

Kiichiro Uchino

List of Publications by Year in descending order

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106
papers

825
citations

567281

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134
all docs

134
docs citations

134
times ranked

508
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of Hydrogen-Induced Blistering of Mo/Si Multilayers with a Capping Layer. Plasma and Fusion Research, 2022, 17, 1406005-1406005.	0.7	6
2	Feasibility study on reactive ion etching occurrence in EUV-induced photoionized hydrogen plasmas based on electron temperature and electron density measurements. Japanese Journal of Applied Physics, 2022, 61, 056001.	1.5	1
3	Effect of Hydrogen Ion Energy in the Process of Reactive Ion Etching of Sn Thin Films by Hydrogen Plasmas. Plasma and Fusion Research, 2021, 16, 1406003-1406003.	0.7	3
4	Time-resolved spatial profiles of electron density and temperature in hydrogen plasmas induced by radiation from laser-produced tin plasmas for extreme ultraviolet lithography light sources. Japanese Journal of Applied Physics, 2021, 60, 066002.	1.5	1
5	Measurements of spatial distributions of electron density and temperature of 450 MHz UHF plasma using laser Thomson scattering. Japanese Journal of Applied Physics, 2021, 60, SAAB03.	1.5	3
6	Measurement of electron velocity distribution function in a pulsed positive streamer discharge in atmospheric-pressure air. Journal Physics D: Applied Physics, 2020, 53, 08LT01.	2.8	15
7	Aberration-corrected focused ion beam for time-of-flight secondary neutral mass spectrometry. Applied Physics Express, 2019, 12, 085005.	2.4	7
8	VHF Plasma CVD Synthesis of Photochromic ZnO Nanoparticle. MRS Advances, 2019, 4, 1573-1577.	0.9	0
9	Electronic data acquisition and operational control system for time-of-flight sputtered neutral mass spectrometer. Surface and Interface Analysis, 2019, 51, 35-39.	1.8	6
10	Two-dimensional simulations of multi-hollow VHF SiH ₄ /H ₂ plasma. AIP Advances, 2018, 8, .	1.3	1
11	Two dimensional simulations of triode VHF SiH ₄ plasma. Japanese Journal of Applied Physics, 2018, 57, 06JG01.	1.5	0
12	Spatial profiles of electron density, electron temperature, average ionic charge, and EUV emission of laser-produced Sn plasmas for EUV lithography. Japanese Journal of Applied Physics, 2017, 56, 036201.	1.5	15
13	Time-resolved two-dimensional profiles of electron density and temperature of laser-produced tin plasmas for extreme-ultraviolet lithography light sources. Scientific Reports, 2017, 7, 12328.	3.3	31
14	Study of spatial profiles of capacitively coupled VHF H ₂ plasma by simulation. Japanese Journal of Applied Physics, 2017, 56, 01AC05.	1.5	1
15	Measurement of Electron Density and Temperature Using Laser Thomson Scattering in PANTA. Plasma and Fusion Research, 2017, 12, 1401018-1401018.	0.7	10
16	Rayleigh Scattering Measurement of Neutral Atom Number Density Downstream of a Hall Thruster under Cold Flow Conditions. Transactions of the Japan Society for Aeronautical and Space Sciences, 2017, 60, 327-330.	0.7	1
17	Mechanism of VHF H ₂ plasma production at high pressures. Japanese Journal of Applied Physics, 2016, 55, 06HA02.	1.5	1
18	Observation of Bi-Maxwellian Distributions in a H ₂ Plasma Produced by a Narrow Gap VHF Discharge. Plasma Processes and Polymers, 2016, 13, 584-587.	3.0	1

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19	Evaluation of multi-turn time-of-flight mass spectrum of laser ionization mass nanoscope. Surface and Interface Analysis, 2016, 48, 1122-1126.	1.8	13
20	Electron density change of atmospheric-pressure plasmas in helium flow depending on the oxygen/nitrogen ratio of the surrounding atmosphere. Japanese Journal of Applied Physics, 2016, 55, 066101.	1.5	9
21	Corrigendum on: Observation of Bi-Maxwellian Distributions in a H ₂ Plasma Produced by a Narrow Gap VHF Discharge. Plasma Processes and Polymers, 2016, 13, 672-672.	3.0	0
22	Quantitative analysis of helium by post-ionization method using femtosecond laser technique. Surface and Interface Analysis, 2016, 48, 1181-1184.	1.8	7
23	Axial distribution of a VHF H ₂ plasma produced by a narrow gap discharge. Japanese Journal of Applied Physics, 2016, 55, 01AH01.	1.5	3
24	Two-dimensional simulations of a VHF H ₂ plasma for different discharge gaps and gas pressures. Japanese Journal of Applied Physics, 2016, 55, 07LD01.	1.5	2
25	Synthesis of photochromic nanoparticles and determination of the mechanism of photochromism. AIP Advances, 2016, 6, .	1.3	11
26	High spatial resolution imaging of helium isotope by TOF-NMS. Surface and Interface Analysis, 2016, 48, 1190-1193.	1.8	13
27	Development of a collective Thomson scattering system for laser-produced tin plasmas for extreme-ultraviolet light sources. Applied Physics Express, 2015, 8, 126101.	2.4	20
28	Thomson scattering diagnostics of SF ₆ gas-blasted arcs confined by a nozzle under free-recovery conditions. Journal Physics D: Applied Physics, 2015, 48, 265201.	2.8	26
29	Temporal evolution of electron density and electron temperature profiles in a non-thermal atmospheric-pressure plasma measured by laser Thomson scattering. Japanese Journal of Applied Physics, 2015, 54, 016101.	1.5	5
30	Simulation of balanced power feeding plasma surrounded by a metal box. Japanese Journal of Applied Physics, 2015, 54, 01AC04.	1.5	1
31	Depth profiling analysis of solar wind helium collected in diamond-like carbon film from <i>Genesis</i>. Geochemical Journal, 2015, 49, 559-566.	1.0	14
32	Thomson scattering diagnostics of atmospheric plasmas in contact with ionic liquids. Applied Physics Express, 2014, 7, 066101.	2.4	9
33	Estimation of negative ions in VHF SiH ₄ /H ₂ plasma. Japanese Journal of Applied Physics, 2014, 53, 116101.	1.5	2
34	Synthetic aperture radar using ultra-wideband microwave-modulated laser. Journal of Electromagnetic Waves and Applications, 2014, 28, 1275-1281.	1.6	2
35	Characteristics of Floating Potential in Negative Ion Plasma. Plasma Processes and Polymers, 2014, 11, 545-550.	3.0	3
36	Measurements of Electron Density and Electron Temperature of Arc Discharge Plasmas Containing Metallic Vapors Using Laser Thomson Scattering. Electrical Engineering in Japan (English Translation) Tj ETQq0 0 0 0 BT /Overclock 10 Tf		

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37	Development of an Ultra-High Performance Multi-Turn TOF-SIMS/SNMS System "MULTUM-SIMS/SNMS". Journal of the American Society for Mass Spectrometry, 2013, 24, 222-229.	2.8	8
38	Simulation of spatial characteristics of very high frequency hydrogen plasma produced by a balanced power feeding. Thin Solid Films, 2013, 547, 132-136.	1.8	9
39	Thomson scattering diagnostics of decay processes of Ar/SF ₆ gas-blast arcs confined by a nozzle. Journal Physics D: Applied Physics, 2013, 46, 382001.	2.8	28
40	Development of a 915 MHz ECR plasma source. Vacuum, 2013, 87, 123-127.	3.5	4
41	VHF SiH ₄ /H ₂ plasma characteristics with negative ions. Surface and Coatings Technology, 2013, 228, S433-S436.	4.8	2
42	Modeling and experimental detection of resonance frequency shift of a microwave cavity caused by a small conductive particle. Journal of Electromagnetic Waves and Applications, 2013, 27, 1114-1126.	1.6	2
43	Simulation of Effective Production of Very High Frequency Hydrogen Plasma Using a Balanced Power Feeding Method. Japanese Journal of Applied Physics, 2013, 52, 11ND01.	1.5	3
44	A Collective Laser Thomson Scattering System for Diagnostics of Laser-Produced Plasmas for Extreme Ultraviolet Light Sources. Applied Physics Express, 2013, 6, 076101.	2.4	13
45	Measurements of Electron Density and Electron Temperature of Arc Discharge Plasmas Containing Metallic Vapors using Laser Thomson Scattering. IEEJ Transactions on Fundamentals and Materials, 2013, 133, 458-464.	0.2	3
46	Diagnostics of VHF Argon Plasmas by Laser Thomson Scattering. Plasma and Fusion Research, 2013, 8, 1306114-1306114.	0.7	4
47	ArF Excimer Laser Operated at 10 kHz with Small Electrode Separations. The Review of Laser Engineering, 2013, 41, 517.	0.0	0
48	Development of laser ionization mass nanoscope (LIMAS). Surface and Interface Analysis, 2012, 44, 635-640.	1.8	20
49	Nondestructive Measurement of Sugar Content in Apples by Millimeter-Wave Reflectometry. Journal of Infrared, Millimeter, and Terahertz Waves, 2012, 33, 228-236.	2.2	8
50	Small-Conductive-Particle Detection with a Microwave Resonant Cavity. IEEJ Transactions on Industry Applications, 2012, 132, 788-793.	0.2	7
51	Thomson Scattering Diagnostics in the Plasma of an Ion Thruster. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2012, 10, Pb_79-Pb_83.	0.2	0
52	Control of large area VHF plasma produced at high pressure. Thin Solid Films, 2011, 519, 6931-6934.	1.8	8
53	Relationship between Ba atom emission and electrode temperature in a low-pressure fluorescent lamp. Thin Solid Films, 2010, 518, 3449-3452.	1.8	5
54	Development of large diameter ECR plasma source. Vacuum, 2010, 84, 1381-1384.	3.5	9

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55	Dominant ion species in VHF SiH ₄ /H ₂ plasma. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 549-552.	0.8	2
56	Ultra-high performance multi-turn TOF-SIMS system with a femto-second laser for post-ionization: investigation of the performance in linear mode. Surface and Interface Analysis, 2010, 42, 1598-1602.	1.8	16
57	Thomson Scattering Diagnostics of High Pressure Plasmas and Plasma Disturbances by Lasers. IEEJ Transactions on Fundamentals and Materials, 2010, 130, 1099-1104.	0.2	8
58	Influence of Widths of Discharge and Gas Density Depletion on High Repetition Glow Discharges in an ArF Excimer Laser for Microlithography. IEEJ Transactions on Fundamentals and Materials, 2010, 130, 1060-1066.	0.2	1
59	Development of VHF Plasma Source with Short Discharge Gap for Solar Cells. Plasma Processes and Polymers, 2009, 6, S273.	3.0	4
60	Study of dual-dipole antenna array for millimeter wave imaging. , 2009, , .		1
61	Elucidation of Steplike Output Energy Decrease Observed in ArF Excimer Laser for Microlithography. Japanese Journal of Applied Physics, 2007, 46, 2921-2925.	1.5	0
62	Effect of Glow-to-Arc Transition on Loss Mechanism of Ba Atoms from Electrode of Fluorescent Lamp. Japanese Journal of Applied Physics, 2007, 46, 6828-6830.	1.5	1
63	Loss of Ba Atom from the Electrode of Fluorescent Lamp Operating under AC and DC Discharges. IEEJ Transactions on Fundamentals and Materials, 2007, 127, 543-548.	0.2	2
64	Investigation of a Step-Like Output Energy Decrease Observed in an ArF Excimer Laser for Microlithography. Japanese Journal of Applied Physics, 2006, 45, L1030-L1032.	1.5	2
65	Study on Temporal and Spatial Distributions of Ba Atoms in Fluorescent Lamp Discharge Using Laser-Induced Florescence. Japanese Journal of Applied Physics, 2006, 45, 8109-8112.	1.5	3
66	In vacuosubstrate pretreatments for enhancing nanodiamond formation in electron cyclotron resonance plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1802-1806.	2.1	3
67	Laser Thomson Scattering Measurements of Electron Density and Temperature Profiles of a Striated Plasma in a Plasma Display Panel (PDP)-Like Discharge. Japanese Journal of Applied Physics, 2005, 44, L442-L444.	1.5	26
68	Laser Thomson scattering and optical emission studies of striated PDP micro-discharge plasmas. Journal of the Society for Information Display, 2005, 13, 639.	2.1	6
69	Performance Improvement of an ArF Excimer Laser for Microlithography by Means of Gaseous Impurity Control. The Review of Laser Engineering, 2005, 33, 262-266.	0.0	3
70	Development of the Third Stage Incoherent Laser Thomson Scattering Diagnostics of Plasmas. Journal of Plasma and Fusion Research, 2004, 80, 101-109.	0.4	0
71	Application of an Acousto-optic Laser Deflector to Interferometric Measurement of Discharges in Air. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 56-61.	0.2	8
72	Diamond nucleation density as a function of ion-bombardment energy in electron cyclotron resonance plasma. Physical Review B, 2003, 68, .	3.2	15

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73	Development of a High-Speed Laser Interferometer Using an Acousto-Optic Deflector. IEEJ Transactions on Electronics, Information and Systems, 2003, 123, 1531-1536.	0.2	7
74	One-Dimensional Simulation of Photo-Detached Electrons in Negative Ion Plasmas.. Journal of Plasma and Fusion Research, 2003, 79, 274-281.	0.4	5
75	Evaluation of Spectral Profiles of KrF Excimer Lasers for Microlithography. The Review of Laser Engineering, 2003, 31, 482-488.	0.0	0
76	Diamond Nucleation Enhancement on Si by Controlling Ion-Bombardment Energy in Electron Cyclotron Resonance Plasma. Japanese Journal of Applied Physics, 2002, 41, 5749-5750.	1.5	3
77	Direct measurement of electron density and temperature distributions in a micro-discharge plasma for a plasma display panel. Journal of Applied Physics, 2002, 91, 613-616.	2.5	65
78	Applicabilities of Laser Thomson Scattering to Various Kinds of Discharge Plasmas.. Journal of Plasma and Fusion Research, 2002, 78, 242-247.	0.4	4
79	Development of a laser wavefront sensor for measurement of discharges in air. IEEJ Transactions on Fundamentals and Materials, 2002, 122, 958-964.	0.2	1
80	Measurements of Electron Temperature and Density of a Micro-Discharge Plasma Using Laser Thomson Scattering. Japanese Journal of Applied Physics, 2001, 40, 326-329.	1.5	42
81	Verification of preoxidation effect on deposition of thin gate-quality silicon oxide films at low temperature by a sputtering-type ECR microwave plasma. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 72, 128-131.	3.5	0
82	Detection Limit of Laser Thomson Scattering for Low Density Discharge Plasmas. Japanese Journal of Applied Physics, 1999, 38, 3723-3730.	1.5	12
83	Performance Improvement of a Discharge-Pumped ArF Excimer Laser by Xenon Gas Addition. Japanese Journal of Applied Physics, 1999, 38, 6735-6738.	1.5	8
84	Development of New Laser-Spectroscopic Methods of Electric Field Measurements in Plasmas.. Journal of Plasma and Fusion Research, 1999, 75, 275-285.	0.4	0
85	Effects of oxygen content on properties of silicon oxide films prepared at room temperature by sputtering-type electron cyclotron resonance plasma. Journal of Applied Physics, 1998, 84, 4579-4584.	2.5	6
86	Observation of Si cluster formation in SiO ₂ films through annealing process using x-ray photoelectron spectroscopy and infrared techniques. Applied Physics Letters, 1998, 72, 725-727.	3.3	30
87	In situ FT-IR reflective absorption spectroscopy for characterization of SiO ₂ thin films deposited using sputtering-type electron cyclotron resonance microwave plasma. Applied Surface Science, 1997, 121-122, 228-232.	6.1	9
88	Development of a Barometer Using Rayleigh Scattering in the Medium Vacuum Region.. Shinku/Journal of the Vacuum Society of Japan, 1995, 38, 11-16.	0.2	1
89	Possibility of Employing Laser Rayleigh Scattering as a Standard Vacuum Gauge and a Pressure Sensor in the Medium Vacuum Region.. Shinku/Journal of the Vacuum Society of Japan, 1993, 36, 563-567.	0.2	2
90	Laser diagnostics of edge plasmas and laser diagnostics of plasmas for industrial applications (invited). Review of Scientific Instruments, 1992, 63, 4913-4919.	1.3	14

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91	Thomson Scattering Diagnostics of an ECR Processing Plasma. Japanese Journal of Applied Physics, 1991, 30, L1425-L1427.	1.5	19
92	Application of two-photon-excited laser-induced fluorescence to atomic hydrogen measurements in the edge region of high-temperature plasmas. Review of Scientific Instruments, 1991, 62, 2345-2349.	1.3	17
93	Pressure measurement at medium vacuum by Rayleigh scattering of laser light.. Shinku/Journal of the Vacuum Society of Japan, 1991, 34, 275-278.	0.2	0
94	Studies of Particle Behaviour in Heliotron E by Means of Balmer-Alpha Laser Fluorescence Spectroscopy. Journal of the Physical Society of Japan, 1988, 57, 909-917.	1.6	19
95	Ruby-Laser Scattering Diagnostics of a Supersonic Plasma Flow for Low-Pressure Plasma Spraying. Japanese Journal of Applied Physics, 1987, 26, L1724-L1726.	1.5	14
96	Studies of Hydrogen Atoms in High-Temperature Plasmas by Laser Fluorescence Spectroscopy at Balmer Series. Kakuyō Kenkyū, 1987, 57, 177-192.	0.1	2
97	Measurements of Atomic Hydrogen-Density Profiles in the RFC-XX-M Machine Using Laser Fluorescence Spectroscopy at the H α Transition. Japanese Journal of Applied Physics, 1985, 24, L59-L61.	1.5	11
98	Ruby-Laser Scattering Diagnostics of DC-Arcs in Atmospheric Air. Japanese Journal of Applied Physics, 1984, 23, 662-662.	1.5	5
99	Studies of an Atmospheric Impulse Arc by Ruby-Laser Scattering. IEEJ Transactions on Fundamentals and Materials, 1983, 103, 609-616.	0.2	8
100	Studies of an Impulse Breakdown Process in an Atmospheric Air Using Ruby-Laser Scattering Diagnostics. Japanese Journal of Applied Physics, 1982, 21, L696-L698.	1.5	20
101	Sterilization and Protein Treatment Using Oxygen Radicals Produced by RF Discharge. , 0, , 201-206.		2
102	Plasma Deposition of N-TiO ₂ Thin Films. , 0, , 349-356.		1
103	Applications of Pulsed Power and Plasmas to Biosystems and Living Organisms. , 0, , 149-163.		0
104	Elimination of Pathogenic Biological Residuals by Means of Low-Pressure Inductively Coupled Plasma Discharge. , 0, , 193-199.		3
105	Chemistry of Organic Pollutants in Atmospheric Plasmas. , 0, , 79-92.		0
106	Hydrophilicity and Bioactivity of a Polyethylene Terephthalate Surface Modified by Plasma-Initiated Graft Polymerization. , 0, , 207-219.		0