Paper List

January ―December, 2016

E2016-1(F) Philippe Gaubert, Akinobu Teramoto, Shigetoshi Sugawa, “Impact on doping concentration on 1/f noise performances of accumulation-mode Si(100) n-MOSFETs”, Japanese Journal of Applied Physics, Vol.55, 04ED08, March 2016.

E2016-2(F) Kiichi Furukawa, Akinobu Tearamoto, Rihito Kuroda, Tomoyuki Suwa, Keiichi Hashimoto, Takashi Kojiri, and Shigetoshi Sugawa, “Proposal of tunneling- and diffusion-current hybrid MOSFET: A device simulation study”, Japanese Journal of Applied Physics, Vol.55, 04ED12, March 2016.

E2016-3(C) [*Invited Paper*] Rihito Kuroda, Akinobu Teramoto, and Shigetoshi Sugawa, “Random telegraph noise measurement and analysis based on arrayed test circuit toward high S/N CMOS image sensors”, 2016 International Conference on Microelectronic Test Structures (ICMTS), 3-1, pp.46-51, Yokohama, March 2016.

E2016-4(F) Tadashi Watanabe, Akinobu Teramoto, Yukihisa Nakao, Shigetoshi Sugawa, and Tadahiro Ohmi, “Low Interface Trap Density and High Breakdown Electric Field SiN Films on GaN Formed by Plasma Pretreatment Using Microwave-Excited Plasma-Enhanced Chemical Vapor Deposition”, IEEE Transactions on Electron Devices, Vol.63, Issue4, pp.1795-1801, April 2016, a revised version of E1593(F).

E2016-5(F) Kohki Nagata, Atsushi Ogura, Ichiro Hirosawa, Tomoyuki Suwa, Akinobu Teramoto and Tadahiro Ohmi, “Detection of short range order in SiO2 thin-films by grazing-incidence wide and small-angle X-ray scattering”, Journal of Applied Physics, Vol.119, 154103(2016), April 2016.

E2016-6(C) Takashi Kojiri, Tomoyuki Suwa, Keiichi Hashimoto, Akinobu Teramoto, Rihito Kuroda, and Shigetoshi Sugawa, “Introduction of a High Selectivity Etching Process with Advanced SiNx Etch Gas in the Fabrication of FinFET Structures”, 229th Meeting of The Electrochemical Society, Abs.1166, San Diego, May 2016.

E2016-7(P) T. Kojiri, T. Suwa, K. Hashimoto, A. Teramoto, R. Kuroda, and S. Sugawa, “Introduction of a High Selectivity Etching Process with Advanced SiNx Etch Gas in the Fabrication of FinFET Structures,” ECS Transactions, Vol.72, Issue 4, Silicon Compatible Materials, Processes, and Technologies for Advanced Integrated Circuits and Emerging Applications 6, pp.23-30, May 2016.

E2016-8(C) Yasumasa Koda, Hisaya Sugita, Tomoyuki Suwa, Rihito Kuroda, Tetsuya Goto, Akinobu Teramoto and Shigetoshi Sugawa, “Low Leakage Current Al2O3 Metal-Insulator-Metal Capacitors Formed By Atomic Layer Deposition at Optimized Process Temperature and O2 Post Deposition Annealing,” 229th Meeting of The Electrochemical Society, Abs.1174, San Diego, May 2016.

E2016-9(P) Yasumasa Koda, Hisaya Sugita, Tomoyuki Suwa, Rihito Kuroda, Tetsuya Goto, Akinobu Teramoto and Shigetoshi Sugawa, “Low Leakage Current Al2O3 Metal-Insulator-Metal Capacitors Formed By Atomic Layer Deposition at Optimized Process Temperature and O2 Post Deposition Annealing,” ECS Transactions, Vol.72, Issue 4, Silicon Compatible Materials, Processes, and Technologies for Advanced Integrated Circuits and Emerging Applications 6, pp.91-100, May 2016.

E2016-10(F) Yasutaka MAEDA, Shun-ichiro OHMI, Tetsuya GOTO, Tadahiro OHMI, “High Quality Pentacene Film Formation on N-Doped LaB6 Donor Layer,” IEICE TRANSACTIONS on Electronics, Special Section on Fundamentals and Applications of Advanced Semiconductor Devices2015, Vol.E99-C, No.5, pp.535-540, May 2016.

E2016-11(C) Yasutaka Maeda, Shun-ichiro Ohmi, Tetsuya Goto, Tadahiro Ohmi, “Effect of Nitrogen-Doped LaB6 Interfacial Layer on Device Characteristics of Pentacene-Based OFET,” 2016 Asia-Pacific Workshop on Fundamentals and Applications of Advanced Semiconductor Devices, A2-3, pp.98-101, Hakodate, July 2016.

E2016-12(F) Akinobu Teramoto, Hiroaki Tanaka, Tomoyuki Suwa, Tetsuya Goto, Rihito Kuroda, Tsukasa Motoya, Kazumasa Kawase, and Shigetoshi Sugawa, “Evaluating Work-Function and Composition of ErSix on Various Surface Orientation of Silicon,” ECS Journal of Solid State Science and Technology, Vol.5, Issue10, pp. 608-613, September 2016.

E2016-13(F) Masayoshi Takahashi, Yasuyuki Shirai, Akinobu Teramoto, Tunejirou Takahashi, Katsumi Tatera, Kouhei Matsuura, Hideo Horibe, “Effects of Oxygen Microbubbles on Photoresist Layers under Hot Water Conditions,” Journal of Photopolymer Science and Technology, Vol. 29, No. 4, pp.643-646, September 2016.

E2016-14(C) K. Furukawa, A. Teramoto, R. Kuroda, T. Suwa, K. Hashimoto, S. Sugawa, D. Suzuki, Y. Chiba, K. Ishii, A. Shimizu, and K. Hasebe, “Formation Technology of Flat Surface after Selective-Epitaxial-Growth on Ion-implanted (100) Oriented Thin SOI Wafers”, Extended Abstracts of the 2016 International Conference on Solid State Devices and Materials, PS-1-03, pp.649-650, Tsukuba, September 2016.

E2016-15(C) Philippe Gaubert, Akinobu Teramoto and Shigetoshi Sugawa, “Low Frequency Noise of Accumulation-Mode n-and p-MOSFETs fabricated on (110) Crystallographic Silicon-Oriented Wafers”, Extended Abstracts of the 2016 International Conference on Solid State Devices and Materials, PS-3-11, pp.717-718, Tsukuba, September 2016.

E2016-16(C) Tomoyuki Suwa, Akinobu Teramoto, Yasumasa Koda, Masaya Saito, Hisaya Sugita, Marie Hayashi, Junichi Tsuchimoto, Hidekazu Ishii, Yoshinobu Shiba, Yasuyuki Shirai and Shigetoshi Sugawa, “Oxidizing Species Dependence of the Interface Reaction during Atomic-Layer-Deposition Process and Post-Deposition-Anneal,” PACIFIC RIM MEETING ON ELECTROCHEMICAL AND SOLID-STATE SCIENCE (PRiME2016) /230th ECS Meeting, Meeting Abstracts, Abs.1836, G02-1836, Honolulu, Hawaii, October 2016.

E2016-17(P) T. Suwa, A. Teramoto, Y. Koda, M. Saito, H. Sugita, M. Hayashi, J. Tsuchimoto, H. Ishii, Y. Shiba, Y. Shirai and S. Sugawa, “Oxidizing Species Dependence of the Interface Reaction during Atomic-Layer-Deposition Process and Post-Deposition-Anneal”, ECS Transactions, Vol.75, Issue 5, Semiconductors, Dielectrics, and Metals for Nanoelectronics 14, pp.207-214, October 2016.

E2016-18(C) [*Invited Paper*] Akinobu Teramoto, “High Quality Film and Interface Formation using Appropriate Reaction Species”, AVS 63rd International Symposium& Exhibition, Plasma Science and Technology, Session PS+TF-WeA, Nashville, November 2016.

E2016-19(F) Tetsuya Goto, Kei-ichiro Sato, Yuki Yabuta, and Shigetoshi Sugawa, “Mirror-field confined compact plasma source using permanent magnet for plasma processings,” Review of Scientific Instruments, Vol.87, Issue12, 123508, December 2016.

E2016-20(C) Tetsuya Goto, Fuminobu Imaizumi, Shigetoshi Sugawa, “Electrical Characteristics of Si-Doped IGZO TFTs Fabricated Using Ion Implantation,” The 23rd International Display Workshops (IDW’16), AMD1-2, pp.252-255, Fukuoka, December 2016.