Takayuki Ohta

List of Publications by Year
in descending order

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61	990	471509 17	454955 30
papers	citations	h-index	g-index

61	61	61	929
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Current status and future prospects of agricultural applications using atmosphericâ€pressure plasma technologies. Plasma Processes and Polymers, 2018, 15, 1700073.	3.0	156
2	Rapid inactivation of Penicillium digitatum spores using high-density nonequilibrium atmospheric pressure plasma. Applied Physics Letters, 2010, 96, 153704.	3.3	88
3	Plasma agriculture. Journal of the Korean Physical Society, 2012, 60, 937-943.	0.7	76
4	Inactivation ofPenicillium digitatumSpores by a High-Density Ground-State Atomic Oxygen-Radical Source Employing an Atmospheric-Pressure Plasma. Applied Physics Express, 2011, 4, 116201.	2.4	71
5	Emission Enhancement of Laser-Induced Breakdown Spectroscopy by Localized Surface Plasmon Resonance for Analyzing Plant Nutrients. Applied Spectroscopy, 2009, 63, 555-558.	2.2	68
6	Inactivation effects of neutral reactive-oxygen species on Penicillium digitatum spores using non-equilibrium atmospheric-pressure oxygen radical source. Applied Physics Letters, 2013, 103, .	3.3	61
7	Real-time in situ electron spin resonance measurements on fungal spores of Penicillium digitatum during exposure of oxygen plasmas. Applied Physics Letters, 2012, 101, 013704.	3.3	33
8	Oxidation mechanism of Penicillium digitatum spores through neutral oxygen radicals. Japanese Journal of Applied Physics, 2014, 53, 010209.	1.5	33
9	Quantitative clarification of inactivation mechanism ofPenicillium digitatumspores treated with neutral oxygen radicals. Japanese Journal of Applied Physics, 2015, 54, 01AG05.	1.5	28
10	Inactivation Process of Penicillium digitatum Spores Treated with Non-equilibrium Atmospheric Pressure Plasma. Japanese Journal of Applied Physics, 2013, 52, 056202.	1.5	24
11	Bactericidal pathway ofEscherichia coliin buffered saline treated with oxygen radicals. Journal Physics D: Applied Physics, 2017, 50, 155208.	2.8	24
12	Growth control ofSaccharomyces cerevisiaethrough dose of oxygen atoms. Applied Physics Letters, 2015, 107, 093701.	3.3	22
13	Investigation on the longâ€term bactericidal effect and chemical composition of radicalâ€activated water. Plasma Processes and Polymers, 2019, 16, 1900055.	3.0	21
14	Measurement of Si, SiF, and SiF2 radicals and SiF4 molecule using very high frequency capacitively coupled plasma employing SiF4. Journal of Applied Physics, 2003, 94, 1428-1435.	2.5	19
15	Simultaneous achievement of antimicrobial property and plant growth promotion using plasmaâ€activated benzoic compound solution. Plasma Processes and Polymers, 2019, 16, 1900023.	3.0	19
16	Nanographene synthesis employing in-liquid plasmas with alcohols or hydrocarbons. Japanese Journal of Applied Physics, 2018, 57, 026201.	1.5	18
17	Simultaneous measurement of substrate temperature and thin-film thickness on SiO2/Si wafer using optical-fiber-type low-coherence interferometry. Journal of Applied Physics, 2009, 105, .	2.5	17
18	Low-Coherence Interferometry-Based Non-Contact Temperature Monitoring of a Silicon Wafer and Chamber Parts during Plasma Etching. Applied Physics Express, 2010, 3, 056201.	2.4	16

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19	Simultaneous monitoring of multimetallic atom densities in plasma processes employing a multimicrohollow cathode lamp. Applied Physics Letters, 2007, 90, 251502.	3.3	14
20	Feature Profiles on Plasma Etch of Organic Films by a Temporal Control of Radical Densities and Real-Time Monitoring of Substrate Temperature. Japanese Journal of Applied Physics, 2012, 51, 016202.	1.5	12
21	Formation of diamond-like carbon film using high-power impulse magnetron sputtering. Thin Solid Films, 2019, 672, 104-108.	1.8	12
22	Rapid measurement of substrate temperatures by frequency-domain low-coherence interferometry. Applied Physics Letters, 2013, 103, 182102.	3.3	11
23	Feature Profiles on Plasma Etch of Organic Films by a Temporal Control of Radical Densities and Real-Time Monitoring of Substrate Temperature. Japanese Journal of Applied Physics, 2012, 51, 016202.	1.5	11
24	Robust characteristics of semiconductor-substrate temperature measurement by autocorrelation-type frequency-domain low-coherence interferometry. Japanese Journal of Applied Physics, 2015, 54, 01AB03.	1.5	10
25	Lipid droplets exhaustion with caspases activation in HeLa cells cultured in plasma-activated medium observed by multiplex coherent anti-Stokes Raman scattering microscopy. Biointerphases, 2017, 12, 031006.	1.6	10
26	Feedback Control System of Wafer Temperature for Advanced Plasma Processing and its Application to Organic Film Etching. IEEE Transactions on Semiconductor Manufacturing, 2015, 28, 515-520.	1.7	9
27	Localized plasma irradiation through a micronozzle for individual cell treatment. Japanese Journal of Applied Physics, 2014, 53, 11RB03.	1.5	8
28	Inactivation mechanism of fungal spores through oxygen radicals in atmospheric-pressure plasma. Japanese Journal of Applied Physics, 2021, 60, 010503.	1.5	8
29	Intracellular-molecular changes in plasma-irradiated budding yeast cells studied using multiplex coherent anti-Stokes Raman scattering microscopy. Physical Chemistry Chemical Physics, 2017, 19, 13438-13442.	2.8	7
30	Effects of Carbon Nanowalls (CNWs) Substrates on Soft Ionization of Low-Molecular-Weight Organic Compounds in Surface-Assisted Laser Desorption/Ionization Mass Spectrometry (SALDI-MS). Nanomaterials, 2021, 11, 262.	4.1	7
31	Optical-Fiber-Type Broadband Cavity Ring-Down Spectroscopy Using Wavelength-Tunable Ultrashort Pulsed Light. Japanese Journal of Applied Physics, 2013, 52, 040201.	1.5	6
32	Real-time temperature monitoring of Si substrate during plasma processing and its heat-flux analysis. Japanese Journal of Applied Physics, 2016, 55, 01AB04.	1.5	6
33	Noncontact measurement of substrate temperature by optical low-coherence interferometry in high-power pulsed magnetron sputtering. Japanese Journal of Applied Physics, 2018, 57, 01AC03.	1.5	6
34	An Autonomously Controllable Plasma Etching System Based on Radical Monitoring. Japanese Journal of Applied Physics, 2012, 51, 076502.	1.5	5
35	Characteristics of optical emissions of arc plasma processing for high-rate synthesis of highly crystalline single-walled carbon nanotubes. Japanese Journal of Applied Physics, 2017, 56, 035101.	1.5	5
36	Atmospheric Pressure Plasma-Treated Carbon Nanowallsâ€™ Surface-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry (CNW-SALDI-MS). Journal of Carbon Research, 2019, 5, 40.	2.7	5

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37	Geometric characteristics of silicon cavities etched in EDP. Journal of Micromechanics and Microengineering, 2007, 17, 1012-1016.	2.6	4
38	Plasma agriculture based on quantitative monitoring of reactions between fungal cells and atmospheric-pressure plasmas. Materials Research Society Symposia Proceedings, 2012, 1469, 115.	0.1	4
39	Inâ€Liquid Plasma Synthesis of Nanographene with a Mixture of Methanol and 1â€Butanol. ChemNanoMat, 2020, 6, 604-609.	2.8	4
40	Atomic oxygen radicalâ€induced intracellular oxidization of mould spore cells. Plasma Processes and Polymers, 2020, 17, 2000001.	3.0	4
41	Line-Profiles and Translational Temperatures of Pb Atoms in Multi-Micro Hollow Cathode Lamp Measured by Diode Laser Absorption Spectroscopy. Japanese Journal of Applied Physics, 2012, 51, 086301.	1.5	4
42	Effects of Ar Dilution and Exciting Frequency on Absolute Density and Translational Temperature of Si Atom in Very High Frequency-Capacitively Coupled SiH4Plasmas. Japanese Journal of Applied Physics, 2004, 43, L94-L96.	1.5	3
43	Line-Profiles and Translational Temperatures of Pb Atoms in Multi-Micro Hollow Cathode Lamp Measured by Diode Laser Absorption Spectroscopy. Japanese Journal of Applied Physics, 2012, 51, 086301.	1.5	3
44	Temperature Measurement of Si Substrate Using Optical-Fiber-Type Low-Coherence Interferometry Employing Supercontinuum Light. Japanese Journal of Applied Physics, 2013, 52, 026602.	1.5	3
45	Mass Spectrometry Analysis of the Real-Time Transport of Plasma-Generated Ionic Species Through an Agarose Tissue Model Target. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2017, 30, 317-323.	0.3	3
46	An Autonomously Controllable Plasma Etching System Based on Radical Monitoring. Japanese Journal of Applied Physics, 2012, 51, 076502.	1.5	3
47	SimultaneousIn situMeasurement of Silicon Substrate Temperature and Silicon Dioxide Film Thickness during Plasma Etching of Silicon Dioxide Using Low-Coherence Interferometry. Japanese Journal of Applied Physics, 2012, 51, 046201.	1.5	2
48	Properties of Indiumâ€“Zinc-Oxide Films Synthesized by Radio Frequency Magnetron Sputtering Based on Gas Phase Monitoring Using Multi-Micro Hollow Cathode Lamp. Japanese Journal of Applied Physics, 2012, 51, 116202.	1.5	2
49	Effects of Driving Frequency on the Translational Temperature and Absolute Density of Si Atoms in Very High Frequency Capacitively Coupled SiF4Plasmas. Japanese Journal of Applied Physics, 2003, 42, L1532-L1534.	1.5	1
50	Study on the Absolute Density and Translational Temperature of Si Atoms in Very High Frequency Capacitively Coupled SiH4Plasma with Ar, N2, and H2Dilution Gases. Japanese Journal of Applied Physics, 2004, 43, 6405-6412.	1.5	1
51	Silicon dioxide etching process for fabrication of micro-optics employing pulse-modulated electron-beam-excited plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1725-1729.	2.1	1
52	Wavelength dependence for silicon-wafer temperature measurement by autocorrelation-type frequency-domain low-coherence interferometry. Applied Optics, 2015, 54, 7088.	2.1	1
53	Formation of Diamond-Like Carbon Film on Organic Substrate by High Power Impulse Magnetron Sputtering. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2022, 73, 47-52.	0.2	1
54	A Novel Silicon-Dioxide Etching Process Employing Pulse-Modulated Electron-Beam-Excited Plasma. Japanese Journal of Applied Physics, 2004, 43, L1166-L1168.	1.5	0

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55	Inactivation mechanism of Penicillium digitatum using atmospheric pressure plasma. , 2010, , .		0
56	Electron Spin Resonance (ESR) Observation of Radicals on Biological Organism Interacted with Plasmas. Materials Research Society Symposia Proceedings, 2012, 1469, 39.	0.1	0
57	Electron spin resonance (ESR) study of radicals on biological organism created by interaction with plasma. , 2012, , .		0
58	SimultaneousIn situMeasurement of Silicon Substrate Temperature and Silicon Dioxide Film Thickness during Plasma Etching of Silicon Dioxide Using Low-Coherence Interferometry. Japanese Journal of Applied Physics, 2012, 51, 046201.	1.5	0
59	Monitoring of Metallic-atom-density in Plasma Processes by Light Source for Absorption Spectroscopy using Micro Hollow Cathode Discharge. IEEJ Transactions on Fundamentals and Materials, 2010, 130, 972-976.	0.2	0
60	Applications of Electrostatics for Preservation and Distribution of Agricultural Products; Inactivation of Bacteria and Decomposition of Ethylene. Journal of the Institute of Electrical Engineers of Japan, 2016, 136, 810-815.	0.0	0
61	Substrate Surrounding Type Magnetron Sputtering Equipment Comparison of HiPIMS and DCMS Drive. IEEJ Transactions on Fundamentals and Materials, 2022, 142, 101-107.	0.2	0