

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(F) 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) Light intensity and charge holding time dependence of pinned photodiode full well capacity
International Image Sensor Workshop (IISW) Proceedings, R3.4, Scotland, UK, (2023), 22 May 2023.
Ken Miyauchi, Toshiyuki Isozaki, Rimon Ikeno, Junichi Nakamura
<https://doi.org/10.60928/dyb9-wzkr>
- E2023-5(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, R9.1, Scotland, UK, (2023), 25 May 2023.
Chia-Chi Kuo, Rihito Kuroda
<https://doi.org/10.60928/ccsi-uy9e>

- E2023-6(C) Measuring Temporal Variation of Concentration of ALD Precursor TEMAZ in Process Chamber Using UV Absorption Method
243rd ECS Meeting with the Eighteenth International Symposium on Solid Oxide Fuel Cells, Abstract 1777, May 30, 2023 Boston, USA
Takafumi Inada, Tetsuya Goto, Tomoyuki Suwa, Masaaki Nagase, Hidekazu Ishii, Yoshinobu Shiba, Yushi Sakai, Akihito Sutoh, Tatsuo Morimoto, Yasuyuki Shirai, Rihito Kuroda and Shigetoshi Sugawa
<https://iopscience.iop.org/article/10.1149/MA2023-01291777mtgabs>
- E2023-7(P) Measuring Temporal Variation of Concentration of ALD Precursor TEMAZ in Process Chamber Using UV Absorption Method
ECS Transactions, Volume 114, Number 1, pp3-10, 2023
Takafumi Inada, Tetsuya Goto, Tomoyuki Suwa, Masaaki Nagase, Hidekazu Ishii, Yoshinobu Shiba, Yushi Sakai, Akihito Sutoh, Tatsuo Morimoto, Yasuyuki Shirai, Rihito Kuroda and Shigetoshi Sugawa
<https://doi.org/10.1149/11101.0003ecst>
- E2023-8(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 Kuo¹, Rihito Kuroda
<https://doi.org/10.1109/JSSC.2023.3281610>
- E2023-9 (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
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- E2023-10(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
- [E2023-11\(W\)](#) [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.
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- [E2023-12\(C\)](#) 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
- [E2023-13\(C\)](#) 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-jJtPk0>
- [E2023-14\(W\)](#) [Invited]
Current Status of Mass-Production Technologies for Flexible Micro LED Display as next Generation Display
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- [E2023-15\(W\)](#) 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/>
- E2023-16(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>
- E2023-17(F) Analysis of Light Intensity and Charge Holding Time Dependence of Pinned Photodiode Full Well Capacity
MDPI Sensors, Vol.23, No.21, pp.8847, (2023), October
Ken Miyauchi, Toshiyuki Isozaki, Rimon Ikeno, Junichi Nakamura
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- E2023-18(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
- E2023-19(W) Impedance Measurement Platform Technology Toward Statistical Evaluation of
Semiconductor Devices
The 35th International Microelectronics Conference, (2023), pp.33-39,
November 11, Sendai
Koga Saito, Tatsuhiko Suzuki, Hidemi Mitsuda, Takezo Mawaki, Tomoyuki
Suwa, Akinobu Teramoto, Shigetoshi Sugawa, and Rihito Kuroda
- E2023-20(W) Small Size, Low Power, and High Performance CMOS Image Sensors Using
Pixel Level Stacking Technolog
The 35th International Microelectronics Conference, (2023), pp.41-44,
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Ken Miyauchi
- E2023-21(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>
- E2023-22(C) [KeynoteAddress]
Advanced Sensing Technology and Its Future
Proceedings of the International Display Workshops Vol.30, (2023), December ,
Niigata
Rihito Kuroda
<https://doi.org/10.36463/idw.2023.0001>
- E2023-23(C) A Preliminary Demonstration of High Resolution Proximity
Capacitance-Optical Multimodal CMOS Image Sensor
Proceedings of the International Display Workshops Volume 30, (2023),IST3-3,
December 7, Niigata
Tsubasa Nozaki, Yoshiaki Watanabe, Chia-Chi Kuo, Koga Saito, Takezo
Mawaki, Rihito Kuroda
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- E2023-24(F) Microstructural Study on Dissolution of Natural Methane Hydrate by Multicontrast and Multiscale X-ray Computed Tomography
The Journal of Physical Chemistry C, Vol.127, Issue 49, pp.23973–23979,
(2023), December 5.
Satoshi Takeya, Akihiro Hachikubo, Hirotoshi Sakagami, Hirotugu Minami,
Satoshi Yamashita, Masayoshi Takahashi, Keiichi Hirano, Kazuyuki Hyodo,
and Akio Yoneyama
<https://doi.org/10.1021/acs.jpcc.3c06655>