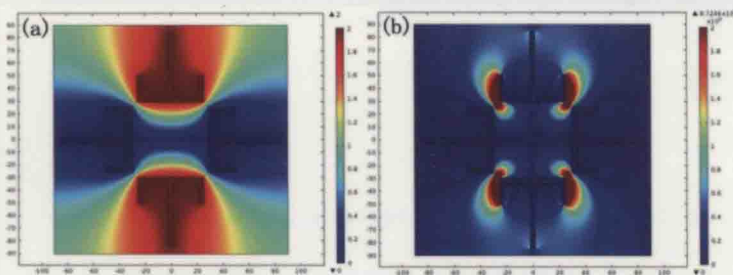
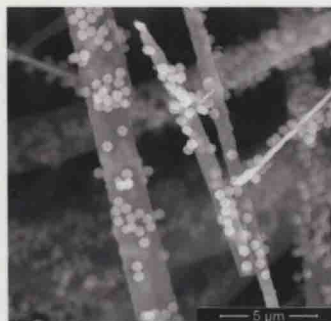
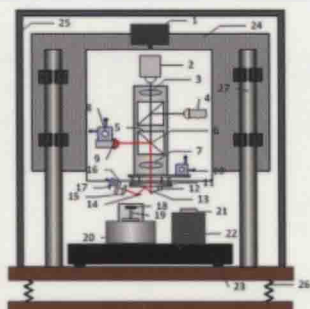


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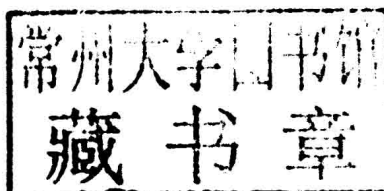
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Micro-Nano Technology XVI

PART 1

Selected, peer reviewed papers from the
16th Annual Conference and
5th International Conference of the
Chinese Society of Micro-Nano Technology
(CSMNT 2014),
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Fei Tang

TTP

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Micro-Nano Technology XVI

PART 1

Edited by
Fei Tang

Preface

This book collects papers selected from the 16th Annual conference and 5th International Conference of the Chinese Society of Micro-Nano Technology.

Micro-nano is considered as an emerging high technology for the 21st century. It involves various high-tech fields including electronics, machinery, materials, manufacturing, testing, and disciplines of physical, chemical and biological. A lot of remarkable achievements have been made in the past few years. Still it is expected that the emerging novel ideas will change people's way of thinking. The conference brings together leading scientists and engineers in Micro- and Nanotechnology to exchange information on their latest research progress. The conference provides a perfect forum for scientist and engineers of different disciplines to meet and discuss. 16th Annual conference and 5th International Conference of the Chinese Society of Micro-Nano Technology have been held in Chengdu, China. Southwest China, is one of the most modern and prosperous cities in China. The fertile Chengdu Plain, on which Chengdu is located, is also known as the "Country of Heaven". Being the birthplace of China's 4 leading cuisines in China-Sichuan Cuisine, Chengdu is widely recognized as the "Land of Abundance and Capital of Great Food" and was crowned the UNESCO City of Gastronomy of the World in 2010, the first one in Asia. With a city history of 2,300 years, Chengdu is one of the first historically and culturally famous cities nominated in China and a permanent venue for China.

In this conference, eight top level MEMS and NANO technology researchers were invited to make plenary presentations. They are:

- Horacio Dante Espinosa, the Director of the Theoretical and Applied Mechanics Program at the McCormick School of Engineering, Northwestern University;
- Qing-An Huang, the Founding Director of the Key Laboratory of MEMS of the Ministry of Education, Southeast University;
- Tianhong Cui, an Affiliate Senior Member of the graduate faculty in Department of Electrical and Computer Engineering and Department of Biomedical Engineering at the University of Minnesota;
- Quanshui Zheng, the Founding Director of Center for Nano and Micro Mechanics, Tsinghua University;
- Shangjr (Felix) Gwo, the Vice President for Research and Development in NTHU;
- SU Wei, a Ph.D supervisor and a deputy director of Institute of Electronic Engineering of CAEP;
- Jiwang Yan, a professor of mechanical engineering at Keio University, Japan;
- K.K. Jain, serves as a CEO of Jain PharmaBiotech as well as a consultant to the biopharmaceuticals industry;

Thanks the staff of Electronic Science and Technology University, China Academy of Engineering Physics and CSMNT Secretary for the efforts they have made, and thanks all honored attendees. Their contributions in all aspects are indispensable to the conference's success.

Thanks to Trans Tech Publications (TTP) for their work on publishing the special volume for selected papers of this conference. We have a good experience for cooperation, and hope that we can continue this cooperation in coming conferences in the future.

The 17th Annual conference and 6th International Conference of the Chinese Society of Micro-Nano Technology will be held in October 11-14, 2015, Shanghai, China.

Shanghai is a municipality under the direct jurisdiction of the central government. It is the city of extreme contrasts that reflect not only in its architecture or landscape, but also in its social and cultural milieu. Shanghai is an ideal "shopping paradise" in the mainland of China; Nanjing Road, known as "China's No.1 Street", and Huaihai Road are packed with rows of shops arrayed with large collections of merchandise that are a feast to the eyes. It is also a paradise for gourmets. There are over a thousand restaurants serving the famous 16 styles of Chinese food. There are also French, Italian, Japanese, Indian and other kinds of foreign flavored cuisine.

See you in Shanghai!

Zheng You

Chairman of Organizing Committee

Table of Contents

Preface	v
---------	---

PART 1

Chapter 1: Materials and Technologies in the Scale of Micro and Nano

Study of PSG Thickness Uniformity Influencing Factors in LPCVD W.L. Lü, Z. Zhan, X.H. Du, R.H. Zhou, H.E. Zhang, L.Y. Wang and D.H. Sun	3
Anisotropic Elastic Properties of Chiral Sculptured Thin Films at Micro-Scale Evaluated by Resonance Frequency Spectra H. Fang, K. Matsumoto, T. Sumigawa and T. Kitamura	9
The Dilute Magnetic Properties of Monolayer MoS₂ Doped with Transition Metal Fe and VA Atoms L. Lan, J.M. Cao, Y.J. Cao, D.S. Xu and J. Zhou	15
Strategies for Defect-Free and Deep Wet Etching of Pyrex 7740 Z. Zhan, L.K. Yu, C. Zheng, J.F. Cai, D.H. Sun and L.Y. Wang	21
Effect of Hydrophilic and Hydrophobic SiO₂ Particles on Performances of PI/Al₂O₃ Composite Films Y.Y. Li, L.Z. Liu, H. Shi, L. Weng and W.W. Cui	26
Synthesis and Characterization of Topological Insulator Bi₂Te₃ Nanowires Z. Guo, L. Lu, J.Y. Wang and Y.J. Xing	32
Electronic and Magnetic Properties of Rare-Earth Atoms Absorbed on Graphene Sheet: A Theoretical Study Q.X. Zhou, Z.B. Fu, C.Y. Wang, X. Yang, L. Yuan and Y.J. Tang	40
Melt Electrohydrodynamic Direct-Writing Micro/Nano Fiber with Restriction of Heated Sheath Gas Z.J. Yu, L.J. Wang, L.L. Sun, Y.H. Lin, W. Wang, G.F. Zheng and D.H. Sun	45
Experimental Study on WEDM Machining of PCD and PCBN Compacts M.C. Song, J.L. Zhang, C. Yu, M.J. Wang, C. Liu and Y. Liu	52
Wet Anisotropic Etching Characteristics of Si{100} in TMAH+Triton at near the Boiling Point M.Q. Yao, B. Tang, W. Su and G. Tan	58
Hierarchically Ordered Porous Carbon as a Host Material for Energetic Composites J. Chen, S.M. He, H.Q. Cai, Q.L. Hao and H. Huang	64
TCAD Study of the Raised SiGe Source/Drain in 40nm PMOS M. Zhong, Y.H. Zhao, S.M. Chen, M. Li, S.H. Zeng and W. Zhang	70
Adsorption of Silver Nanoparticles on Modified Surfaces C. Gao, T. Guo, X.S. Ye, H.F. Zhang, H.N. Liu and Z.J. Wu	75
W-Band Quadrupler Based on Multi-Chip Module and Schottky Barrier Diodes Y. He, X.J. Deng, C. Wang and B. Lu	80
Intermediate Layer Bonding for Silicon and Piezoelectric on UV Adhesive X.Y. Wang, H. Liu, R. Lei and W.G. Liu	86

Quantitative Production of Charges with a Carbon Nanotubes Coated Electrode Based on Trichel Pulses	
F.C. Deng, L.Y. Ye and K.C. Song.....	92
Band Engineering of Graphene Nanomesh Field Effect Transistor under Multiscale Simulation Framework	
Y.W. Lv, H. Wang, S. Chang, Z.H. Yu, J. He and Q.J. Huang.....	98
Growth and Magnetic Properties of Three-Dimensional Firtree-Like Cobalt Microcrystals with Hierarchical Dendritic Superstructures	
X. Yang, Z.B. Fu, L. Yuan, C.Y. Wang and Q.W. Chen.....	104
The Thermal Decomposition Behavior of Graphene Oxide/HMX Composites	
G.Y. Zeng, J.H. Zhou and C.M. Lin.....	110
Facile Fabrication of Super-Hydrophobic Surfaces by Spray PTFE	
Y. Wang, H.F. Zhang and X.W. Liu.....	115
Frequency Characteristics Research for the Negative Resistance Oscillations Phenomenon of a Silicon Magnetic Sensitivity Transistor	
X.F. Zhao, Y.F. Li, M.W. Lv, D.Z. Wen and H.Q. Zhang.....	120
Large-Scale Synthesis and Microwave Absorption Properties of $\text{CoFe}_2\text{O}_4/\text{Co}_{0.4}\text{Zn}_{0.6}\text{Fe}_2\text{O}_4$ Hollow Nanospheres	
Q.G. Ren, X.J. Qiao, Y. Li, Z.G. Sun, X.D. Guo and S.Z. Zhang.....	126
Research of Magnetic Characteristics of the Split-Drain MAGFET Based on Nano-Polysilicon TFTs	
X.F. Zhao, H.Y. Guan, M.W. Lv, Y.N. Bai and D.Z. Wen.....	132
Graphene Field Effect Transistor's Circuit Modeling and Radio Frequency Application Study	
R. Zhu, Y. Zhang, J. Luo, S. Chang, H. Wang, Q. Huang and J. He.....	139
Synthesis and Dispersity of YBCO Powder Produced by Oxalic Acid Precipitation Method	
A.Q. Wang, H.H. Han, M. Li, J.P. Xie, Q.J. Wu and D.Q. Ma.....	145
Influence of Defects on the Young's Modulus of [110] Silicon Nanowires with Different Cross Sections	
F. Gu, J.H. Zhang, M. Li, L.Y. Liu and J. Su.....	151
Sintering Behavior and Electrical Property of Surface Treated Silver Nanoparticle for Electronic Application	
H. Xie, N.N. Xiong, Y.Z. Zhao and Y.H. Wang.....	157
Study on the Etching Technique of Non-Photosensitive Polyimide	
R. Lei, W.G. Liu, C.L. Cai, S. Zhou, J. Nie and X.Y. Wang.....	163
An Investigation on Resistive Switching Characteristics Induced by HfO_x and Electrode Interfaces	
X.R. Chen and J. Feng.....	169
Study on Internal Stress in Micro-Electroformed Layer	
L.Q. Du, Z.C. Tan, C. Song, Z. Zhao, Q.F. Li and P.H. Yin.....	178
Low Temperature Eutectic Alloy Bonding Used in MEMS-Based Solid Propellant Microthrusters Array	
C.B. Ru, Y.H. Ye, J.B. Xu, Z.Y. Zou, J. Dai, P. Zhu and R.Q. Shen.....	184
Simulation and Test of through Silicon Vias Impacted by Large Current Pulse	
X.R. Ding, Y.B. Wang, W.Z. Lou and F.Y. Liu.....	190
Preparation of Strongly Hydrophobic Film with Large Area and Flexibility Based on Micro Fabrication	
Y.B. Zeng, T.T. Wang, J.Y. Wang and H. Guo.....	195
Preparation of TiO_2 Nano-Film by Anodic Oxidation Method and its Hydrophobic Modification	
F.B. Liu and B. Jing.....	201
Fabrication and Thermal Performance of Copper Pillars Modified Micro Heat Pipe (MHP)	
L.L. Zou, Y. Luo, J.G. Liu, B.K. Yu, Q. Shan and X.D. Wang.....	208

Research on TSV Dry Etching Technology G.Q. Jiang, L. Kuang and J. Zhu.....	216
Research on Microstructure and Wear Resistance of Cast-Penetrated Layer Strengthened by Nano-Sized TiN Intermediate Alloy J.P. Xie, X.H. Shao, S. Liu, F.M. Wang, A.Q. Wang and D.Q. Ma	221
Research on Delamination of Plastic Packaging Device during Reflow Soldering P.S. Liu, Y. Lu, J.X. Huang and L.L. Yang	226
Preparation of Nano α-Fe₂O₃ Powders and Characterization of their Photo-Catalysis Capacities N.Y.S. Zhang, Y.A. Zen, S.B. Wang and B. Zhu	232
Research on the Preparation of Nanoporous Copper Using Taguchi Method K.C. Li, X.G. Liu, Y. Chen and M.X. Chen	238
Preparation of Mn-Zn Ferrite Flake Absorbent by Self-Reactive Spray Forming Technology H.T. Gao, J.J. Wang, H.F. Lou, X.D. Cai and Y.S. Hou.....	246
Intermolecular-Interaction and Mechanical Properties of MNs-Plasticizer Modified 2,4,6-Trinitrotoluene/1,3,5-Trinitrohexahydro-1,3,5-Triazine Molten-Energetic-Composite(MEC) Q. Ma, M.P. Wen, B.H. Zheng, H.J. Huang, D.B. Liu and J.S. Li	252
Research Survey of Electroformed Nickel Material Properties Used in MEMS G.Z. Li, G.C. Shi, L. Sui, F.T. Yi and B. Wang.....	259
The Effect of Thermal Accumulation to the Field Emission Properties of the Carbon Nanotubes F. Yan, N.N. Li, L. Chen, D.Z. Jin and W. Xiang.....	265
Effect of Ammonia as an Inert Solvent on Structure and Separation Performance for Oil/Water Mixtures of PVDF Porous Membranes W.W. Cui, J.Q. Liu, L.Z. Liu, W.H. Xu, Y.Y. Li and Z.Q. Gao.....	269
Size Effect of Piezoelectricity in ZnO Nanowires: A First-Principles Study C.Q. Qin, Y.S. Gu, X. Sun, C. Li and Y. Zhang	275
Ejection and Motion Behaviors Simulation for Multi-Jet Electrospinning W.W. Li, Z.W. Luo, X. Wang, J.Y. Zheng, G.F. Zheng and D.H. Sun	281
Measurement on the Mechanical Properties of SiC Thin Films Based on Square Thin Films Theory Y.M. Chen, P.T. Dong, X.Z. Wu and Y.L. Wu.....	287
Optimization of Chemical Mechanical Planarization Process of High Enrichment Slurry Under Low Pressure Y. Li, Y.L. Liu, H.B. Li, A.C. Wang, W.J. Liu and J. Hong	291
Effect of Reaction Inhibitors on Synthesized Silver Nanostructures via Solvothermal Method H. Xie, N.N. Xiong, J.Z. Liu, Y.Z. Zhao and Y.H. Wang	297
Effects of NaOH Concentration on Section Structures of Oxide Films Based on TC4 by Anodic Oxidation Process J.K. Yan, G. Yang, Z. Shi, W.X. Tang and Y.F. Wu.....	303
A Novel High Precision Analytic Potential Function for Diatomic Molecules C.F. Yu.....	313
The Simulation and Analysis of Current Crowding and Joule Heat in Flip Chip Solder Bumps P.S. Liu, L.L. Yang, J.X. Hang and Y. Lu	319
Effects of n-Type Dopants on Electronic Properties in 4H-SiC J.L. Tang, J.N. Zhong and C. Wen.....	325
Fabrication of Ultrasooth Polymer Films by Concentration Control and Spin Speed Adjustment Y. Guo, W.G. Liu, H. Liu, S. Zhou, L. Wu and F. Li	330
Nanopore in C-S-H Gel Stability Analysis of Hardened Cement Pastes L. Wu, N. Xiong and F.Y. Yu.....	335
Simulation and Typical Application of Multi-Step Diffusion Method for MEMS Device Layers L.Y. Wang, R.H. Zhou, Y.F. Liu, C. Zheng, J.F. Cai and Y. He.....	341

Synthesis of Nano-Al with Fe₂O₃ Nanowires to Realize Core-Shell Composite Materials Arrays Based on Colloidal Templates	
S.M. He, J. Chen, K. Fang, Z.Q. Qiao and J.S. Li	347
Evaluation of the Stability on the New Alkaline Copper Bulk Slurry	
J. Wang, R. Wang and G.D. Chen	352
Research on Low Temperature Anodic Bonding Based on Interface Pretreatment of Dielectric Barrier Discharge Plasma	
M.Q. Pan, L.N. Sun, Y.J. Wang, J.Z. Liu, T. Chen, H.C. Liu and L.G. Chen	356
The Study on the Selectivity Ratio of SiC/Epoxy Resin Based on ICP Etching	
J. Hu, S. Zhou, C.L. Cai, Y.F. Zhu, S. Hu and W.G. Liu	362
High-Efficiency Preparation of N-Doped Titania with High Visible Light Photocatalytic Activity Using Composite N Precursor	
Y.L. Hu, X.D. Zhang, H.F. Liu and X.P. Guo	368
UV Photocatalytic Digestion Utilizing TiO₂ Nano-Fiber for the Determination of Total Phosphorus	
Q. Zhang, J.H. Tong, C. Bian and S.H. Xia	375
Research of Thin Film for Laser Polarization Beam Splitter	
X.H. Fu, Y.G. Pan, D.M. Liu, J. Zhang and X.J. Wang	381
Micro Laser Joining between Dissimilar Materials of 200μm Thick TiNi Alloy and Stainless Steel and the Joint's Electrochemical Behavior	
Y.H. Chen, J.L. Xie and W.H. Gong	388
Electrokinetic Research on the Dispersion Behavior of Nano-Ceria Particles in Concentrated Suspensions	
W. Gao, Q.L. Wei, L. Ding, X.Y. Li, C. Wang, G.P. Tang and J.G. He	394
Study of SiC's Mechanical Property Variance Caused by Film Thickness	
Z.L. Jiao and J. Zhu	400
Experimental Study on the Relationship between Dislocation Density and Internal Stress in Micro Electroforming Layer	
C. Song, L.Q. Du, T. Yang, L. Luo, Y.S. Tao and X. Zhang	405
Influence of Hybrid Fibers on Flexural Properties of Ultra High Toughness Cementitious Composites with Nano-SiO₂	
X. Gao, Q.H. Li and S.L. Xu	411
The Influence of Polyhedral Oligomeric Silsesquioxane on Heat Resistance and Curing Kinetics of Potting Materials	
J.H. Fan, H. Jing and J.Y. Wu	416
Study on Mechanism of Phase Forming in Ni⁺ Implantation into Ti6Al4V at Elevated Temperature	
Y. Wang, X.H. Yu and H.L. Yang	421
Preparation and Mechanical Properties of Ultra-Fine Grain Medium-Carbon Steel Based on Equal-Channel Angular Pressing	
J.M. Wang, W.T. Hou and L. Lu	427

Chapter 2: Micro/Nanofluids Research and Technologies

Tribological Properties of Oil-Based ZnO Nanofluids	
X. Ran, X.Y. Yu, Y. Wang and Z. Xiao	437
Performance Investigation of TiO₂ Nanofluid Coolant for Automobile Cooling Applications	
J.M. Chen, X.Y. Sun, G.J. Leng and J.H. Feng	444
The Simulation and Experimental Analysis of Hydrodynamic Focusing Effect inside a Rectangular Microchannel	
S.J. Feng, X.Q. Shi, J. Zeng, Y. Peng and M. Liu	449

Threshold Model of Micro-Fluidic Inertial Switch Based on Orthogonal Regression Design T.T. Liu, W. Su, C. Wang and T. Yang	455
Effect of Flow Rate of Slurry in Micro-Channels on the Consistency of Polishing Rate Y. Li, M. Sun, Y.L. Liu, A.C. Wang, J.Y. Tang and S.Y. Fan	462
Discrimination of Low-Grade Oil from Edible Oil by a Microfluidic Device M. Liu, S.J. Feng, X.Q. Shi, Y. Peng and Z.Z. Wu	469
Effect of Elliptical Dimples on Hydrodynamic Lubrication J.H. Ji, H. Wang and Y.H. Fu	474

Chapter 3: Measurements, Sensors and MEMS

Study of Bandwidth Expansion Based on Electrochemical Vibration Sensor Z.Y. Zhang, J.B. Wang, D.Y. Chen and Y.A. Li	483
A Novel Micro-Machined Out-of-Plane Resonant Accelerometer with Differential Structure of Different-Height Resonant Beams S.M. Zhao, Y.F. Liu and J.X. Dong	488
The Research of Turn-On Time for Silicon Micromechanical Gyroscope on a Chip Y. Bian, Q. Shi and G.M. Xia	492
3D Indoor Positioning System Based on MEMS Sensors J.L. Zhu, B. Mo, C.D. Ling and W.Y. Fu	498
Analysis Temperature Characteristics of Atmosphere Pressure Sensor Caused by Residual Gas L.D. Du, Z. Zhao, S.H. Wu and Z. Fang	504
Q-Factor Improving of Film Bulk Acoustic Wave Resonator for Chip-Scale Atomic Clocks Z.S. Zhang, L. Tang and L. Ji	509
Study on a Planar Interdigitated MEMS Supercapacitor Using Modeling and Simulation Method K.R. Dai, X.F. Wang, W.S. Lv and Z. You	513
Passive Acoustic Localization Based on MEMS Microphone Arrays X.M. Dai, W.Z. Lou, M.R. Guo, F.F. Wang and X. Jin	517
An Electromagnetic Vibrating Ring Gyroscope Using SOI-MEMS Technology Y.X. Li, D.Y. Chen, G. Huang and Q. Li	522
The Research on MEMS Micro Capacitance Sensor Detection Based on MS3110 H.J. Yu, Z.Q. Ding, X.P. He, L.M. Du, H. Qu, W. Zhou and B. Peng	528
The Influence of Die-Attach Adhesives on the Packaging of MEMS Accelerometer P. Peng, X.P. He, L.M. Du, W. Zhou, H.J. Yu and B. Peng	533
High Resolution Micro-Displacement Sensing Circuit for Rotor Micro-Gyroscope M.Y. Ren, X.W. Liu, H.F. Zhang and Z.G. Mao	538
Simulation and Experimental Verification of Silicon Microgyroscope's Closed-Loop Driving Circuits Based on Cadence W.F. Tang, G.M. Xia, A.P. Qiu and Y. Su	543
Design of 16 bit 200kHz Feedforward Sigma-Delta ADC Applied in Silicon Gyroscope F.X. Huang, Z.Q. Gao and X.W. Liu	548
Advancements in Micro-Structure with Multiple Stress Concentration Region for Bionic Vector Hydrophone G.J. Zhang, P. Zhao and W.D. Zhang	555
High-Precision Quadrature Signal Generator for Digital Demodulation of MEMS Gyroscope D.H. Chen, L. Chen, H. Zhou and Y. Tian	561
Study of Thin Film Pressure Sensor by Magnetron Sputtering D.P. Hu and X.L. Wang	566

FPGA-Based Test Equipment for System-Level MEMS Switch Series P. Liu, W.Z. Lou, Y.F. Lu and X.Y. Feng	572
Design and Analysis of Capacitive Micromachined Ultrasonic Transducers Based on SU-8 Y.P. Li, C.D. He, J.T. Zhang, J.L. Song, W.D. Zhang and C.Y. Xue	577
Passive Wireless Multi-Parameter Sensor System for Hermetic Environment Monitoring D. Tang, L.F. Wang and Q.A. Huang	583
Statistical Analysis and Yield Enhancement of MEMS Devices by Considering Multi-Process Variations L.L. Gao, W.H. Li and Q.A. Huang	589
Effects of Hall Output Probes Shape on Magnetic Characterization of Hall Magnetic Field Sensor Based on MOSFET X.F. Zhao, Q.R. Lin, A.L. Mu, D.Z. Wen and H.Q. Zhang	595
Chip-Level Active Temperature Control for Improving Temperature Robust of a Micro-Gyroscope Z.H. Chen, L.L. Liu, D.B. Xiao, H.J. Cui and X.H. Wang	600
A 16 Bits 500 kHz Sigma-Delta DAC for Silicon Micro Gyroscope Y.K. Zhao, L. Yin, Z.T. Liu, W.P. Chen and X.W. Liu	605
An Integrated Pressure and Magnetic Field Sensor Based on Piezoresistance Effect T. Wu, X.F. Zhao, X.H. Yang, D.Z. Wen and G. Li	610
The SOI Micro-Accelerometer Fabricated by Sacrificial Process Z.Y. Zhang, W. Su, Z.G. Shi, B. Tang, Z. Xiong, Y.H. Chen and B. Peng	616
Noise Analysis of Silicon Microgyroscope's Transimpedance Amplifier Interface Circuit W.F. Tang, A.P. Qiu, G.M. Xia and Y. Su	624
Micromachined Tri-Axis Capacitive Accelerometer Based on the Single Mass F. Yuan, L.G. Chen, T. Chen and L.N. Sun	630
Multi-Chip Module Design of a MEMS Air Pressure Sensor G.X. Yao, H.Y. Du, Q.A. Huang and M. Nie	636
A Modulated Feedback Approach to Improve Closed Loop MEMS Accelerometer Bias Instability M.J. Ma, Z.H. Jin and Y.D. Liu	640
A Second Differential Bandpass Filter with Tuning Center Frequency and Constant Q Y.X. Zhao, W.R. Zhang, H.Y. Xie, X. Huang and L.H. Zhang	646
Trajectory Guidance Law for MAV Based on MEMS Sensor/GPS Y. Cai, W. Xiong, X.T. Cao and Z.Y. Zhou	653
A Feed-Forward Sigma-Delta Modulator Applied in Silicon Gyroscope Q. Shao, Q.Y. Lv, H. Meng, Q. Fu and X.W. Liu	657
A Novel Capacitive Temperature Sensor for Real-Time Monitoring of Temperature in the Silicone Oil Fan Clutch Q.Y. Ren, L.F. Wang, J.Q. Huang and Q.A. Huang	662
Active Disturbance Rejection Control Design for Fast AFM D.X. Chen, B.H. Yin, J.B. Liu, W.P. Li, L.Q. Wu and H. Li	670
Plastic Strain Effect in Progressive Multi-Cycle Nano-Indentation Measurement Q.L. Wei, X.Y. Li, X.B. Yue and D.J. Lei	675
Micro-Fabricated Pre-Concentrator Filled with Single-Walled Carbon Nanotubes as Adsorbent Material X.F. Zhu, Z.W. Ning, J.H. Sun, T.J. Ma, Y.N. Zhang and J.H. Liu	681
Research on Rapid Detection and Accounting of Small Particles in Marine Hydraulic Oil L. Zeng, H.P. Zhang, E.C. Liu, H.Q. Chen and F.Y. Cui	687

CHAPTER 1:

Materials and Technologies in the Scale of Micro and Nano