

Prof. Ohmi's Paper

January–December, 2000

- E884 (C) T. Nozawa, M. Konda, M. Fujibayashi, M. Imai, and T. Ohmi, "A Parallel Vector Quantization Processor Eliminating Redundant Calculations for Real-time Motion Picture Compression," 2000 IEEE International Solid-State Circuits Conference, Digest of Technical Papers, pp. 234-235, San Francisco, February 2000.
- E885 (F) Takeo Ushiki, Koji Kotani, Toshihiko Funaki, Kunihiro Kawai, and Tadahiro Ohmi, "New Aspect and Mechanism of Kink Effect in Static Back-Gate Transconductance Characteristics in Fully-Depleted SOI MOSFET's on High-Dose SIMOX Wafers," IEEE Transactions on Electron Devices, Vol. 47, No. 2, pp. 360-366, February 2000.
- E886 (F) Yoshio Ishihara, Daiji Nakajima, and Tadahiro Ohmi, "Economical Clean Dry Air System for Closed Manufacturing System," IEEE Transactions on Semiconductor Engineering, Vol. 13, No. 1, pp. 16-23, February 2000.
- E887 (C) Satoshi Kawada, Yukio Tamai, Shunkichi Omae, and Tadahiro Ohmi, "Effect of surfactant-added developer on development of chemically amplified photoresist," Proceedings of SPIE Advances in Resist Technology and Processing XVII, Vol. 3999, pp. 717-725, Santa Clara, February-March 2000.
- E888 (C) Tadahiro Ohmi, "Advances in the Use of UPW in Wafer Cleaning," 2000 Semiconductor Pure Water and Chemical Conference, pp. 1-13, Santa Clara, invited, March 2000.
- E889 (C) Ken-ichi Mitsumori, Tadahiro Ohmi, Nobuaki Haga, Yasuhiko Kasama, Norihisa Takahashi, and Takashi Imaoka, "Advanced Wet Cleaning Technology For Next Generation FPD Manufacturing," 2000 Semiconductor Pure Water and Chemical Conference, pp. 318-328, Santa Clara, invited, March 2000.
- E890 (C) Ikunori Yokoi, Toshihiro Ii, and Tadahiro Ohmi, "A Hydrogen-Dissolved Water Application In Wet Cleaning Technology," 2000 Semiconductor Pure Water and Chemical Conference, pp. 329-344, Santa Clara, March 2000.
- E891 (C) Senri Ojima, Takahisa Nitta, Nobuhiro Miki, Toshikazu Abe, and Tadahiro Ohmi, "Photoresist Stripping Technology Utilizing Water Vapor," 2000 Semiconductor Pure Water and Chemical Conference, pp. 387-398, Santa Clara, March 2000.
- E892 (F) Yukio Tamai, Mauricio Massazumi Oka, Akira Nakada, and Tadahiro Ohmi, "Influence of substrate dopant concentration on electrical properties and residual defects in pn junction formed by low-temperature post-implantation annealing," J. Appl. Phys., Vol. 87, No. 7, pp. 3488-3496, April 2000.

- E893 (C) Takahiro J. Yamaguchi, Mani Soma, Masahiro Ishida, Toshifumi Watanabe, and Tadahiro Ohmi, "Extraction of Peak-to-Peak and RMS Sinusoidal Jitter Using an Analytic Signal Method," Proceedings of the 18th IEEE VLSI Test Symposium, pp. 395-402, Montreal, Canada, April-May 2000.
- E894-1 (C) Takeshi OHKAWA, Osamu NAKAMURA, and Tadahiro OHMI, "Improvement of Gate Oxide Integrity by Preparing Atomic Order Flattened Si (100) Surface," Extended Abstracts, The 197th Meeting of The Electrochemical Society, Abstract No. 452, Vol. 2000-I, Toronto, Canada, May 2000.
- E894-2 (P) Osamu Nakamura, Takeshi Ohkawa, and Tadahiro Ohmi, "Improvement of Gate Oxide Integrity by Preparing Atomic Order Flattened Si (100) Surface," The Physics and Chemistry of SiO₂ and The Si-SiO₂ Interface-4, Edited by H. Z. Massoud, I. J. R. Baumvol, M. Hirose and E. H. Poindexter, PV2000-2, The Electrochemical Society, Pennington, NJ, pp.101-112, 2000.
- E895-1 (C) Yuji Saito, Katsuyuki Sekine, Masaki Hirayama, and Tadahiro Ohmi, "Low-temperature Formation of Gate-grade Silicon Oxide Films using High-Density Krypton Plasma," Extended Abstracts, The 197th Meeting of The Electrochemical Society, Abstract No. 453, Vol. 2000-I, Toronto, Canada, May 2000.
- E895-2 (P) Yuji Saito, Katsuyuki Sekine, Masaki Hirayama, and Tadahiro Ohmi, "Low-temperature formation of gate-grade silicon oxide films using high-density krypton plasma," The Physics and Chemistry of SiO₂ and The Si-SiO₂ Interface-4, Edited by H. Z. Massoud, I. J. R. Baumvol, M. Hirose and E. H. Poindexter, PV2000-2, The Electrochemical Society, Pennington, NJ, pp. 113-124, 2000.
- E896 (C) Yuji Saito, Katsuyuki Sekine, Naoki Ueda, Masaki Hirayama, Shigetoshi Sugawa, and Tadahiro Ohmi, "Advantage of Radical Oxidation for Improving Reliability of Ultra-Thin Gate Oxide," 2000 Symposium on VLSI Technology Digest of Technical Papers, pp. 176-177, Honolulu, June 2000.
- E897 (C) Zhibin Pan, Koji Kotani, and Tadahiro Ohmi, "A On-Line Hierarchical Method of Speaker Identification for Large Population," 2000 IEEE Nordic Signal Processing Symposium, pp. 33-36, Sweden, June 2000.
- E898 (C) Tadahiro Ohmi, Shigetoshi Sugawa, Masaki Hirayama, and Yasuyuki Shirai, "Contamination Reduction for 300mm Processes," Semicon West 2000:Symposium on Contamination-Free Manufacturing (CFM) for Semiconductor Processing, pp. A1-A5, San Francisco, keynote, July 2000.
- E899 (C) Tadahiro Ohmi, "Semiconductor ultra fine processing & planarization technology," 30th Workshop on Ultra Clean Technology: Fundamentals of Chemical-Mechanical Polishing, pp. 1-8, Tokyo, July 2000.
- E900 (P) Zhibin Pan, Koji Kotani, and Tadahiro Ohmi, "A speech indexing system for recorded audio source based on speaker identification technique," Advances in Intelligent Systems: Theory and Applications, Edited by Masoud Mohammadian, IOS Press, Ohmsha, pp. 239-243, 2000.
- E901 (C) Zhibin Pan, Koji Kotani, and Tadahiro Ohmi, "A novel method of speaker identification for large population by pre-learning of test utterance using vector quantization," Proceedings, World Multiconference on Systemics, Cybernetics and Informatics, Vol. VI, Part II, pp. 48-51, Orland, July 2000.

- E902 (F) Katsuyuki Sekine, Yuji Saito, Masaki Hirayama, and Tadahiro Ohmi, "Highly Robust Ultrathin Silicon Nitride Films Grown at Low-Temperature by Microwave-Excitation High-Density Plasma for Giga Scale Integration," IEEE Transactions on Electron Devices, Vol. 47, No. 7, pp. 1370-1374, July 2000.
- E903(C) Tatsuhiro Nanbu, Katsuyuki Sekine, Yuji Saito, Shin-ichi Nakao, Masaki Hirayama, and Tadahiro Ohmi, "Ultra-Thin Silicon Oxynitride Films as Cu Diffusion Barrier for Lowering Interconnect Resistivity," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 32-33, Sendai, August 2000.
- E904(C) Ikunori Yokoi, Geun-Min Choi, and Tadahiro Ohmi, "An Advanced Room Temperature Cleaning Using a pH Controlled Ozonated Ultrapure Water," Extended Abstract of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 172-173, Sendai, August 2000.
- E905 (C) Geun-Min Choi, Francesco Pipia, and Tadahiro Ohmi, "Strategy in Cleaning Processes for Future Materials," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 174-175, Sendai, August 2000.
- E906(C) Kazuo Ohtsubo, Yuji Saito, Katsuyuki Sekine, Masaki Hirayama, Shigetoshi Sugawa, Herzl Aharoni, and Tadahiro Ohmi, "Ultra-Thin Silicon Oxynitride Film Grown at Low-Temperature by Microwave-Excited High-Density Kr/O₂/N₂ Plasma," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 176-177, Sendai, August 2000.
- E907 (C) Tatsufumi Hamada, Yuji Saito, Katsuyuki Sekine, Herzl Aharoni, and Tadahiro Ohmi, "Low Temperature Gate Oxidation MOS Transistor Produced by Kr/O₂ Microwave Excited High-Density Plasma," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 184-185, Sendai, August 2000.
- E908 (C) Hiroshi Arakawa, Yasuyuki Shirai, and Tadahiro Ohmi, "Perfectly Etching Uniformity Control of Various Doped Oxide Films Using an Anhydrous HF Gas," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 196-197, Sendai, August 2000.
- E909 (C) Masafumi Kitano, Yasuyuki Shirai, Atsushi Ohki, and Tadahiro Ohmi, "Impurity Measurement in Specialty Gases Using Atmospheric Pressure Ionization Mass Spectrometer with Two Compartments Ion Source," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 200-201, Sendai, August 2000.
- E910 (C) Toshiyuki Nozawa, Makoto Imai, Kenji Mochizuki, and Tadahiro Ohmi, "Eliminating Needless Calculations on Circuit Level: Most-Significant-Digit-First Digit-Serial Processing," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 354-355, Sendai, August 2000.

- E911 (C) Satoshi Sakaidani, Naoto Miyamoto, and Tadahiro Ohmi, "A Dynamically Reconfigurable Processor with Multi-Mode Operation Based on Newly Developed Full-Adder/D-Flip-Flop Merged Module (FDMM)," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 358-359, Sendai, August 2000.
- E912 (C) K. Higashi, T. Ohmi, A. O. Adan, H. Morimoto, K. Niimi, T. Ashida, and S. Sugawa, "Ultra-Low Standby Current in SOI-CMOS LSI Circuits by Using Body-Bias-Control Technology," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 376-377, Sendai, August 2000.
- E913 (C) Kei Kanemoto, Herzl Aharoni, and Tadahiro Ohmi, "Ultra-Shallow and Low-Leakage p⁺n Junctions Formation by Plasma Immersion Ion Implantation (PIII) and Low-Temperature Post- Implantation Annealing," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 406-407, Sendai, August 2000.
- E914 (C) Akihiro Morimoto, Koji Kotani, Shigetoshi Sugawa, and Tadahiro Ohmi, "Interconnect and Substrate Structure for High Speed Giga-Scale Integration," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 418-419, Sendai, August 2000.
- E915 (C) K. Takahashi, H. Nohira, T. Nakamura, T. Ohmi and T. Hattori, "SiO₂/Si(111) Interface Structures Formed by Atomic Oxygen," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 434-435, Sendai, August 2000.
- E916 (C) Hiroyuki Shimada, Ichiro Ohshima, Takeo Ushiki, Shigetoshi Sugawa, and Tadahiro Ohmi, "Low Resistivity PVD TaNx/Ta/TaNx Stacked Metal Gate CMOS Technology Using Self-Grown bcc-Phased Tantalum on TaNx Buffer Layer," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 460-461, Sendai, August 2000.
- E917 (C) Yoshihide Wakayama, Takeshi Ohkawa, Osamu Nakamura, Sadao Kobayashi, Shigetoshi Sugawa, Herzl Aharoni, and Tadahiro Ohmi, "The Effect of Organic Compounds Contamination on the Electrical Characteristics of Ultra-Thin Gate Oxide Films," Extended Abstracts of the 2000 International Conference on SOLID STATE DEVICES and MATERIALS, pp. 550-551, Sendai, August 2000.
- E918-1 (C) Francesco Pipia, Geun-Min Choi, and Tadahiro Ohmi, "Metal Wet Cleaning with No Corrosion: A Novel Approach," Fifth International Symposium on Ultra Clean Processing of Silicon Surfaces (UCPSS 2000), Abstract Book, pp. 43-44, Ostende, Belgium, September 2000.
- E918-2 (P) Francesco Pipia, Geun-Min Choi, and Tadahiro Ohmi, "Metal Wet Cleaning with No Corrosion: A Novel Approach," Solid State Phenomena, Vols. 76-77, pp. 35-38, 2001.
- E919-1 (C) Ikunori Yokoi, Geun-Min Choi, Yoshio Yamazaki, and Tadahiro Ohmi, "A Hydrogenated Water Application to Semiconductor Manufacturing," Fifth International Symposium on Ultra Clean Processing of Silicon Surfaces (UCPSS 2000), Abstract Book, pp. 65-66, Ostende, Belgium, September 2000.

- E919-2 (P) Ikunori Yokoi, Geun-Min Choi, Yoshio Yamazaki, and Tadahiho Ohmi, "A Hydrogenated Water Application to Semiconductor Manufacturing," Solid State Phenomena, Vols.76-77, pp. 71-74, 2001.
- E920-1 (C) Takeo Hattori, Kensuke Takahashi, Hiroshi Nohira, and Tadahiho Ohmi, "Layer-by-layer oxidation of silicon by atomic and molecular oxygen," Fifth International Symposium on Ultra Clean Processing of Silicon Surfaces (UCPSS 2000), Abstract Book, pp. 104-105, Ostende, Belgium, September 2000.
- E920-2 (P) T. Hattori, K. Takahashi, H. Nohira, and T. Ohmi, "Layer-By-Layer Oxidation of Silicon," Solid State Phenomena, Vols. 76-77, pp. 139-144, 2001.
- E921-1 (C) Toshikazu Abe and Tadahiho Ohmi, "Photo Resist Stripping Using An Alkaline Accelerator Containing Wet-Vapor," Fifth International Symposium on Ultra Clean Processing of Silicon Surfaces (UCPSS 2000), Abstract Book, pp. 153-154, Ostende, Belgium, September 2000.
- E921-2 (P) Toshikazu Abe, Senri Ojima, Takahisa Nitta, Nobuhiro Miki, and Tadahiho Ohmi, "Photo Resist Stripping Using An Alkaline Accelerator Containing Wet-Vapor," Solid State Phenomena, Vols. 76-77, pp. 231-234, 2001.
- E922-1 (C) Hiroshi Morita, Jun-ichi Ida, Osamu Ota, Kazumi Tsukamoto, and Tadahiho Ohmi, "Particle Removal Mechanism of Hydrogenated Ultrapure Water with Megasonic Irradiation," Fifth International Symposium on Ultra Clean Processing of Silicon Surfaces (UCPSS 2000), Abstract Book, pp. 160-161, Ostende, Belgium, September 2000.
- E922-2 (P) Hiroshi Morita, Jun-ichi Ida, Osamu Ota, Kazumi Tsukamoto, and Tadahiho Ohmi, "Particle Removal Mechanism of Hydrogenated Ultrapure Water with Megasonic Irradiation," Solid State Phenomena, Vols. 76-77, pp. 245-250, 2001.
- E923-1 (C) Geun-Min Choi, Ikunori Yokoi, and Tadahiho Ohmi, "The Role of Oxidant in HF-Based Solution for Noble Metal Removal from Substrate," Fifth International Symposium on Ultra Clean Processing of Silicon Surfaces (UCPSS 2000), Abstract Book, pp. 170-171, Ostende, Belgium, September 2000.
- E923-2 (P) Geun-Min Choi, Ikunori Yokoi, and Tadahiho Ohmi, "The Role of Oxidant in HF-Based Solution for Noble Metal Removal from Substrate," Solid State Phenomena, Vols. 76-77, pp. 267-270, 2001.
- E924 (C) Ryu Kaihara, Masaki Hirayama, Shigetoshi Sugawa, and Tadahiho Ohmi, "Damage-free Contact Etching using Balanced Electron Drift Magnetron Etcher," The Ninth International Symposium on Semiconductor Manufacturing, Proceeding of ISSM2000, pp. 102-105, Tokyo, September 2000.
- E925 (C) Hirokazu Suzuki, Hideo Hanaoka, Yoshinori Ohkubo, Yoshio Yamazaki, Yasuyuki Shirai, and Tadahiho Ohmi, "Energy Saving in Semiconductor Fabs by Out-Air Handling Unit Performance Improvement," The Ninth International Symposium on Semiconductor Manufacturing, Proceeding of ISSM2000, pp. 293-296, Tokyo, September 2000.

- E926 (C) Ikunori Yokoi, Yoshio Yamazaki, Toshikazu Abe, and Tadahiro Ohmi, "Application of Hydrogenated Water to Future Cooling System," The Ninth International Symposium on Semiconductor Manufacturing, Proceeding of ISSM2000, pp. 297-300, Tokyo, September 2000.
- E927 (C) Ichiro Ohshima, Yoshio Ishihara, Isao Akutsu, and Tadahiro Ohmi, "Ultra Clean Process Gas Recycling System for Plasma Process Using Krypton and Xenon," The Ninth International Symposium on Semiconductor Manufacturing, Proceeding of ISSM2000, pp. 305-308, Tokyo, September 2000.
- E928 (C) Ken-ichi Mitsumori, Haga Nobuaki, Norihisa Takahashi, Takashi Imaoka, and Tadahiro Ohmi, "Advanced Wet Cleaning Using Novel Nozzle and Functional Ultrapure Water in Next Generation," The Ninth International Symposium on Semiconductor Manufacturing, Proceeding of ISSM2000, pp. 329-332, Tokyo, September 2000.
- E929 (F) Kunkul Ryoo, Wataru Shindo, Masaki Hirayama, and Tadahiro Ohmi, "Analysis of Epitaxy of Polysilicon Films on Silicon (100) Wafers Deposited with Enlarged Microwave Plasma," Journal of The Electrochemical Society, Vol. 147, No. 10, pp. 3859-3863, October 2000.
- E930 (C) Y. Wakayama, S. Kobayashi, T. Ishii, S. Sugawa, and T. Ohmi, "The Effect of Molecular Weight of Organic Contaminants on their Adsorption on Si-wafers," AVS 47th International Symposium, p. 232, Boston, October 2000.
- E931(C) Zhibin Pan, Koji Kotani, Tadahiro Ohmi, "A Fast Search Method of Speaker Identification for Large Population Using Pre-selection and Hierarchical Matching," 6th International Conference on Spoken Language Processing, pp.290-293, China, October 2000.
- E932 (F) Takeo Ushiki, Kunihiro Kawai, Ichiro Ohshima, and Tadahiro Ohmi, "Chemical Reaction Concerns of Gate Metal with Gate Dielectric in Ta Gate MOS Devices: An Effect Of Self-Sealing Barrier Configuration Interposed Between Ta and SiO₂," IEEE Trans. on Electron Devices, Vol.47, No.11, pp.2201-2207, November 2000.
- E933(C) Y.Saito, K.Sekine, M.Hirayama, S.Sugawa, H.Aharoni, and T.Ohmi, "High-Reliability Ultra-Thin Gate Oxide Grown At Low-Temperature (400 °C) Using Microwave-Excited High-Density Krypton Plasma," International Conference on Materials Science and Technologies, pp.43, Israel, November 2000.
- E934(C) O.Nakamura, Y.Shirai, K.Kawada, N.Ikeda, H.Aharoni, and T.Ohmi, "A New Approach for Obtaining Highly Reliable Wet Oxidation Process in Microelectronics Using Catalytic Water Vapor Generator (WVG) System," International Conference on Materials Science and Technologies, pp.44, Israel, November 2000.
- E935(C) T.Ohkawa, O.Nakamura, H.Aharoni, and T.Ohmi, "Improvement of MOS Device Reliability and Performance by Atomic Order Flattening of Si(100) Surface and Si-SiO₂ Interface Selective Nitridation," International Conference on Materials Science and Technologies, pp.67, Israel, November 2000.

- E936(C) K.Kanemoto, H.Aharoni, and T.Ohmi, "Plasma Immersion Ion Implantation (PIII) Technique and Low-Temperature Post-Implantation Annealing for the Formation of Ultra-Shallow Source/Drain Junctions," International Conference on Materials Science and Technologies, pp.68, Israel, November 2000.
- E937(C) T.Hamada, Y.Saito, K.Sekine, H.Aharoni, and T.Ohmi, "MOS Transistors on Different Si Oriented Surfaces Fabricated with Low Temperature Gate Oxide for Future System on Glass Realization," International Conference on Materials Science and Technologies, pp.69, Israel, November 2000.
- E938(C) Kazuo Ohtsubo, Yuji Saito, Katsuyuki Sekine, Masaki Hirayama, Shigetoshi Sugawa, Herzl Aharoni, and Tadahiro Ohmi, "Low Temperature (400°C) Improved Ultra-Thin Oxynitride Films for MOS Gate Insulators," International Conference on Materials Science and Technologies, pp.123, Israel, November 2000.
- E939(C) Kei Kanemoto, Tatsufumi Hamada, Herzl Aharoni, and Tadahiro Ohmi, "A Simple One Chamber Parallel Plate Plasma Immersion Ion Implantation (PIII) System for the Formation of SI Electronic Devices with Ultra-Shallow Junctions," International Conference on Materials Science and Technologies, pp.126, Israel, November 2000.
- E940(C) Yuji Saito, Katsuyuki Sekine, Masaki Hirayama, Shigetoshi Sugawa, Herzl Aharoni, and Tadahiro Ohmi, "Microwave-Excited High-Density Plasma System for High-Quality Thin Dielectric Film Growth at Low-Temperatures," International Conference on Materials Science and Technologies, pp.127, Israel, November 2000.
- E941(C) Yoshihide Wakayama, Takeshi Ohkawa, Osamu Nakamura, Herzl Aharoni, and Tadahiro Ohmi, "Controlled Contamination Experiments of Gate Oxide Surfaces by Organic Compounds and their Effect on the Reliability of M.O.S. Devices," International Conference on Materials Science and Technologies, pp.130, Israel, November 2000.
- E942(C) Herzl Aharoni, Yukio Tamai, Akira Nakada, Oka Mauricio Massazumi, and Tadahiro Ohmi, "Breakdown Mechanisms in Shallow and Ultra-Shallow Ion-Implanted N⁺P Junctions," International Conference on Materials Science and Technologies, pp.132, Israel, November 2000.
- E943(C) Tadahiro Ohmi and Shigetoshi Sugawa, "Silicon Technology and Devices for the 21st century," Proceedings of the 3rd International Symposium on Advanced Science and Technology of Silicon Materials, pp.1-6, Kona, Hawaii, plenary talk, November 2000.
- E944(C) Tadahiro Ohmi and Shigetoshi Sugawa, "Ultra Short TAT Semiconductor Manufacturing for Customer's Needs," The IT Revolution in Japan and Taiwan, Direction for the 21st Century, pp.128-132, Taiwan, November 2000.
- E945 (F) Toshiyuki Nozawa, Masahiro Konda, Masanori Fujibayashi, Makoto Imai, Koji Kotani, Shigetoshi Sugawa, and Tadahiro Ohmi, "A Parallel Vector-Quantization Processor Eliminating Redundant Calculations for Real-Time Motion Picture Compression," IEEE Journal of Solid-State Circuits, Vol.35, No.11, pp.1744-1751, November 2000.

E946 (L)

Takeo Ushiki, Hideaki Ishino, and Tadahiro Ohmi, "Effect of Starting SOI Material Quality on Low-Frequency Noise Characteristics in Partially Depleted Floating-Body SOI MOSFETs," IEEE Electron Device Letters, Vol.21, No.12, pp.610-612, December 2000.