

2007 IEEE 20th International Vacuum Nanoelectronics Conference

**Chicago, IL
8-12 July 2007**



IEEE Catalog Number: CFP07VAC-PRT
ISBN 10: 1-4244-1133-5
ISBN 13: 978-1-4244-1133-7

Table of Contents

Improvements on an out-of-plane MEMS quadrupole for portable mass spectrometry	1
<i>L. F. Velásquez-García, K. Cheung, and A.I. Akinwande,</i>	
Fabrication and operation of triode electron emitters as ion source for miniature mass spectrometer	3
<i>Jung Bin Cho, Hyewon Jung Yoon, Sang Sik Yang, Ken Ha Koh, and Soonil Lee</i>	
Hydrogen ion production using carbon nanotube field emitter arrays	5
<i>Jonathan L. Shaw and David S. Y. Hsu</i>	
AC performance of a novel carbon nanotube vacuum field emission differential amplifier IC	7
<i>Y. M. Wong, W. P. Kang, J. L. Davidson, D. V. Kerns, and J. H. Huang</i>	
Low-Voltage Field Emitter Array Operation in Cold Cathode TWT.....	9
<i>D. R. Whaley, R. Duggal, C. M. Armstrong, C. L. Bellew, C. E. Holland, C. A. Spindt</i>	
An Injection Locked Millimeter Wave Oscillator Based on Field Emission Cathodes.....	11
<i>Pu-Shih Lua,^a and Ming-Chieh Lin^a</i>	
Fabrication of field-emission cathode ray tube with an unique nano-structure carbon electron emitter.....	13
<i>H. X. Wang^a, N. Jiang, H. Hiraki, Y. Harada, H. Zhang, J. Wang, M. Haba, and A. Hiraki</i>	
Field emission display prototype using screen printed carbon nanotube cathode.....	15
<i>Jun Chen, J. X. Huang, C. L. Xu, W. L. Chen, G. Zhang, J. Yu, C. Y. Duan, X. G. Xu, S Z Deng, N S Xu</i>	
Combined XPS/UPS/FES for characterisation of electron emission mechanism from diamond	17
<i>H. Yamaguchi, Y. Kudo, T. Masuzawa, M. Kudo, T. Yamada, Y. Takakuwa, and K. Okano</i>	
XPS and LEED analyses on the extremely low work function surface of W(100) modified by yttrium oxide.....	19
<i>Takashi Kawakubo, Yusuke Shimoyama, Hideaki Nakane, and Hiroshi Adachi</i>	
Scanning atom probe study of graphite nanofibers	21
<i>Osamu Nishikawa, Masahiro Taniguchi and Mizumoto Ushirozawa</i>	
Thermal-Field Treatment for creating single-crystal tungsten tips with ultimate sharpness	23
<i>Shin Fujita and Hiroshi Shimoyama</i>	
Effect of radical oxygen gas exposure on Pt field emitter fabricated by electron-beam induced deposition.....	25
<i>K. Murakami, S. Abe, S. Nishihara, S. Abo, F. Wakaya,, and M. Takai</i>	
MWNT-polymer composite degradation under high emission current regime as revealed by mass spectrometry.....	27
<i>E.O. Popov, A.A. Pashkevich, A.O. Pozdnyakov, O.F. Pozdnyakov</i>	
A new cold cathode using pulsed laser deposited lanthanum monosulfide thin films	29
<i>M. Samiee, K. Garre, M. Cahay, P.B. Kosel, S. Fairchild, J. W. Fraser, and D. J. Lockwood</i>	
Field Desorption Arrays For Neutron Generator Ion Sources	31
<i>I. Solano, B. Reichenbach, C. E. Holland, D. L. Chichester, K. L. Hertz, J. A. Brainard, and P. R. Schwoebel</i>	
Measurements and Analysis of Advanced Field Emission Cold Cathodes	32
<i>X. He, J. Scharer, J. Booske, V. Vlahos, S. Sengele, N. Jordan, R. Gilgenbach, Y. Feng, and J. Verboncoeur</i>	
Tutorial lecture on the theory of cold field electron emission.....	34
<i>Richard G. Forbes</i>	
Development Of A General Thermal-Field-Photoemission Model And Its Relation To Current Density, Emittance, And Beam Brightness.....	36
<i>K. L. Jensen, D. W. Feldman, P. G. O'Shea, N. A. Moody, M. Cahay, E. J. Montgomery</i>	
The physics of generalized Fowler-Nordheim-type equations	38
<i>Richard G. Forbes</i>	
Quantum interference depression in thin metal films with ridged surface	40
<i>Avto Tavkhelidze, Vasiko Svanidze and Irakli Noselidze</i>	

Table of Contents

Modelling of electron transfer from a carbon nanotube cap into the vacuum under high extraction fields	42
<i>L. D. Filip, R. C. Smith, Dan Nicolaescu, J. D. Carey, and S. R. P. Silva</i>	
Carbon nanotube clusters may give greater output power with large tunable bandwidth from photomixing in laser-assisted field emission.....	44
<i>Mark J. Hagmann</i>	
The concept of Suppressor-less Schottky emitter	46
<i>Anand Kumar Dokania and Pieter Kruit</i>	
Field emission characteristics from patchwork cathodes: a numerical approach	48
<i>R. Mouton, C. Adessi, V. Semet, and Vu Thien Binh</i>	
Energy exchange in field emission from semiconductors.....	50
<i>Moon S. Chung, Yu. J. Jang, A. Mayer, Paul H. Cutler and Nicholas M. Miskovsky</i>	
Development of high spatial resolution x-ray radiography system equipped with multiwalled carbon nanotube field emission cathode.....	52
<i>Ryosuke Yabushita, Koichi Hata</i>	
An improvement on cold carbon field electron emitter for a commercial x-ray tube	54
<i>G.Y. Liu, Q.N. Lv, S.H. Xia, D.A. Wang, T.X. Li, H.Y. Li, Y.G. Ding, Z.M. Ju</i>	
CNT cold cathodes for application in low current x-ray tubes.....	56
<i>Zhidan Li Tolt, Chris Mckenzie, Robert Espinosa, Scott Snyder, Marjorie Munson</i>	
Field Emitter Arrays For Tomographic Medical Imaging.....	58
<i>P. R. Schwoebel, C. E. Holland, C. A. Spindt, and J. M. Boone</i>	
640×480 pixel active-matrix HEED imaging sensor with HARP target.....	59
<i>N. Negishi, T. Sato, Y. Matsuba, R. Tanaka, T. Nakada, K. Sakemura, Y. Okuda, A. Watanabe, T. Yoshikawa, K. Ogasawara, M. Nanba, S. Okazaki, K. Tanioka, N. Egami, and N. Koshida</i>	
Development of a vacuum packaged nanodiamond lateral field emission device	61
<i>K. Subramanian, R. Schroeder, W. P. Kang, and J. L. Davidson</i>	
Field emission for resonance sensing in MEMS/NEMS	63
<i>C.K. Yang, A.J. le Fèbre, G.. Pandraud, E. van der Drift, P.J. French</i>	
Characteristics of nanosilicon ballistic cold cathode in liquids as an active electrode.....	65
<i>Toshiyuki Ohta, Bernard Gelloz, Nobuyoshi Koshida</i>	
Electrical discharge machining of carbon nanomaterials: Mechanisms and the advanced field emission applications.....	67
<i>Jong Girl Ok, Bo Hyun Kim, Do Kwan Chung, Seung Min Lee, Woo Yong Sung, Wal Jun Kim, Chong Nam Chu, Yong Hyup Kim</i>	
Carbon nanotube based photocathode for microwave devices	70
<i>L. Hudanski, E. Minoux, L. Gangloff, K.B.K. Teo, J-P. Schnell, S. Xavier, P. Legagneux, and W.I. Milne</i>	
Open aperture microgated carbon nanotube FEAs.....	72
<i>David S.Y. Hsu and Jonathan L. Shaw</i>	
Design, Fabrication and Characterization of Double-Gated Vertically Aligned Carbon Nanofiber Field Emitter Arrays	74
<i>L.-Y. Chen, L. F. Velásquez-García, X. Wang, K. Cheung, and K. Teo, and A. I. Akinwande</i>	
Field electron emission from free-standing flexible PDMS-supported CNT-array films.....	76
<i>Nguyen Tuan Hong, Jong Hyuk Yim, Ken Ha Koh, and Soonil Lee, Phan Ngoc Minh, Phan Hong Khoi</i>	
A lateral carbon nanotube based field emission triode.....	78
<i>A. H. Monica, S. J. Papadakis, M. Paranjape, R. Osiander</i>	
The synthesis and field emission property of carbon nanotubes on carbon fibers substrate.....	80
<i>Leyong Zeng, Weibiao Wang, Jingqiu Liang, Yuxue Xia, Da Lei, Song Chen, Haifeng Zhao</i>	

Table of Contents

Fabrication of field emitters with triboelectricity	82
<i>Seung Min Lee, Woo Young Sung, Wal Jun Kim, Jong Girl Ok, Yong Hyup Kim</i>	
In-situ field emission characterisation of multi walled carbon nanotubes.....	84
<i>R. C. Smith, J. D. Carey, D. C. Cox and S. R. P. Silva</i>	
Large-area Array of Micro/Nano Electron Sources Using Nanoemitters.....	86
<i>N S Xu</i>	
Field Emission from Nanomechanically Modulated Electron Islands	87
<i>Hyun S. Kim, Hua Qin, and Robert H. Blick</i>	
Field emission properties of gold nanowire cathodes based on polymer ion-track membranes.....	89
<i>A. Dangwal, C.S. Pandey, G. Müller, S. Karim, T.W. Cornelius, C. Trautmann</i>	
Improving the Electron Emission Properties of Ion-Beam-Synthesized Ag- SiO₂ Nanocomposites by Pulsed Laser Annealing.....	91
<i>W.M. Tsang, A. A. D. T. Adikaari, V. Stolojan, B. Sealy, S.P. Wong, and S. R. P. Silva</i>	
Low temperature synthesis of two-dimensional carbon nanosheets as a field electron emission material	93
<i>Mingyao Zhu, R. A. Outlaw, Peter Miraldo, Hou Kun, Dennis M. Manos</i>	
Improvement of emission efficiency of nanocrystalline silicon planar cathodes	95
<i>Hidetaka Shimawaki, Yoichiro Neo, Hidenori Mimura, Katsuhisa Murakami, Fujio Wakaya, Mikio Takai</i>	
Field emission from hafnium carbide	97
<i>K.J. Kagarice, G.G. Magera, M.R. Scheinfein, W.A. Mackie</i>	
Improved field emission characteristics of individual carbon nanotube coated with boron nitride nanofilm	99
<i>Yuji Morihisa, Chiharu Kimura, Makoto Yukawa, Hidemitsu Aoki, Takumi Kobayashi, Shigeki Hayashi, Seiji Akita, Yoshikazu Nakayama and Takashi Sugino</i>	
The Use of Boron Nitride for Field Effect Electron Emission.....	101
<i>David P. Morris, Codrin N. Cionca, Thomas M. Liu, Ibrahim M. Oraiqat Brian E. Gilchrist, Roy Clarke, Alec D. Gallimore,</i>	
Fabrication of ultra-sharp ZnO nanotip from sub-micro ZnO whiskers by electric field treatment	103
<i>J C She, Z M Xiao, S Z Deng, Jun Chen, Y H Yang, G W Yang and N S Xu</i>	
Field emission of ZnO nanorods synthesized by sonication	105
<i>Jin-Young Kim, SeGi Yu, Soo-Hwan Jeong, Jeonghee Lee, J. M. Kim</i>	
Correlation between field emission current fluctuation and physisorption of gases in graphite-nanoneedle cold cathode.....	107
<i>T. Matsumoto, Y. Neo, H. Mimura, and M. Tomita</i>	
The relationship between field emission characteristics and defects measured by RAMAN scattering in carbon nanotube cathode treated by plasma and laser irradiation.....	109
<i>W. S. Kim a), A. Kinoshita, K. Murakami, S. Abo, F. Wakaya, and M. Takai</i>	
The detailed Analysis of field emission under Stabilized Operation using field effect transistor.....	111
<i>Yoichiro Neo, Takahiro Matsumoto, Hidetaka Shimawaki, Hidenori Mimura and Kuniyoshi Yokoo</i>	
Polymer embedded C nanopearls field emission cathodes for time of flight mass spectrometers.....	113
<i>R. Mouton, V. Semet, D. Kilgour, M.D. Brookes and Vu Thien Binh</i>	
Field emission observation of carbon nanosheet thin film by photoelectron emission microscopy (PEEM).....	115
<i>Kun Hou, Martin E. Kordes, Uwe Arp, Mingyao Zhu, Ronald A. Outlaw, Peter Miraldo, Brian C. Holloway, Dennis Manos,</i>	
Fabrication of triode field emission display using metal-gate-plate	117
<i>G W Yang, Jun Chen, J X Huang, S Z Deng, J C She, N S Xu</i>	
Field Emission from Vertically Aligned Silicon Nanotubes	119
<i>R H Yao, J C She, S Z Deng, Jun Chen and N S Xu</i>	

Table of Contents

Tuning the density of ZnO nanorods and the field emission performance by seed layer in low temperature solution growth.....	121
<i>J Liu, J C She, S Z Deng, J Chen, and N S Xu</i>	
Field emission properties of ZnO nanowire array directly grown from zinc substrate	123
<i>L H Cai, J Chen, S. M. Zhang, S Z Deng, J C She, N S Xu</i>	
Fabrication of non-gated carbon nanotube field emission arrays using conventional optical lithography	125
<i>Ming Q. Ding, Changqing Chen, Xinghui Li, Guodong Bai, Fuquan Zhang, Jin Jun. Feng and Fujiang Liao</i>	
Fabrication and field emission properties of gated field emitter arrays with hafnium nitride cathode.....	127
<i>Y. Gotoh, N. Setojima, Y. Miyata, T. Kanzawa, H. Tsuji, and J. Ishikawa</i>	
Maskless Synthesis of Vertically Aligned Carbon Nanofibers (VACNF) Field Emission Arrays on a Laser-Induced Periodic Surface Structures (LIPSS) Template	129
<i>Y.F. Guan, A.V. Melechko, A.J. Pedraza, L.R. Baylor, P.D. Rack</i>	
Electron emission properties of silicon field emitter arrays in gaseous ambient for charge compensation device.....	131
<i>M. Takeuchi, T. Kojima, A. Oowada, Y. Gotoh, M. Nagao, H. Tsuji, J. Ishikawa, S. Sakai, and T. Kimoto</i>	
Analysis of planar field-stimulated vacuum space-charge using a dimensionless equation	133
<i>Richard G. Forbes</i>	
Exact mathematical solution for the principal field emission correction function v used in Standard Fowler-Nordheim theory.....	135
<i>Richard G. Forbes, Jonathan H.B. Deane and R.W. Shail</i>	
Modeling of linear CNT nanotriodes with improved field uniformity.....	137
<i>D. Nicolaescu, V. Filip, Y. Gotoh and J. Ishikawa</i>	
Role of dielectric for field emission at the metal-dielectric-vacuum triple junction	139
<i>Moon S. Chung, Hae K. Bae, A. Mayer, Paul H. Cutler and Nicholas M. Miskovsky</i>	
Electroluminescence of silicon nanoclusters excited by tunneling carrier injection	141
<i>Valeriu Filip, Hei Wong, C. K. Wong, and Dan Nicolaescu</i>	
Space Charge Limited Current in Quantum Regime by Solving the Schrödinger-Poisson Equation Based on Finite Element Method.....	143
<i>Chieh-Yu Chang and Ming-Chieh Lin</i>	
Work Functions of Cathode Surfaces with Adsorbed Atoms Based on Ab Initio Calculations	145
<i>Ming-Chieh Lin and Wei-Chih Lin</i>	
Fitting Nonlinear FN Plots of Field Emission Strips with a Self-consistent Parallel Plane Model	147
<i>Ming-Chieh Lin and Yi-Huan Liao</i>	
Simulations of high-power pulsed terahertz sources using laser-assisted field emission.....	149
<i>Mark J. Hagmann</i>	
Application of a General Electron Emission Equation to Surface Non-Uniformity and Current Density Variation.....	151
<i>K. L. Jensen, J. J. Petillo, D. W. Feldman E. J. Montgomery, P. G. O'Shea, N. A. Moody, J. L. Shaw, J. E. Yater</i>	
Effective current enhancement vs. aspect ratio for rectangular ridge cathodes	153
<i>R. Miller, Y.Y. Lau, and J. Booske</i>	
Calculation of field enhancement factor and screening effects in carbon nanotube arrays.....	155
<i>R. C. Smith, L.D. Filip, J. D. Carey and S. R. P. Silva</i>	
Improved Field Emission Properties from Poly-crystalline Indium Oxide coated Single Walled Carbon Nanotubes	157
<i>Jungwoo Lee, Wonjoo Lee, Kijo Sim, Whikun Yi</i>	

Table of Contents

Field Emission properties of single-walled carbon nanotube with amphoteric doping by encapsulation of TTF and TCNQ.....	159
<i>Jungwoo Lee, Kijo Sim, Whikun Yi</i>	
Fabrication of Transparent Single Wall Carbon Nanotube Films with Low Sheet Resistance.....	161
<i>Jong Hyuk Yim, Woo Geun Kim, Ken Ha Koh, and Soonil Lee</i>	
Direct growth of carbon nanotubes on a conical tip as a micro-focused x-ray generation source: Effects of various composition ratios of co-sputtered Ni and Co catalysts	163
<i>Jong-Pil Kim, Chang-Kyun Park, Sung-Jun Yun, Won Kim, Young-Kwang Kim, and Jin-Seok Park</i>	
Transport and field emission in carbon nanotube - polymer composite cathodes.....	165
<i>David Carey, Richard Smith, Ravi Silva, Robert Murphy, Werner Blau and Jonathan Coleman</i>	
Fabrication of field emitter by direct growth of carbon nanotube onto tungsten tip by chemical vapor deposition.....	167
<i>Hideki Sato, Koichi Hata, Kazuo Kajiwara and Yahachi Saito</i>	
Enhanced electron emission current of carbon nanotubes emitter arrays after constant bias-aging	169
<i>Ki Seo Kim, Je Hwang, Ryu, Chang Seok Lee, Jung Sun Ahn, Jin Jang, and Kyu Chang Park</i>	
Growth control of carbon nanotubes by RF plasma enhanced chemical vapor deposition	171
<i>Atsushi Suzuki, Hideki Sato, Takamichi Sakai, Hitoshi Takegawa, Koichi Hata, Kazuo Kajiwara and Yahachi Saito</i>	
Implementation Of X-Ray Energy Detection And Photon Counting Using A Silicon Field-Emission Imaging Array.....	173
<i>Michael C. Wong, Charles E. Hunt, and Yacouba Diawara</i>	
Operation of the Digital Electrostatic e-beam Array Lithography (DEAL) Prototype with Dose Control1	175
<i>L.R. Baylor, W.L. Gardner, S.J. Randolph, Y.F. Guan, P.D. Rack, J.A. Moore, and M.N. Ericson</i>	
Evidence of electronic cooling from resonance states of nanocrystalline graphite (NCG) field emitters	177
<i>Kevin Tao, Alan Feinerman, and Heinz Busta</i>	
Cathodoluminescent properties of blue emitting SrGa₂S₄:Ce phosphor	179
<i>X. G. Xu, C. Y. Duan, Jun Chen, S. Z. Deng, N. S. Xu, H. B. Liang, Qiang Su</i>	
A field emission display based on double-gated driving scheme for quasi-one dimensional nanoemitters	181
<i>Jie Luo, Jun Chen, Yu Zhang, JX Huang, Z L Li, S Z Deng, N S Xu</i>	
Preparation and characteristics of insulator layers for field emission display device	183
<i>Jieke Huang, Jun Chen, S Z Deng, JC She, N S Xu</i>	
Low temperature growth of carbon nanotube on glass substrate and its application in field emission display	185
<i>JX Huang, Jun Chen, S Z Deng, JC She, N S Xu</i>	
The preparation of ITO films by DC magnetron sputtering and its application in a field emission display.....	187
<i>W L Chen, Jun Chen, Jun Yu, S Z Deng, JC She, N S Xu</i>	
Fabrication of a triode field emission display using screen-printing process	189
<i>Geng Zhang, Jun Chen, S Z Deng, JC She, N S Xu</i>	
First principles optimization of mass producible microscaled linear quadrupoles for operation in higher stability regions	191
<i>Kerry Cheung, Luis F. Velásquez-García, Akintunde I. Akinwande</i>	
Characterization of metallic field emitter array devices fabricated by molding for x-ray free electron laser applications.....	193
<i>S. Tsujino, E. Kirk, H. Sehr, T. Vogel, J. Gobrecht, R. Ganter, F. le Pimpec, M. Dehler, J. Raabe, M. Buess, A. Wrulich</i>	

Table of Contents

A Miniaturized Orbitron Pump for Vacuum Nanoelectronics.....	195
<i>Hans W.P. Koops</i>	
Study of influence of gas ambience on the CNT cold cathode property in high temperature process	196
<i>Yu Zhang, S.Z. Deng, N.S. Xu, Jun Chen</i>	
Field emission to control nanometer tip-medium distances in probe storage	198
<i>Alexander le Fèbre, L. Abelmann, J.C Lodder</i>	
Extension of lifetime of silicon field emitter arrays in oxygen ambient by carbon negative ion implantation	200
<i>A. Oowada, M. Takeuchi, Y. Sakai, Y. Gotoh, M. Nagao, H. Tsuji, J. Ishikawa, S. Sakai and T. Kimoto</i>	
Self-Assembled Surface Structures Caused By Argon Ion Bombardment Of Reticulated Vitreous Carbon (RVC).....	202
<i>Rebecca J. Chacon and Charles E. Hunt</i>	
Preparation and characterization for nanodiamond thin film for electronic field emission applications	204
<i>J Chen, F Y Xie, W G Xie, X Liu, W H Zhang, S Z Deng, and N S Xu,</i>	
Density Control of Carbon Nanofibers on Titanium Buffer Layer Using Electroplated Ni Catalyst	206
<i>Hyeyong-Suk Yoo, Woo Yong Sung, Seung-Jai Yoon, Yong-Hyup Kim, Seung-Ki Joo</i>	
Field emission properties of multi-level self assembled mesoscopic structures on nanoporous templates	208
<i>K. Garre, M. Cahay, J. W. Fraser, D.J. Lockwood B. Kanchibotla, S. Bandyopadhyay, V. Semet, Vu Thien Binh, and B. Das</i>	
BaTiO₃ thin films for ferroelectric electron emission	210
<i>Adrian Ghemes, Yoichiro Neo, Hidenori Mimura,</i>	
Fabrication and emission characteristics from GaAs FEAs	212
<i>Gui Han, Yoshihito Takigawa, Xin Liu, Masaru Shimomura, Yoichiro Neo, Hidenori Mimura,</i>	
Novel carbon nanotube based three terminal devices	214
<i>Stephen M. Lyth, L. D. Filip, D.C. Cox, S. R. P. Silva</i>	
Thermionic Electron Emission from Diamond by Nano-seconds Laser Heating.....	216
<i>B.K. Choi, W.P. Kang, I.L. Davis, J.L. Davidson, S.T. Hu, R.W. Pitz</i>	
Formation of ZnO nano tetrarods on a metallic substrate.....	218
<i>Qilong Wang, Xiaxi Yang, Xiaobing Zhang, Wei Lei, Xiaowei Yin</i>	
Efficiency of surface conduction electron emission from ZnO nanostructure	220
<i>Lei Wei, Xiaobing Zhang, Zuoya Zhu, Guodong Yang, Chengxian Huang</i>	
Influence of synthesis temperature on field emission properties of ZnO nanostructures	222
<i>Kai Hou, Wei Lei, Xiaobing Zhang, Chi Li, Xiaxi Yang, Ke Qu</i>	
Enhanced field emission properties from ZnO nanostructure by improving contact behavior	224
<i>Chi Li, Wei Lei, Xiaobing Zhang, Kai Hou, Xiaxi Yang, Guodong Yang</i>	
Lanthanum Monosulfide thin films grown on MgO substrates for field emission.....	226
<i>S. Fairchild, L. Grazulis, M. Cahay, K. Garre</i>	
Local field emission characteristic of individual AlN cone fabricated by focused ion beam.....	228
<i>Y. L. Li, C. Y. Shi, J. J. Li C, Z. Gu</i>	
Field-emission properties of 3D ZnO network structure synthesized with solvent thermal method	230
<i>Jing Chen, Zichen Zhang, Wei Lei, Xiaobing Zhang, Chengxian Huang</i>	
Fabrication of Aligned CNT Bundle Emitters in Different Density	232
<i>Fei Liu, J. B. Liu, W. G. Xie, W. W. Ming, J. Chen, S. Z. Deng, N.S. Xu</i>	
Resistance Effects on Field Emission for One-dimensional Nanostructure Grown on Silicon Substrate: A Simulation Study Using Classical Transport Model.....	234
<i>Yung-Chiang Lan, Ping-Sang Huang and Ming-Chieh Lin</i>	