

Chin-Wook Chung

List of Publications by Year in descending order

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122
papers

1,722
citations

304743

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123
docs citations

123
times ranked

682
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of RF bias power on discharge mode transition and its hysteresis in inductively coupled plasmas. <i>Physics of Plasmas</i> , 2022, 29, .	1.9	4
2	Plasma and electrical characteristics depending on an antenna position in an inductively coupled plasma with a passive resonant antenna. <i>Plasma Sources Science and Technology</i> , 2022, 31, 015002.	3.1	1
3	Low-energy electron beam generation in inductively coupled plasma via a DC biased grid. <i>Plasma Sources Science and Technology</i> , 2022, 31, 025002.	3.1	3
4	Two-dimensional measurements of the ELM filament using a multi-channel electrical probe array with high time resolution at the far SOL region in the KSTAR. <i>Nuclear Engineering and Technology</i> , 2022, , .	2.3	0
5	Local electron and ion density control using passive resonant coils in inductively coupled plasma. <i>Plasma Sources Science and Technology</i> , 2021, 30, 025002.	3.1	4
6	Effects of RF bias frequency and power on the plasma parameters and ash rate in a remote plasma source. <i>Plasma Sources Science and Technology</i> , 2021, 30, 025009.	3.1	5
7	Correlation of RF impedance with Ar plasma parameters in semiconductor etch equipment using inductively coupled plasma. <i>AIP Advances</i> , 2021, 11, 025027.	1.3	7
8	Control of the spatial distribution of ion flux in dual inductively coupled plasmas. <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	3
9	A wafer-like apparatus for two-dimensional measurement of plasma parameters and temperature distribution in low-temperature plasmas. <i>Review of Scientific Instruments</i> , 2021, 92, 053531.	1.3	4
10	Experimental investigation on optimal plasma generation in inductively coupled plasma. <i>Physics of Plasmas</i> , 2021, 28, 053507.	1.9	2
11	Development of high-efficiency capacitive discharge using magnetic resonance wireless power transfer systems. <i>Plasma Sources Science and Technology</i> , 2021, 30, 055017.	3.1	0
12	Noninvasive method to measure the electron temperature in radio frequency capacitively coupled plasmas. <i>Applied Physics Letters</i> , 2021, 118, 204101.	3.3	1
13	Response to "Comment on 'A study on improvement of discharge characteristic by using a transformer in a capacitively coupled plasma'" [Phys. Plasmas 28, 064701 (2021)]. <i>Physics of Plasmas</i> , 2021, 28, 064702.	1.9	1
14	Improvement of the floating probe method for ion density and electron temperature measurement without compensation due to voltage reduction across the sheath. <i>Plasma Sources Science and Technology</i> , 2021, 30, 065006.	3.1	1
15	Simultaneous measurements of plasma parameters and blob characteristics at the far-SOL region using a hybrid probe in KSTAR. <i>Fusion Engineering and Design</i> , 2021, 172, 112900.	1.9	1
16	Hysteresis control using a DC magnetic field in an argon inductively coupled plasma. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	1
17	Effect of the RF bias on the plasma density in an argon inductively coupled plasma. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	13
18	Experimental observation of the effect of electron attachment and detachment reactions on the electron energy distribution in an inductive oxygen discharge. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	2

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19	The opposite pressure dependence of electron temperature with respect to O ₂ /Ar mixing ratio in an inductively coupled plasma. <i>Physics of Plasmas</i> , 2020, 27, 113504.	1.9	0
20	Electrical and plasma characterization of a hybrid plasma source combined with inductively coupled and capacitively coupled plasmas for O atom generation. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	2
21	Nonlinear circuit analysis of intermodulation currents in a floating Langmuir probe with a capacitive load. <i>Physics of Plasmas</i> , 2020, 27, 033508.	1.9	1
22	A method for measuring negative ion density distribution using harmonic currents in a low-pressure oxygen plasma. <i>Plasma Sources Science and Technology</i> , 2020, 29, 065017.	3.1	4
23	Effect of low frequency power on the electron energy distribution function in argon inductively coupled plasmas. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2020, 38, .	1.2	6
24	Effect of electron kinetics on plasma density in inductively coupled plasmas using a passive resonant antenna. <i>Physics of Plasmas</i> , 2020, 27, 063511.	1.9	2
25	Control of electron and ion density profiles via virtual ground position control in an inductively coupled plasma. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	2
26	On the E to H mode transition in a dual frequency (2 and 13.56â€‰MHz) inductively coupled plasma. <i>Physics of Plasmas</i> , 2020, 27, 023503.	1.9	7
27	Hysteresis and current reduction during Eâ€‰H mode transition in an inductively coupled plasma. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	5
28	A method for measuring plasma parameters and dielectric film thickness by analyzing transient voltages for deposition plasma processing monitoring. <i>Plasma Sources Science and Technology</i> , 2020, 29, 075006.	3.1	1
29	Improvement of Plasma Resistance of Anodic Aluminum-Oxide Film in Sulfuric Acid Containing Cerium(IV) Ion. <i>Coatings</i> , 2020, 10, 103.	2.6	7
30	Electron energy distribution modification by RF bias in Ar/SF ₆ inductively coupled plasmas. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	9
31	Degradation Test for an Anodic Aluminum Oxide Film in Plasma Etching. <i>Journal of the Korean Physical Society</i> , 2019, 74, 1046-1051.	0.7	1
32	High efficient plasma generation in an inductively coupled plasma using a passive resonant antenna. <i>Plasma Sources Science and Technology</i> , 2019, 28, 105018.	3.1	6
33	Experimental investigation on the spatial distribution of floating potential at the wafer-level in inductively coupled oxygen plasma. <i>Physics of Plasmas</i> , 2019, 26, 083509.	1.9	3
34	Experimental investigation on the reduction in antenna coil current during the E to H mode transition in an inductively coupled plasma. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	3
35	Experimental comparative analysis on series and parallel antenna in an inductively coupled plasma. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2019, 37, 062922.	1.2	0
36	Measurement of the electron energy distribution function in CO ₂ inductively coupled plasma. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	5

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37	Noninvasive electrical plasma monitoring method using reactor substrates as alternative current-sensing electrodes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018, 36, 031302.	2.1	1
38	A monitoring device made of an anodic aluminum oxide template for plasma-induced charging potential measurements in the high-aspect-ratio trench structure. <i>Review of Scientific Instruments</i> , 2018, 89, 115006.	1.3	0
39	Transient voltage analysis on a series capacitor of the floating probe for plasma diagnostics. <i>Plasma Sources Science and Technology</i> , 2018, 27, 075010.	3.1	4
40	Evolution of two-dimensional plasma parameters in the plane of the wafer during the E- to H- and H- to E-mode transition in an inductively coupled plasma. <i>Plasma Sources Science and Technology</i> , 2018, 27, 055018.	3.1	5
41	Compensation of the sheath effects in cylindrical floating probes. <i>Physics of Plasmas</i> , 2018, 25, 053516.	1.9	0
42	Pulsed floating-type Langmuir probe for measurements of electron energy distribution function in plasmas. <i>Physics of Plasmas</i> , 2017, 24, 013508.	1.9	1
43	Effect of remote inductively coupled plasma (ICP) on the electron energy probability function of an in-tandem main ICP. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	10
44	A study on plasma parameters in Ar/SF ₆ inductively coupled plasma. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	9
45	Evolution of electron temperature in inductively coupled plasma. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	28
46	Temporal evolution of two-dimensional electron temperature and ion flux on a substrate in a pulsed-power inductively coupled plasma. <i>Physics of Plasmas</i> , 2017, 24, 053510.	1.9	6
47	Nonlinear circuit analysis of harmonic currents in a floating Langmuir probe with a capacitive load. <i>Plasma Sources Science and Technology</i> , 2017, 26, 025001.	3.1	6
48	Improved numerical AC superposition method for electron energy distribution functions. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	8
49	Experimental investigation of edge-to-center density ratio in E-H mode transition of an inductively coupled plasma. <i>Physics of Plasmas</i> , 2017, 24, 123506.	1.9	10
50	Global model including multistep ionizations in helium plasmas. <i>Physics of Plasmas</i> , 2016, 23, 123508.	1.9	7
51	Control of the floating potential using dual-frequency. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	3
52	Probe diagnostics in the far scrape-off layer plasma of Korea Superconducting Tokamak Advanced Research tokamak using a sideband harmonic method. <i>Review of Scientific Instruments</i> , 2015, 86, 123508.	1.3	4
53	Real-time dielectric-film thickness measurement system for plasma processing chamber wall monitoring. <i>Review of Scientific Instruments</i> , 2015, 86, 123502.	1.3	3
54	Experimental investigation on plasma parameter profiles on a wafer level with reactor gap lengths in an inductively coupled plasma. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	12

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55	Pulsed plasma measurement method using harmonic analysis. Journal of Applied Physics, 2015, 117, 243302.	2.5	8
56	Effect of Electron Energy Distribution on the Hysteresis of Plasma Discharge: Theory, Experiment and Modeling. Scientific Reports, 2015, 5, 15254.	3.3	26
57	The sheath effect on the floating harmonic method. Physics of Plasmas, 2015, 22, 123503.	1.9	4
58	Relatively high plasma density in low pressure inductive discharges. Physics of Plasmas, 2015, 22, 093517.	1.9	1
59	A study on improvement of discharge characteristic by using a transformer in a capacitively coupled plasma. Physics of Plasmas, 2015, 22, .	1.9	4
60	Effect of the electron energy distribution on total energy loss with argon in inductively coupled plasmas. Physics of Plasmas, 2015, 22, .	1.9	8
61	E-H heating mode transition in inductive discharges with different antenna sizes. Physics of Plasmas, 2015, 22, .	1.9	15
62	Electron heating and control of electron energy distribution for the enhancement of the plasma ashing processing. Plasma Sources Science and Technology, 2015, 24, 024001.	3.1	16
63	Control of Spatial Power Deposition by Wireless Power Transfer Method Applicable to Inductively Coupled Plasma. IEEE Transactions on Plasma Science, 2015, 43, 2766-2767.	1.3	3
64	Measurement of sheath thickness at a floating potential. Physics of Plasmas, 2014, 21, 023512.	1.9	5
65	Experimental observation of the plasma potential with the screening temperature. Physics of Plasmas, 2014, 21, 033506.	1.9	2
66	Investigation of the Boltzmann relation in plasmas with non-Maxwellian electron distribution. Physics of Plasmas, 2014, 21, 023511.	1.9	9
67	Study on Plasma Uniformity Using 2-D Measurement Method in Argon Inductively Coupled Plasmas. IEEE Transactions on Plasma Science, 2014, 42, 2858-2859.	1.3	1
68	Enhanced Plasma Uniformity in RF Plasma With Side Multihole. IEEE Transactions on Plasma Science, 2014, 42, 2766-2767.	1.3	0
69	Colorimetric polydiacetylene for plasma diagnostics. Sensors and Actuators B: Chemical, 2014, 203, 130-134.	7.8	6
70	Effect of antenna size on electron kinetics in inductively coupled plasmas. Physics of Plasmas, 2013, 20, 101607.	1.9	26
71	Two-dimensional-spatial distribution measurement of electron temperature and plasma density in low temperature plasmas. Review of Scientific Instruments, 2013, 84, 053505.	1.3	17
72	A study on the maximum power transfer condition in an inductively coupled plasma using transformer circuit model. Physics of Plasmas, 2013, 20, .	1.9	14

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73	Understanding the Synthesis of Ethylene Glycol Pulsed Plasma Discharges. Plasma Processes and Polymers, 2013, 10, 119-135.	3.0	19
74	Mode transition of power dissipation and plasma parameters in an asymmetric capacitive discharge. Thin Solid Films, 2013, 547, 38-42.	1.8	1
75	Spatial measurements of electron energy distribution and plasma parameters in a weakly magnetized inductive discharge. Physics of Plasmas, 2013, 20, .	1.9	6
76	Method for measurement of transferred power to plasma in inductive discharges. Thin Solid Films, 2013, 547, 9-12.	1.8	7
77	Discharge mode transition and hysteresis in inductively coupled plasma. Applied Physics Letters, 2013, 102, .	3.3	36
78	Experimental verification of the Boltzmann relation in confined plasmas: Comparison of noble and molecule gases. Physics of Plasmas, 2013, 20, 033504.	1.9	26
79	Transition of electron kinetics in weakly magnetized inductively coupled plasmas. Physics of Plasmas, 2013, 20, 101612.	1.9	10
80	Plasma diagnostic method using intermodulation frequencies in a Langmuir probe. Applied Physics Letters, 2013, 103, .	3.3	14
81	Effects of capacitor termination to an antenna coil on the plasma parameters in a radio frequency inductively coupled plasma. Plasma Sources Science and Technology, 2013, 22, 055011.	3.1	10
82	Control of plasma density distribution via wireless power transfer in an inductively coupled plasma. Plasma Sources Science and Technology, 2013, 22, 032002.	3.1	6
83	Variation of the electron energy distribution with He dilution in an inductively coupled argon discharge. Physics of Plasmas, 2012, 19, .	1.9	16
84	Collisionless electron heating by radio frequency bias in low gas pressure inductive discharge. Applied Physics Letters, 2012, 101, .	3.3	50
85	Plasma diagnostics with high-time resolution based on floating harmonic method in pulsed plasma. , 2012, , .		0
86	Effect of helium on spatial plasma parameters in low pressure argon-helium plasma. Applied Physics Letters, 2012, 100, 164107.	3.3	6
87	Comparisons of the electrical characteristics by impedance matching conditions on the Eâ€H and Hâ€E transition and the hysteresis of inductively coupled plasma. Thin Solid Films, 2012, 521, 185-188.	1.8	17
88	Electromagnetically coupled resonators using toroidal ferrite core for wireless power transfer. , 2012, , .		3
89	Double probe diagnostics based on harmonic current detection for electron temperature and electropositive ion flux measurement in RF plasmas. Measurement Science and Technology, 2012, 23, 085001.	2.6	10
90	Determination of metastable level densities in a low-pressure inductively coupled argon plasma by the line-ratio method of optical emission spectroscopy. Journal Physics D: Applied Physics, 2011, 44, 285203.	2.8	12

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91	Evolution of Two-Dimensional Plasma Density on the E-H Heating-Mode Transition in Planar-Type Inductively Coupled Plasma. IEEE Transactions on Plasma Science, 2011, 39, 2536-2537.	1.3	10
92	E-H mode transition in inductively coupled plasma using Ar, O2, N2, and mixture gas. Current Applied Physics, 2011, 11, S149-S153.	2.4	34
93	Effects of RF bias power on electron energy distribution function and plasma uniformity in inductively coupled argon plasma. Thin Solid Films, 2011, 519, 7009-7013.	1.8	42
94	Harmonic analysis of sideband signals generated in plasmas. Thin Solid Films, 2011, 519, 7042-7044.	1.8	12
95	Measurements of the total energy lost per electron-ion pair lost in low-pressure inductive argon, helium, oxygen and nitrogen discharge. Plasma Sources Science and Technology, 2011, 20, 015005.	3.1	14
96	Electron energy flux control using dual power in side-type inductively coupled plasma. Physics of Plasmas, 2011, 18, .	1.9	16
97	Observation of pressure gradient and related flow rate effect on the plasma parameters in plasma processing reactor. Physics of Plasmas, 2011, 18, .	1.9	19
98	Comparison of pressure dependence of electron energy distributions in oxygen capacitively and inductively coupled plasmas. Physical Review E, 2010, 81, 046402.	2.1	32
99	Low energy electron heating and evolution of the electron energy distribution by diluted O2 in an inductive Ar/O2 mixture discharge. Physics of Plasmas, 2010, 17, 013501.	1.9	33
100	Measurement of electron temperature and ion density using the self-bias effect in plasmas. Physics of Plasmas, 2010, 17, .	1.9	22
101	Evolution of the electron energy distribution and E-H mode transition in inductively coupled nitrogen plasma. Physics of Plasmas, 2010, 17, 033506.	1.9	63
102	Experimental investigation of edge-to-center density ratio in inductively coupled plasmas. Physics of Plasmas, 2010, 17, 073504.	1.9	13
103	Measurement of the total energy losses per electron-ion lost in various mixed gas inductively coupled plasmas. Physics of Plasmas, 2010, 17, 043508.	1.9	6
104	Effects of rf-bias power on plasma parameters in a low gas pressure inductively coupled plasma. Applied Physics Letters, 2010, 96, .	3.3	76
105	Experimental observation of the transition from nonlocal to local electron kinetics in inductively coupled plasmas. Applied Physics Letters, 2010, 96, .	3.3	78
106	Observation of inverse hysteresis in the E to H mode transitions in inductively coupled plasmas. Plasma Sources Science and Technology, 2010, 19, 015011.	3.1	29
107	<i>In situ</i> method for real time measurement of dielectric film thickness in plasmas. Journal of Applied Physics, 2010, 107, .	2.5	18
108	Inductively coupled RF heating of nano-particle for non-invasive and selective cancer cell destruction. , 2010, , .		0

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109	Experimental measurement of the total energy losses in a low pressure inductively coupled argon plasma. Applied Physics Letters, 2009, 95, 111501.	3.3	8
110	Observation of collisionless heating of low energy electrons in low pressure inductively coupled argon plasmas. Applied Physics Letters, 2008, 93, .	3.3	22
111	Floating probe for electron temperature and ion density measurement applicable to processing plasmas. Journal of Applied Physics, 2007, 101, 033305.	2.5	161
112	Noninvasive method to measure the ion flux in capacitive discharge. Applied Physics Letters, 2007, 91, 221505.	3.3	6
113	On the hysteresis in E to H and H to E transitions and the multistep ionization in inductively coupled plasma. Applied Physics Letters, 2007, 90, 191502.	3.3	67
114	New Method to Measure the Electron Temperature and the Plasma Density in a Single-Frequency Capacitive Discharge. Journal of the Korean Physical Society, 2007, 51, 1307.	0.7	1
115	On the multistep ionizations in an argon inductively coupled plasma. Physics of Plasmas, 2006, 13, 053502.	1.9	57
116	On the E to H and H to E transition mechanisms in inductively coupled plasma. Physics of Plasmas, 2006, 13, 063510.	1.9	88
117	Distributed Ferromagnetic Inductively Coupled Plasma as an Alternative Plasma Processing Tool. Japanese Journal of Applied Physics, 2006, 45, 8035-8041.	1.5	29
118	Self-consistent global model with multi-step ionizations in inductively coupled plasmas. Physics of Plasmas, 2005, 12, 073501.	1.9	75
119	Effect of multistep ionizations on the electron temperature in an argon inductively coupled plasma. Applied Physics Letters, 2005, 87, 131502.	3.3	38
120	Enhanced plasma generation in capacitively coupled plasma using a parallel inductor. Plasma Sources Science and Technology, 0, , .	3.1	3
121	Measurement of the electron energy distribution functions in low density RF plasmas through a tunable external RF filter. Plasma Sources Science and Technology, 0, , .	3.1	1
122	Correlation of SiO ₂ etch rate in CF ₄ plasma with electrical circuit parameter obtained from VI probe in inductively coupled plasma etcher. Journal Physics D: Applied Physics, 0, , .	2.8	1