

Paper List

January – December, 2023

- E2023-1(F) Accelerated germination of aged recalcitrant seeds by K⁺-rich bulk oxygen nanobubbles
Scientific Reports vol.13, 3301 (2023), 27 February 2023.
Mijung Kim, Akio Shoji, Toshiaki Kobayashi, Yasuyuki Shirai, Shigetoshi Sugawa and Masayoshi Takahashi
<https://doi.org/10.1038/s41598-023-30343-2>
- E2023-2(C) Excimer laser doping for the fabrication of 4H-SiC power devices
Proceedings Volume 12408, Laser Applications in Microelectronic and Optoelectronic Manufacturing (LAMOM) XXVIII; 124080M (2023), 17 March 2023, San Francisco Yoshiaki Kakimoto, Keita Katayama, Takuma Yasunami, Tetsuya Goto, Daisuke Nakamura, Hiroshi Ikenoue
<https://doi.org/10.1117/12.2651419>
- E2023-3(C) Oxygen nanobubble water affects wound healing of fibroblast WI-38 cells
Bioscience, Biotechnology, and Biochemistry, Vol.0, No.0, pp.1-7, (2023), 11 April 2023.
Neng Tanty Sofyana, Redoyan Refli, Masayoshi Takahashi, Kazuichi Sakamoto
<https://doi.org/10.1093/bbb/zbad026>
- E2023-4(C) A Half-Pulse 2-Tap Indirect Time-of-Flight Ranging Method with Sub-Frame Operation for Depth Precision Enhancement and Motion Artifact Suppression
International Image Sensor Workshop (IISW) Proceedings, Scotland, UK, (2023), 25 May 2023.
Chia-Chi Kuo, Rihito Kuroda
- E2023-5(F) A 134 × 132 4-Tap CMOS Indirect Time-of-Flight Range Imager Using In-Pixel Memory Array With 10 Kfps High-Speed Mode and High Precision Mode
IEEE Journal Solid-State Circuits, 15 June. (2023)
Chia-Chi Kuo, Rihito Kuroda
<https://doi.org/10.1109/JSSC.2023.3281610>
- E2023-6(F) A 2-Tap 4-Phase Indirect Time-of-Flight Ranging Method using Half-Pulse Modulation for Depth Precision Enhancement and Sub-Frame Operation for Motion Artifact Suppression
ITE Transactions on Media Technology and Applications, (2023), Vol.11, Issue 3, pp.123-129, 1 July 2023.
Chia-Chi Kuo, Rihito Kuroda
<https://doi.org/10.3169/mta.11.123>

- E2023-7(C) Characterization of MONOS-Type Polycrystalline Silicon Thin Film Transistors
2023 Asia-Pacific Workshop on Fundamentals and Applications of advanced Semiconductor Devices (AWAD), P-4, (2023), Yokohama, 11 July, 2023.
Tetsuya Goto, Tomoyuki Suwa, Keita Katayama, Shu Nishida, Hiroshi Ikenoue, Shigetoshi Sugawa
- [E2023-8\(W\)](#) [Invited]
Next Generation FPD with UV-Micro LED's
LED Forum 2023 MicroLED: Metaverse X Technological Evolution X Application Innovation, Taipei, (2023), 5 September 2023.
Koichi Kajiyama
- [E2023-9\(C\)](#) Threshold Voltage Control of LTPS TFTs with MONOS Structure
2023 International Conference on Solid State Devices and Materials, E-7-02, (2023), pp.245-246, (2023), Nagoya, 8 September 2023.
Tetsuya Goto, Tomoyuki Suwa, Keita Katayama, Shu Nishida, Hiroshi Ikenoue, and Shigetoshi Sugawa
- [E2023-10\(C\)](#) Eco-Friendly SPM Alternative Resist Stripping with High-Concentration O3-Water Technology
Ultra Clean Processing of Semiconductor Surfaces XVI (UCPSS2023), pp.302-307, (2023), Brugge, 14 September 2023.
Solid State Phenomena Vol. 346, pp.302-307, (2023).
Takayuki Jizaimaru, Takao Funakoshi, Takeshi Sakai, Hisashi Fujimoto, Yasuyuki Shirai
<https://doi.org/10.4028/p-jtPk0>
- [E2023-11\(W\)](#) [Invited]
Current Status of Mass-Production Technologies for Flexible Micro LED Display as next Generation Display
Seminar on the latest technology prospects towards practical Micro LED displays and on the latest trends in bendable and large-scale technologies and markets, Taipei, 15 September 2023.
Koichi Kajiyama
- [E2023-12\(W\)](#) A Half-Pulse 2-Tap Indirect Time-of-Flight Ranging Method with Sub-Frame Operation for Depth Precision Enhancement and Motion Artifact Suppression/
深度精度の向上とモーションアーティファクト抑制のためのサブフレーム動作を用いたハーフパルス 2 タップ間接 Time-of-Flight 測距法
映像情報メディア学会技術報告・情報センシング研究会(一般社団法人 映像情報メディア学会), (2023), Vol.47, No.27, pp.5-8, 2022 年 9 月 15 日, 東京/ハイブリッド,
郭 家祺, 黒田 理人
<https://www.ite.or.jp/ken/paper/20230915hA13/>

- E2023-13(F) Mineralization of Poly(vinyl alcohol) by Ozone Microbubbles under a Wide Range of pH Conditions
Langmuir 2023, Vol.39, Issue.43, 15215–15221, (2023), October 31.
Masayoshi Takahashi, Ryo Nakatsuka, Shuzo Kutsuna, Yasuyuki Shirai, and Shigetoshi Sugawa
<https://doi.org/10.1021/acs.langmuir.3c01838>
- E2023-14(W) Measurement of TEMAZ concentration in process chamber by UV absorption method
The 35th International Microelectronics Conference, (2023), pp.29-31, November 11, Sendai
Takafumi Inada, Yushi Sakai, Akihito Suto, Tatsuo Morimoto, Tomoyuki Suwa, Yasuyuki Shirai, Shigetoshi Sugawa, and Rihito Kuroda
- E2023-15(W) Impedance Measurement Platform Technology Toward Statistical Evaluation of Semiconductor Devices
The 35th International Microelectronics Conference, (2023), pp.29-31, November 11, Sendai
Koga Saito, Tatsuhiko Suzuki, Hidemi Mitsuda, Takezo Mawaki, Tomoyuki Suwa, Akinobu Teramoto, Shigetoshi Sugawa, and Rihito Kuroda
- E2023-16(F) Visualization and Analysis of Temporal and Steady-State Gas Concentration in Process Chamber Using 70-dB SNR 1000 fps Absorption Imaging System
IEEE Transactions on Semiconductor Manufacturing, Vol.36, Issue: 4, pp. 515-519, (2023), November 2023
Yushi Sakai, Yoshinobu Shiba, Takafumi Inada, Tetsuya Goto, Tomoyuki Suwa, Tetsu Oikawa, Aoi Hamaya, Akihito Sutoh, Tatsuo Morimoto, Yasuyuki Shirai, Shigetoshi Sugawa, and Rihito Kuroda
<https://doi.org/10.1109/TSM.2023.3267024>