang		2010.04
Temperature and thickness dependence of cerium oxide dielectric breakdown	217th ECS Meeting, Apr. 25-30, Vancouver, Canada, 2010	C.H. Chen <sup>1</sup> , W. C. Shih, H.L. Hwang, and F. C. Chiu*		2010.04
Reliability Characteristics of D <sub>2</sub> O-Radical Annealed ALD HfO <sub>2</sub> Dielectric	217th ECS Meeting, Apr. 25-30, Vancouver, Canada, 2010.	C. H. Tu, F. C. Chiu*, C. H. Chen, C. H. Hou, Z. J. Lee, H. W. Chen, S. Y. Chen, H. S. Huang, T. B. Wu,		2010.04

		and H. L. Hwang		
Breakdown characteristics of D2O-radical annealed ALD HfO2 dielectrics	In Proc. of International Electron Devices and Materials Symposium (IEDMS) C-59 pp. 1-2, Nov. 19-20, Taoyuan, Taiwan, 2009.	S. Y. Chen, J. Y. Huang, C. H. Tu, F. C. Chiu*, Z. J. Lee, H. S. Huang, C. H. Chen, C. H. Hou, H. W. Chen, T. B. Wu, and		2009.11
An SCR-buried BJT device for robust ESD protection with high latchup immunity in high-voltage technology	Proc. 16th IEEE IPFA (International Symposium on the Physical & Failure Analysis of Integrated Circuits), Jul. 6-10 2009, Suzhou, China	Chih-Yao Huang, Quo-Ker Chen, Ming-Fang Lai, Fu-Chien Chiu and Jen-Chou Tseng		2009.07
Interface Characterization and Carrier Transportation in CeO2-Gated MOS Capacitors	4th Vacuum and Surface Sciences Conference of Asia and Australia (VASSCAA-4)	H. W. Chen, F. C. Chiu*, C. H. Chen, S. Y. Chen, C. H. Liu, Z. Y. Hsieh, H. S. Huang and H. L. Hwang		2008.10
“Hot Carrier Reliability of ALD HfSiON Gated	PRiME (Pacific Rim Meeting on Electrochemical and	H. W. Chen1, S. Y. Chen1,		2008.10



MOSFETs with Different Compositions”	Solid-State Science), Otc. 12-17, Hawaii, 2008 (214th Meeting of ECS).	C. C. Lu1, C. H. Liu2, *, F. C. Chiu2, H. S. Huang1, L. W. Cheng3, **, C. T. Lin3, G. H. Ma3,		
“Interfacial and Electrical Characterization of HfO2-Gated MOSCs and MOSFETs by C-V and Gated-Diode Method”	PRiME (Pacific Rim Meeting on Electrochemical and Solid-State Science), Otc. 12-17, Hawaii, 2008 (214th Meeting of ECS).	S. Y. Chen1, H. W. Chen1, F. C. Chiu2 *, C. H. Liu2, Z. Y. Hsieh1 , H. S. Huang1 and H. L. Hwang3		2008.10
“Interface Characterization of CeO2-Gated MOSFETs Using Gated Diode Method and Charge Pumping Technique”	PRiME (Pacific Rim Meeting on Electrochemical and Solid-State Science), Otc. 12-17, Hawaii, 2008 (214th Meeting of ECS)	F. C. Chiu1, *, H. W. Chen2, C. H. Chen3, C. H. Liu1, S. Y. Chen2, B. S. Huang2, Z. Y. Hsieh2, H. S. Huang2 and H. L. Hwan		2008.10
“Interfacial and Electrical Characterization in	2008 International Conference on Solid State Devices and Materials	F. C. Chiu1, *, H. W.		2008.09

MOSFETs with CeO <sub>2</sub> Gate Dielectric” ,	(SSDM 2008), Sep. 23-26, Japan, 2008.	Chen <sup>2</sup> , C. H. Chen <sup>3</sup> , C. H. Liu <sup>1</sup> , S. Y. Chen <sup>2</sup> , B. S. Huang <sup>2</sup> , H. S. Huang <sup>2</sup> and H. L. Hwang <sup>3</sup>		
“Interfacial and Electrical Characterization of ALD HfSiON Gated MOSFETs with Different Compositions after Channel Hot-Carrier Stress”	2008 International Conference on Solid State Devices and Materials (SSDM 2008), Sep. 23-26, Japan, 2008.	H. W. Chen <sup>1</sup> , S. Y. Chen <sup>1</sup> , C. C. Lu <sup>1</sup> , C. H. Liu <sup>2</sup> , *, F. C. Chiu <sup>2</sup> , H. S. Huang <sup>1</sup> , L. W. Cheng <sup>3</sup> , **, C. T. Lin <sup>3</sup> , G. H. Ma <sup>3</sup> ,		2008.09
“Comparison of the Electrical Properties of Hf-Silicate Gate Stacks Using ALD with Various Hf Compositions”	Proc. of International Electron Devices and Materials Symposium (IEDMS), Taiwan, 2007.	S. Y. Chen, W. X. Su, H. W. Chen, K. C. Chen, C. H. Liu, F. C. Chiu, L. W. Cheng, C. T. Lin, G. H. Ma, and H. S. Huang		2007.12
"Electrical Characterization of Hf-Silicate Dielectric Using	Proc. of International Electron Devices and	S. Y. Chen, L. C. Cheng,		2007.12

ALD Gate Stacks for 90nm Node MOSFETs"	Materials Symposium (IEDMS), Taiwan, 2007.	H. W. Chen, K. C. Chen, C. H. Liu, F. C. Ciu, L. W. Cheng, C. T. Lin, G. H. Ma, and H. S. Hu		
"Electrical Properties and Conduction Mechanism in Hf-Silicate Dielectric Using ALD Gate Stacks"	Proc. of International Electron Devices and Materials Symposium (IEDMS), Taiwan, 2007.	S. Y. Chen, B. S. Huang, H. W. Chen, K. C. Chen, C. H. Liu, F. C. Ciu, L. W. Cheng, C. T. Lin, G. H. Ma, and H. S. H		2007.12
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2nd ISPN:	2nd International symposium on point defect and nonstoichiometry(ISPN) and 12th Asia-Pacific academy of materials topical seminar	Fu-chien Chiu, Trevor Pi-chun Juan, Wen-Chieh Shih, Shun-An Lin, Joseph Ya-min Lee and Huey-Liang Hwang		2005.10
"The Electrical Properties of Metal – Ferroelectric (PbZr <sub>0.53</sub> Ti <sub>0.47</sub> O <sub>3</sub> ) – Insulator – Silicon (MFIS) Capacitors with	14th bi-annual conference on Insulating Films on Semiconductors(INFOS),	Pi-chun Juan, Yu-ping Hu, Fu-chien Chiu, and Joseph		2005.06

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"Electrical properties of metal-HfO <sub>2</sub> -silicon system measured from metal-insulator-semiconductor capacitors and metal-insulator-semiconductor field-effect transistor using HfO <sub>2</sub> gate dielectric"	13th WoDiM (Workshop on Dielectrics in Microelectronics)	Shun-An Lin, Fu-Chien Chiu and Joseph Ya-min Lee		2004.06
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