Nobuya Hayashi

List of Publications by Year
in descending order

78	1,256	394421 19	395702 33
papers	citations	h-index	g-index

80	80	80	933
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Variations in Plant Growth Characteristics Due to Oxygen Plasma Irradiation on Leaf and Seed. Agronomy, 2022, 12, 259.	3.0	2
2	Time-Modulated LF-Microwave Hybrid Plasma for Surface Sterilization. IEEE Transactions on Plasma Science, 2021, 49, 154-161.	1.3	6
3	Removal of metal ions from water using oxygen plasma. Scientific Reports, 2021, 11, 9175.	3.3	18
4	Oxygen plasma modulates glucosinolate levels without affecting lipid contents and composition in Brassica napus seeds. Bioscience, Biotechnology and Biochemistry, 2021, 85, 2434-2441.	1.3	3
5	Surface sterilization using LF-microwave hybrid plasma. Japanese Journal of Applied Physics, 2021, 60, SAAE01.	1.5	3
6	Pulsed power applications for agriculture and food processing. Reviews of Modern Plasma Physics, 2021, 5, 1.	4.1	15
7	Effect of gas composition on surface sterilization by using LF-microwave hybrid plasma source. Japanese Journal of Applied Physics, 2020, 59, SAAB02.	1.5	9
8	Regulation of macrophage-like cell activity driven by atmospheric oxygen plasma. Japanese Journal of Applied Physics, 2020, 59, SHHF03.	1.5	1
9	Characteristics of differentiation of osteoclast cells irradiated with active species in atmospheric oxygen plasma. Japanese Journal of Applied Physics, 2020, 59, SJJF02.	1.5	4
10	Activation of EL-4 T-cells by irradiation with atmospheric oxygen plasma. Japanese Journal of Applied Physics, 2020, 59, SJJF03.	1.5	3
11	High-voltage technologies for agriculture and food processing. Journal Physics D: Applied Physics, 2019, 52, 473001.	2.8	49
12	Reprint of: Sterilization of small vial using electron cyclotron resonance plasma. Vacuum, 2019, 167, 586-590.	3.5	0
13	Activation of p53-Mediated Apoptosis Pathway in HSC3 Cancer Cell Irradiated by Atmospheric DBD Oxygen Plasma. IEEE Transactions on Plasma Science, 2019, 47, 1093-1099.	1.3	14
14	Current Plasma Sterilization and Disinfection Studies. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2018, 31, 389-398.	0.3	7
15	Sporicidal Activity of â€˜Peracetic Acid-containing Hydrogen Peroxide Gas Sterilizerâ€™. Iryou Kikigaku (the) Tj ETQq1 1 0.784314 rgBT	0.0	0
16	Sterilization of small vial using electron cyclotron resonance plasma. Vacuum, 2018, 157, 100-104.	3.5	3
17	Inactivation of bacteria on plant seed surface by low-pressure RF plasma using a vibrating stirring device. Vacuum, 2017, 136, 214-220.	3.5	17
18	Mechanism of Inactivation of Oral Cancer Cells Irradiated by Active Oxygen Species from DBD Plasma. Plasma Medicine, 2017, 7, 201-213.	0.6	6

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19	Effect of Oxygen Plasma Irradiation on Gene Expression in Plant Seeds Induced by Active Oxygen Species. Plasma Medicine, 2016, 6, 303-313.	0.6	19
20	DNA Microarray Analysis of Plant Seeds Irradiated by Active Oxygen Species in Oxygen Plasma. Plasma Medicine, 2016, 6, 459-471.	0.6	15
21	Growth enhancement and gene expression of Arabidopsis thaliana irradiated with active oxygen species. Japanese Journal of Applied Physics, 2016, 55, 07LG10.	1.5	11
22	Inactivation of Oral Cancer Cell Using Active Species Generated by Atmospheric Plasma. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2016, 29, 443-445.	0.3	2
23	Direct Plasma Disinfection of Green Mold Spore on Citrus by Atmospheric Pressure Dielectric Barrier Discharge for Agricultural Applications. Transactions of the Materials Research Society of Japan, 2016, 41, 127-130.	0.2	8
24	Decomposition of Proteins Using a Microwave Air Plasma Sterilizer. Transactions of the Materials Research Society of Japan, 2016, 41, 179-182.	0.2	5
25	Sterilization characteristics of dental instruments using oxygen plasma produced by narrow gap RF discharge. Japanese Journal of Applied Physics, 2016, 55, 07LG05.	1.5	4
26	Characteristics of surface sterilization using electron cyclotron resonance plasma. Japanese Journal of Applied Physics, 2016, 55, 07LG08.	1.5	6
27	Plant Growth Response to Atmospheric Air Plasma Treatments of Seeds of 5 Plant Species. MRS Advances, 2016, 1, 1265-1269.	0.9	9
28	Effects of plasma irradiation using various feeding gases on growth of Raphanus sativus L.. Archives of Biochemistry and Biophysics, 2016, 605, 129-140.	3.0	64
29	Characteristics of plasma sterilizer using microwave torch plasma with AC high-voltage discharge plasma. Japanese Journal of Applied Physics, 2016, 55, 01AB03.	1.5	10
30	Simple method of improving harvest by nonthermal air plasma irradiation of seeds of Arabidopsis thaliana (L.). Applied Physics Express, 2016, 9, 016201.	2.4	83
31	Antioxidative activity and growth regulation of Brassicaceae induced by oxygen radical irradiation. Japanese Journal of Applied Physics, 2015, 54, 06GD01.	1.5	40
32	Variation of antioxidative activity and growth enhancement of Brassicaceae induced by low-pressure oxygen plasma. Japanese Journal of Applied Physics, 2015, 54, 06GD03.	1.5	17
33	Growth Enhancement of Plant by Plasma and UV Light Irradiation to Seeds. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2015, 28, 445-448.	0.3	11
34	Effects of Atmospheric Air Plasma Irradiation to Seeds of Radish Sprouts on Chlorophyll and Carotenoids Concentrations in their Leaves. Materials Research Society Symposia Proceedings, 2015, 1723, 34.	0.1	4
35	Multigeneration Effects of Plasma Irradiation to Seeds of Arabidopsis Thaliana and Zinnia on Their Growth. Materials Research Society Symposia Proceedings, 2015, 1723, 7.	0.1	7
36	Evaluation of Antioxidative Properties of Plants Induced by Low-pressure Oxygen Plasma Irradiation. IEEJ Transactions on Fundamentals and Materials, 2015, 135, 347-352.	0.2	0

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37	Sterilization characteristics of the surfaces of agricultural products using active oxygen species generated by atmospheric plasma and UV light. Japanese Journal of Applied Physics, 2014, 53, 05FR03.	1.5	30
38	Sterilization of narrow tube inner surface using discharge plasma, ozone, and UV light irradiation. Vacuum, 2014, 110, 217-220.	3.5	31
39	Plasma induced long-term growth enhancement of Raphanus sativus L. using combinatorial atmospheric air dielectric barrier discharge plasmas. Current Applied Physics, 2014, 14, S149-S153.	2.4	85
40	Effects of Atmospheric Air Plasma Irradiation on pH of Water. , 2014, , .		3
41	Sterilization effect of nitrogen oxide radicals generated by microwave plasma using air. Vacuum, 2014, 110, 213-216.	3.5	22
42	Application of atmospheric discharge plasma to agricultural and marine products. Nihon AEM Gakkaishi, 2014, 22, 447-452.	0.1	0
43	Inactivation characteristics of Bacillus thuringiensis spore in liquid using atmospheric torch plasma using oxygen. Vacuum, 2013, 88, 173-176.	3.5	21
44	Treatment of Dipicolinic Acid and Inactivation Mechanism of Thermophile Spores Using Active Oxygen. Japanese Journal of Applied Physics, 2013, 52, 11NF03.	1.5	4
45	Influence of Atmospheric Pressure Torch Plasma Irradiation on Plant Growth. Materials Research Society Symposia Proceedings, 2012, 1469, 92.	0.1	4
46	Rapid Growth of Radish Sprouts Using Low Pressure O₂Radio Frequency Plasma Irradiation. Materials Research Society Symposia Proceedings, 2012, 1469, 61.	0.1	4
47	Growth Enhancement of Radish Sprouts Induced by Low Pressure O₂Radio Frequency Discharge Plasma Irradiation. Japanese Journal of Applied Physics, 2012, 51, 01AE01.	1.5	32
48	Effects of Atmospheric Pressure Dielectric Barrier Discharge Plasma Irradiation on Yeast Growth. Materials Research Society Symposia Proceedings, 2012, 1469, 86.	0.1	5
49	Growth Control of Dry Yeast Using Scalable Atmospheric-Pressure Dielectric Barrier Discharge Plasma Irradiation. Japanese Journal of Applied Physics, 2012, 51, 11PJ02.	1.5	13
50	Growth Enhancement of Radish Sprouts Induced by Low Pressure O₂Radio Frequency Discharge Plasma Irradiation. Japanese Journal of Applied Physics, 2012, 51, 01AE01.	1.5	58
51	Growth Control of Dry Yeast Using Scalable Atmospheric-Pressure Dielectric Barrier Discharge Plasma Irradiation. Japanese Journal of Applied Physics, 2012, 51, 11PJ02.	1.5	47
52	Agricultural Applications of Plasma. Journal of the Institute of Electrical Engineers of Japan, 2012, 132, 702-705.	0.0	1
53	Redox Characteristics of Thiol Compounds Using Radicals Produced by Water Vapor Radio Frequency Discharge. Japanese Journal of Applied Physics, 2011, 50, 08JF04.	1.5	12
54	Sterilization of Medical Equipment Using Air Torch Plasma Produced by Microwave Discharge. IEEE Transactions on Plasma Science, 2011, 39, 2976-2977.	1.3	15

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55	Redox Characteristics of Thiol Compounds Using Radicals Produced by Water Vapor Radio Frequency Discharge. Japanese Journal of Applied Physics, 2011, 50, 08JF04.	1.5	10
56	Redox characteristics of amino acids using low pressure water vapor RF plasma. , 2010, , .		0
57	Treatment Characteristics of Second Order Structure of Proteins Using Low-Pressure Oxygen RF Plasma. , 2010, , .		0
58	Treatment Characteristics of Polysaccharides and Endotoxin Using Oxygen Plasma Produced by RF Discharge. , 2010, , .		0
59	Growth stimulation of radish sprouts using discharge plasmas. , 2010, , .		2
60	Treatment of Second-Order Structures of Proteins Using Oxygen Radio Frequency Plasma. Japanese Journal of Applied Physics, 2010, 49, 08JH02.	1.5	5
61	Studies on Allergic Substance Elimination by RF Plasma Treatment. Transactions of the Materials Research Society of Japan, 2010, 35, 119-122.	0.2	1
62	Suppression of by-product generation in the treatment of aromatic perfumery substances using a surface discharge. Vacuum, 2008, 83, 138-141.	3.5	0
63	Sterilization Characteristics of Tube Inner Surface Using Oxygen Plasma Produced by AC HV Discharge. IEEE Transactions on Plasma Science, 2008, 36, 1304-1305.	1.3	16
64	Sterilization of Medical Equipment Using Oxygen Radicals Produced by Water Vapor RF Plasma. IEEE Transactions on Plasma Science, 2008, 36, 1302-1303.	1.3	33
65	Treatment of protein using oxygen plasma produced by RF discharge. Transactions of the Materials Research Society of Japan, 2008, 33, 791-794.	0.2	15
66	Effect of additive gases on synthesis of organic compounds from carbon dioxide using non-thermal plasma produced by atmospheric surface discharges. Vacuum, 2006, 80, 1299-1304.	3.5	31
67	Sterilization of Medical Equipment Using Radicals Produced by Oxygen/Water Vapor RF Plasma. Japanese Journal of Applied Physics, 2006, 45, 8358-8363.	1.5	91
68	Water Treatment Using Discharge on the Surface of a Bubble in Water. Plasma Processes and Polymers, 2005, 2, 246-251.	3.0	59
69	Effect of triggered discharge using an excimer laser with high-repetition-rate of the order of kilohertz. Applied Physics Letters, 2005, 86, 131502.	3.3	3
70	Lifetime evaluation of weakly ionized plasma channel by accumulation effect of charged particles by means of laser absorption. Journal of Applied Physics, 2004, 95, 6007-6010.	2.5	6
71	Title is missing!. Plasma Chemistry and Plasma Processing, 2003, 23, 569-583.	2.4	3
72	Ozone Generation Characteristics by Superimposed Discharge in Oxygen-Fed Ozonizer. Japanese Journal of Applied Physics, 2003, 42, 6578-6583.	1.5	29

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73	Generation of Radicals using Discharge inside Bubbles in Water for Water Treatment. Ozone: Science and Engineering, 2002, 24, 471-477.	2.5	51
74	Treatment of Fluorocarbon Using Nonthermal Plasma Produced by Atmospheric Discharge. Japanese Journal of Applied Physics, 2002, 41, 5399-5403.	1.5	6
75	Generation of Oxidants with a Foaming System and its Electrical Properties. Ozone: Science and Engineering, 2002, 24, 181-191.	2.5	6
76	Treatment of Volatile Organic Compound by Positive Streamer Corona Using a Series Gap. Japanese Journal of Applied Physics, 2001, 40, 6104-6108.	1.5	13
77	Studies on Electrical Discharge Effects in a Foaming Environment. Japanese Journal of Applied Physics, 2001, 40, 7061-7066.	1.5	11
78	Sterilization and Protein Treatment Using Oxygen Radicals Produced by RF Discharge. , 0, , 201-206.		2