

Sang Jeen Hong

List of Publications by Year in descending order

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times ranked

252
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | IOT-based in situ condition monitoring of semiconductor fabrication equipment for e-maintenance. Journal of Quality in Maintenance Engineering, 2022, 28, 736-747. | 1.7 | 1 |
| 2 | Virtual Metrology for Etch Profile in Silicon Trench Etching With SF ₆ /Ar Plasma. IEEE Transactions on Semiconductor Manufacturing, 2022, 35, 128-136. | 1.7 | 11 |
| 3 | Industrial Internet of Things for Condition Monitoring and Diagnosis of Dry Vacuum Pumps in Atomic Layer Deposition Equipment. Electronics (Switzerland), 2022, 11, 375. | 3.1 | 5 |
| 4 | Use of Optical Emission Spectroscopy Data for Fault Detection of Mass Flow Controller in Plasma Etch Equipment. Electronics (Switzerland), 2022, 11, 253. | 3.1 | 10 |
| 5 | Machine Learning-Based Process-Level Fault Detection and Part-Level Fault Classification in Semiconductor Etch Equipment. IEEE Transactions on Semiconductor Manufacturing, 2022, 35, 174-185. | 1.7 | 9 |
| 6 | On-Wafer Temperature Monitoring Sensor for Condition Monitoring of Repaired Electrostatic Chuck. Electronics (Switzerland), 2022, 11, 880. | 3.1 | 8 |
| 7 | HARDWARE DESIGN FOR CRYOGENIC ETCHING EQUIPMENT. Heat Transfer Research, 2021, 52, 1-14. | 1.6 | 3 |
| 8 | Surface Analysis of TMCTS-Based SiOC(H) Low-k Dielectrics in Post-Etch Strip of ACL Hardmask. Materials, 2021, 14, 1144. | 2.9 | 0 |
| 9 | Surface Analysis of Amorphous Carbon Thin Film for Etch Hard Mask. Journal of Nanoscience and Nanotechnology, 2021, 21, 2032-2038. | 0.9 | 8 |
| 10 | Artificial Immune System for Fault Detection and Classification of Semiconductor Equipment. Electronics (Switzerland), 2021, 10, 944. | 3.1 | 17 |
| 11 | Dual-Frequency RF Impedance Matching Circuits for Semiconductor Plasma Etch Equipment. Electronics (Switzerland), 2021, 10, 2074. | 3.1 | 4 |
| 12 | Use of Plasma Information in Machine-Learning-Based Fault Detection and Classification for Advanced Equipment Control. IEEE Transactions on Semiconductor Manufacturing, 2021, 34, 408-419. | 1.7 | 16 |
| 13 | Machine learning-based virtual metrology on film thickness in amorphous carbon layer deposition process. Measurement: Sensors, 2021, 16, 100046. | 1.7 | 12 |
| 14 | Analysis of optical emission spectroscopy data during silicon etching in SF ₆ /O ₂ /Ar plasma. Plasma Science and Technology, 2021, 23, 125501. | 1.5 | 6 |
| 15 | Surface Analysis of Chamber Coating Materials Exposed to CF ₄ /O ₂ Plasma. Coatings, 2021, 11, 105. | 2.6 | 12 |
| 16 | Fabrication of Planar Heating Chuck Using Nichrome Thin Film as Heating Element for PECVD Equipment. Electronics (Switzerland), 2021, 10, 2535. | 3.1 | 1 |
| 17 | In-situ process monitoring for eco-friendly chemical vapor deposition chamber cleaning. Journal of the Korean Physical Society, 2021, 79, 1027. | 0.7 | 3 |
| 18 | Investigation of Structure Modification of Underlying SiCOH Low-k Dielectrics with Subsequent Hardmask Deposition Process Conditions. Science of Advanced Materials, 2021, 13, 2185-2193. | 0.7 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Kinetic Mechanism of Reactive Oxygen/Nitrogen Species in Plasma-Assisted Greenhouse Gas Replacement. Science of Advanced Materials, 2021, 13, 2227-2233. | 0.7 | 0 |
| 20 | <i>In-Situ</i> Optical Monitoring of Atmospheric Pressure Plasma During Organic Surface Removal. Science of Advanced Materials, 2021, 13, 2213-2219. | 0.7 | 3 |
| 21 | Planar heating chuck to improve temperature uniformity of plasma processing equipment. Japanese Journal of Applied Physics, 2020, 59, SJJ01. | 1.5 | 6 |
| 22 | In situ monitoring of plasma ignition step in capacitively coupled plasma systems. Japanese Journal of Applied Physics, 2020, 59, SJJ02. | 1.5 | 3 |
| 23 | Deep Neural Network Modeling of Multiple Oxide/Nitride Deposited Dielectric Films for 3D-NAND Flash. Applied Science and Convergence Technology, 2020, 29, 190-194. | 0.9 | 6 |
| 24 | Performance Evaluation of RF Generators with <i>In-Situ</i> Plasma Process Monitoring Sensors. Journal of Nanoscience and Nanotechnology, 2019, 19, 6499-6505. | 0.9 | 2 |
| 25 | Surface coupling of plasma optical emission spectra with bent metal-clad waveguide. Optical and Quantum Electronics, 2019, 51, 1. | 3.3 | 0 |
| 26 | Analysis of Optical Plasma Monitoring in Plasma-Enhanced Atomic Layer Deposition Process of Al ₂ O ₃ . Journal of Nanoscience and Nanotechnology, 2019, 19, 1657-1665. | 0.9 | 1 |
| 27 | An <i>in situ</i> monitoring method for PECVD process equipment condition. Plasma Science and Technology, 2019, 21, 064003. | 1.5 | 9 |
| 28 | In-Situ Monitoring of Multiple Oxide/Nitride Dielectric Stack PECVD Deposition Process. Transactions on Electrical and Electronic Materials, 2018, 19, 21-26. | 1.9 | 13 |
| 29 | Spectroscopic Analysis of Film Stress Mechanism in PECVD Silicon Nitride. Transactions on Electrical and Electronic Materials, 2018, 19, 1-6. | 1.9 | 9 |
| 30 | Optical in situ monitoring of plasma-enhanced atomic layer deposition process. Japanese Journal of Applied Physics, 2018, 57, 06JF05. | 1.5 | 4 |
| 31 | In-Situ Detection Method of Abnormal Plasma Discharge in Plasma-Assisted Deposition Processes. Transactions on Electrical and Electronic Materials, 2018, 19, 96-100. | 1.9 | 7 |
| 32 | Process Integration of Ion Sensitive Field Effect Transistor Bio-Sensor Array Platform. Journal of Nanoscience and Nanotechnology, 2017, 17, 8321-8325. | 0.9 | 0 |
| 33 | Characterization of Silicon Nitride-Cored Silicon Photonics Waveguide Material for Optical Microring Resonator. Journal of Nanoelectronics and Optoelectronics, 2017, 12, 903-907. | 0.5 | 1 |
| 34 | Characterization of Plasma Deposited TMCTS Based Low- <i>k</i> Thin Film Deposition Process. Science of Advanced Materials, 2017, 10, 522-526. | 0.7 | 1 |
| 35 | Optical Emission Spectroscopy of Thermal Ta ₂ O ₅ in SF ₆ /Ar Plasma. Journal of Nanoscience and Nanotechnology, 2016, 16, 12788-12791. | 0.9 | 1 |
| 36 | Virtual metrology for TSV etch depth measurement using optical emission spectroscopy. , 2015, , . | | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Quantitative Evaluation Method for Etch Sidewall Profile of Through-Silicon Vias (TSVs). ETRI Journal, 2014, 36, 617-624. | 2.0 | 2 |
| 38 | Endpoint Detection in Low Open Area TSV Fabrication Using Optical Emission Spectroscopy. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 1251-1260. | 2.5 | 10 |
| 39 | In-situ virtual metrology for the silicon-dioxide etch rate by using optical emission spectroscopy data. Journal of the Korean Physical Society, 2014, 65, 168-175. | 0.7 | 5 |
| 40 | Fault Diagnosis in Semiconductor Etch Equipment Using Bayesian Networks. Journal of Semiconductor Technology and Science, 2014, 14, 252-261. | 0.4 | 20 |
| 41 | Novel photodefined polymer-clad through-silicon via technology integrated with endpoint detection using optical emission spectroscopy. , 2013, , . | | 2 |
| 42 | Endpoint detection using optical emission spectroscopy in TSV fabrication. , 2013, , . | | 1 |
| 43 | Hands-on experience-based microelectronics manufacturing engineering education. , 2013, , . | | 1 |
| 44 | Optical In-Situ Plasma Process Monitoring Technique for Detection of Abnormal Plasma Discharge. Transactions on Electrical and Electronic Materials, 2013, 14, 71-77. | 1.9 | 7 |
| 45 | Fault Detection and Classification in Plasma Etch Equipment for Semiconductor Manufacturing $\text{Se}\text{-}\text{Diagnostics}$. IEEE Transactions on Semiconductor Manufacturing, 2012, 25, 83-93. | 1.7 | 67 |
| 46 | Real-time In-situ Plasma Etch Process Monitoring for Sensor Based-Advanced Process Control. Journal of Semiconductor Technology and Science, 2011, 11, 1-5. | 0.4 | 4 |
| 47 | RepTor: An Intelligent Hybrid Neural Network Based Recipe Generator for Semiconductor Process Modeling and Characterization. , 2009, , . | | 1 |
| 48 | Improved current drivability with back-gate bias for elevated source and drain structured FD-SOI SiGe MOSFET. Microelectronic Engineering, 2009, 86, 2165-2169. | 2.4 | 1 |
| 49 | A comparison and analysis of genetic algorithm and particle swarm optimization using neural network models for high efficiency solar cell fabrication processes. , 2009, , . | | 5 |
| 50 | Neural-Network-Based Sensor Fusion of Optical Emission and Mass Spectroscopy Data for Real-Time Fault Detection in Reactive Ion Etching. IEEE Transactions on Industrial Electronics, 2005, 52, 1063-1072. | 7.9 | 35 |
| 51 | Neural Network-Based Real-Time Malfunction Diagnosis of Reactive Ion Etching Using In Situ Metrology Data. IEEE Transactions on Semiconductor Manufacturing, 2004, 17, 408-421. | 1.7 | 42 |
| 52 | Neural network modeling of reactive ion etching using optical emission spectroscopy data. IEEE Transactions on Semiconductor Manufacturing, 2003, 16, 598-608. | 1.7 | 74 |
| 53 | Characterization of low-temperature SU-8 photoresist processing for MEMS applications. , 0, , . | | 1 |
| 54 | A modular neural network for R2R diagnosis of semiconductor fabrication equipment: a reactive ion etching application. , 0, , . | | 1 |

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|----|---|-----|-----------|
| 55 | Chemical reaction mechanism of plasma scrubber for by-product treatment in TiN-atomic layer deposition processes. Japanese Journal of Applied Physics, 0, , . | 1.5 | 0 |