Paper List

January ―December, 2017

E2017-1(F) Stable yttrium oxyfluoride used in plasma process chamber
Journal of Vacuum Science & Technology A: Vacuum, Surfaces, and Films, Vol.35, Issue 2, 021405, January 2017.
Yoshinobu Shiba, Akinobu Teramoto and Tetsuya Goto, Yukio Kishi, Yasuyuki Shirai, Shigetoshi Sugawa
https://doi.org/10.1116/1.4975143

E2017-2(C) New Compact ECR Plasma Source for Silicon Nitride Film Formation in Minimal Fab System
2017 IEEE Electron Devices Technology and Manufacturing Conference Proceedings of Technical Papers, 5M-4, pp.84-85, Toyama, March 2017.
Tetsuya Goto, Kei-ichiro Sato, Yuki Yabuta, Shigetoshi Sugawa, and Shiro Hara
https://doi.org /10.1109/EDTM.2017.7947528

E2017-3(L) Improvement in the Negative Bias Illumination Stress Stability for Silicon-Ion Implanted Amorphous InGaZnO Thin-Film Transistors
IEEE Electron Device Letters, Vol.38, Issue3, March 2017.
Tetsuya Goto, Fuminobu Imaizumi, and Shigetoshi Sugawa
https://doi.org/10.1109/LED.2017.2660486

E2017-4(F) Performances of Accumulation Mode n- and p-MOSFETs on Si(110) Wafers
Japanese Journal of Applied Physics, Vol.56, 04CD15, March 2017.
Philippe Gaubert, Akinobu Teramoto, Shigetoshi Sugawa
https://doi.org/10.7567/JJAP.56.04CD15

E2017-5(C) Impact of SiO2/Si Interface Micro-roughness on SILC Distribution and Dielectric Breakdown: A Comparative Study with Atomically Flattened Devices
International Reliability Physics Symposium 2017, pp. DG-7.1-DG-7.5, Monterey, April 2017.
Hyeonwoo Park, Tetsuya Goto, Rihito Kuroda, Akinobu Teramoto, Tomoyuki Suwa, Daiki Kimoto, Shigetoshi Sugawa

E2017-6(F) Effect of Nitrogen-Doped LaB6 Interfacial Layer on Device Characteristics of Pentacene-Based OFET
IEICE TRANSACTIONS on Electronics, Vol.E100-C, No.5, pp.463-467, May 2017.
Yasutaka MAEDA, Shun-ichiro OHMI, Tetsuya GOTO, and Tadahiro OHMI
https://doi.org/10.1587/transele.E100.C.463

E2017-7(C) Statistical Analysis of Random Telegraph Noise in Source Follower Transistors with Various Shapes
2017 International Image Sensor Workshop (IISW), R11, pp.39-42, Hiroshima, May 2017.
Shinya Ichino, Takezo Mawaki, Shunichi Wakashima, Akinobu Teramoto, Rihito Kuroda, Phillipe Gaubert, Tetsuya Goto, Tomoyuki Suwa, Shigetoshi Sugawa

E2017-8(C) Impact of Random Telegraph Noise with Various Time Constants and Number of States in CMOS Image Sensors
2017 International Image Sensor Workshop (IISW), pp.43-46, Hiroshima, May 2017.
Rihito Kuroda, Akinobu Teramoto, Shigetoshi Sugawa

E2017-9(C) A Spectral Imaging System with an Over 70dB SNR CMOS Image Sensor and Electrically Tunable 10nm FWHM Multi-Bandpass Filter
2017 International Image Sensor Workshop, pp.47-50, Hiroshima, May 2017.
Yasuyuki Fujihara, Yusuke Aoyagi, Satoshi Nasuno, Shunichi Wakashima, Rihito Kuroda, Kohei Terashima, Takahiro Ishinabe, Hideo Fujikake, Kazuhiro Wako, Shigetoshi Sugawa

E2017-10(C) 10Mfps 960 Frames Video Capturing Using a UHS Global Shutter CMOS Image Sensor with High Density Analog Memories
2017 International Image Sensor Workshop, pp.308-311, Hiroshima, May 2017.
Manabu Suzuki, Masashi Suzuki, Rihito Kuroda, Yuki Kumagai, Akira Chiba, Noriyuki Miura, Naoya Kuriyama, Shigetoshi Sugawa

E2017-11(C) 224-ke Saturation signal global shutter CMOS image sensor with in-pixel pinned storage and lateral overflow integration capacitor
Symposium on VLSI Circuits Digest of Technical Papers, pp.C250-C251, Kyoto, June 2017. Yorito Sakano, Shin Sakai, Yoshiaki Tashiro, Yuri Kato, Kentaro Akiyama, Katsumi Honda, Mamoru Sato, Masaki Sakakibara, Tadayuki Taura, Kenji Azami, Tomoyuki Hirano, Yusuke Oike, Yasunori Sogo, Takayuki Ezaki, Tadakuni Narabu, Teruo Hirayama, Shigetoshi Sugawa
https://doi.org/10.23919/VLSIC.2017.8008498

E2017-12(C) Atomically flat interface for noise reduction in SOI-MOSFETs
24th International Conference on Noise and Fluctuations (ICNF2017), abstractB8.4, Vilnius, Lithuania, June 2017.
P. Gaubert, R. Kuroda, T. Goto, A. Teramoto, and S. Sugawa

E2017-13(P) Atomically flat interface for noise reduction in SOI-MOSFETs
24th International Conference on Noise and Fluctuations (ICNF2017), Vilnius, Lithuania, June 2017
Philippe Gaubert, Alexandre Kircher, Hyeonwoo Park, Rihito Kuroda, Tetsuya Goto, Tomoyuki Suwa, Akinobu Teramoto, and Shigetoshi Sugawa
https://doi.org/10.1109/ICNF.2017.7985986

E2017-14(C) Monte-Carlo Simulation of Biomolecules' Fluid-Dynamics in Electrolyte Facing Nanowires Biosensor
Proceedings of the 17th IEEE International Conference on Nanotechnology, pp.797-800, Pittsburgh, USA, July 2017.
Che-An Lee, Akinobu Teramoto, Hiroshi Watanabe
https://doi.org/10.1109/NANO.2017.8117265

E2017-15(L) Hole-Trapping Process at Al2O3/GaN Interface Formed by Atomic Layer Deposition
IEEE ELECTRON DEVICE LETTERS, Vol.38, No.9, pp.1309-1312, Sep. 2017.
Akinobu Teramoto, Masaya Saito, Tomoyuki Suwa, Tetsuo Narita, Rihito Kuroda, and Shigetoshi Sugawa
https://doi.org/10.1109/LED.2017.2734914

E2017-16(F) Formation technology of flat surface with epitaxial growth on ion-implanted (100)-oriented Si surface of thin silicon-on-insulator
Japanese Journal of Applied Physics, Vol.56, 105503, September 2017.
Kiichi Furukawa, Akinobu Tearamoto, Rihito Kuroda, Tomoyuki Suwa, Keiichi Hashimoto, Shigetoshi Sugawa, Daisuke Suzuki, Yoichiro Chiba, Katsutoshi Ishii, Akira Shimizu, and Kazuhide Hasebe
https://doi.org/10.7567/JJAP.56.105503

E2017-17(C) Experimental Investigation of Localized Stress Induced Leakage Current Distribution in Gate Dielectrics Using Array Test Circuit
Extended Abstracts of the 2017 International Conference on Solid State Devices and Materials, PS-4-07, pp. 785-786, Sendai, September 2017.
Hyeonwoo Park, Tomoyuki Suwa, Rihito Kuroda, Akinobu Teramoto, Shigetoshi Sugawa

E2017-18(C) Analysis of Random Telegraph Noise Behaviors of nMOS and pMOS toward Back Bias Voltage Changing
Extended Abstracts of the 2017 International Conference on Solid State Devices and Materials, G-5-03, pp. 333-334, Sendai, September 2017.
Takezo Mawaki, Akinobu Teramoto, Rihito Kuroda, Shinya Ichino, Shigetoshi Sugawa

E2017-19(C) Impact of Drain Current to Appearance Probability and Amplitude of Random Telegraph Noise in Low Noise CMOS Image Sensors
Extended Abstracts of the 2017 International Conference on Solid State Devices and Materials, G-5-02, pp. 331-332, Sendai, September 2017.
Shinya Ichino, Takezo Mawaki, Akinobu Teramoto, Rihito Kuroda, Hyeonwoo Park, Takeru Maeda, Shunichi Wakashima, Tetsuya Goto, Tomoyuki Suwa, Shigetoshi Sugawa

E2017-20(W) Experimantal Investigation of Localized Stress Induced Leakage Current Distribution and Its Decrease by Atomically Flatting Process
IEICE Technical Report, Silicon Devices and Materials, Vol.117, No.260, SDM2017-51(2017-10), pp.9-14, October 2017.
Hyeonwoo PARK, Rihito KURODA, Tetsuya GOTO, Tomoyuki SUWA, Akinobu TERAMOTO, Daiki KIMOTO, and Shigetoshi SUGAWA

E2017-21(F) New Compact Electron Cyclotron Resonance Plasma Source for Silicon Nitride Film Formation in Minimal Fab System
IEEE Journal of the Electron Devices Society, Vol.6, pp.512-517., November 2017.
Tetsuya Goto, Kei-Ichiro Sato, Yuki Yabuta, Shigetoshi Sugawa, and Shiro Hara
https://doi.org/10.1109/JEDS.2017.2773519

E2017-22(C) Narrow-Bandpass Liquid Crystal Filter for Real-Time Multi Spectral Imaging Systems International Display Workshops, pp.259-261, SENDAI, December 2017.
Kohei Terashima, Takahiro Ishinabe, Kazuo Wako, Yasuyuki Fujihara, Yusuke Aoyagi, Maasa Murata, Satoshi Nasuno, Shunichi Wakashima, Rihito Kuroda, Yosei Shibata, Shigetoshi Sugawa, Hideo Fujikake