Hannu Koivisto

List of Publications by Year in descending order

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88	1,179	394421 19	454955 30
papers	citations	h-index	g-index

88	88	88	403
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Diagnostic techniques of minimum-B ECR ion source plasma instabilities. Review of Scientific Instruments, 2022, 93, 013302.	1.3	5
2	Influence of axial mirror ratios on the kinetic instability threshold in electron cyclotron resonance ion source plasma. Physics of Plasmas, 2022, 29, .	1.9	6
3	Quasi-periodical kinetic instabilities in minimum-B confined plasma. AIP Advances, 2022, 12, 015223.	1.3	3
4	Measurement of ionization, charge exchange and ion confinement times in charge breeder ECR ion sources with short pulse 1+ injection of metal ions. Journal of Physics: Conference Series, 2022, 2244, 012009.	0.4	2
5	The role of radio frequency scattering in high-energy electron losses from minimum-B ECR ion source. Plasma Physics and Controlled Fusion, 2021, 63, 045007.	2.1	13
6	Controlled turbulence regime of electron cyclotron resonance ion source for improved multicharged ion performance. Journal Physics D: Applied Physics, 2021, 54, 385201.	2.8	7
7	Correlation of bremsstrahlung and energy distribution of escaping electrons to study the dynamics of magnetically confined plasma. Plasma Physics and Controlled Fusion, 2021, 63, 095010.	2.1	7
8	Photo-assisted Oâ^' and Alâ^' production with a cesium sputter ion source. AIP Conference Proceedings, 2021, , .	0.4	2
9	Experimental evidence on photo-assisted Oâ^' ion production from Al2O3 cathode in cesium sputter negative ion source. Journal of Applied Physics, 2020, 128, .	2.5	6
10	Effects of magnetic configuration on hot electrons in a minimum-B ECR plasma. Plasma Physics and Controlled Fusion, 2020, 62, 095015.	2.1	5
11	Estimating ion confinement times from beam current transients in conventional and charge breeder ECRIS. Review of Scientific Instruments, 2020, 91, 013304.	1.3	9
12	Charge breeding at GANIL: Improvements, results, and comparison with the other facilities. Review of Scientific Instruments, 2020, 91, 023315.	1.3	8
13	ECRIS plasma spectroscopy with a high resolution spectrometer. Review of Scientific Instruments, 2020, 91, 013318.	1.3	11
14	A new 18 GHz room temperature electron cyclotron resonance ion source for highly charged ion beams. Review of Scientific Instruments, 2020, 91, 023303.	1.3	8
15	Measurements of the energy distribution of electrons lost from the minimum B-fieldâ€"The effect of instabilities and two-frequency heating. Review of Scientific Instruments, 2020, 91, 013502.	1.3	15
16	Method for estimating charge breeder ECR ion source plasma parameters with short pulse 1+ injection of metal ions. Plasma Sources Science and Technology, 2020, 30, 035018.	3.1	9
17	A study of VUV emission and the extracted electron-ion ratio in hydrogen and deuterium plasmas of a filament-driven Hâ^'/Dâ^' ion source. Physics of Plasmas, 2019, 26, 073517.	1.9	3
18	Spectroscopic study of ion temperature in minimum-B ECRIS plasma. Plasma Sources Science and Technology, 2019, 28, 075006.	3.1	18

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19	The biased disc of an electron cyclotron resonance ion source as a probe of instability-induced electron and ion losses. Review of Scientific Instruments, 2019, 90, 123303.	1.3	3
20	Spectroscopic method to study low charge state ion and cold electron population in ECRIS plasma. Review of Scientific Instruments, 2018, 89, 043506.	1.3	16
21	Measurement of the energy distribution of electrons escaping minimum-B ECR plasmas. Plasma Sources Science and Technology, 2018, 27, 025012.	3.1	28
22	The effect of plasma instabilities on the background impurities in charge breeder ECRIS. AIP Conference Proceedings, 2018, , .	0.4	3
23	Investigation into the gas mixing effect in ECRIS plasma using KÎ± and optical diagnostics. AIP Conference Proceedings, 2018, , .	0.4	1
24	Studying the double-frequency heating mode in ECRIS plasma using KÎ± diagnostics. AIP Conference Proceedings, 2018, , .	0.4	1
25	Status of new 18â€...GHz ECRIS HIISI. AIP Conference Proceedings, 2018, , .	0.4	3
26	The effect of microwave power on the Ar9+ and Ar13+ optical emission intensities and ion beam currents in ECRIS. AIP Conference Proceedings, 2018, , .	0.4	3
27	Microwave emission from ECR plasmas under conditions of two-frequency heating induced by kinetic instabilities. AIP Conference Proceedings, 2018, , .	0.4	2
28	Inner shell ionization of argon in ECRIS plasma. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 900, 40-52.	1.6	9
29	Experimental evidence on microwave induced electron losses from ECRIS plasma. Physics of Plasmas, 2018, 25, 062502.	1.9	8
30	Broadband microwave emission spectrum associated with kinetic instabilities in minimum-B ECR plasmas. Physics of Plasmas, 2017, 24, 043515.	1.9	14
31	Plasma instabilities of a charge breeder ECRIS. Plasma Sources Science and Technology, 2017, 26, 105002.	3.1	11
32	Hydrogen plasma induced photoelectron emission from low work function cesium covered metal surfaces. Physics of Plasmas, 2017, 24, 103502.	1.9	10
33	Photoelectron emission experiments with ECR-driven multi-dipolar negative ion plasma source. AIP Conference Proceedings, 2017, , .	0.4	1
34	Time resolved measurements of hydrogen ion energy distributions in a pulsed 2.45 GHz microwave plasma. Physics of Plasmas, 2017, 24, 113501.	1.9	5
35	Power efficiency improvements with the radio frequency Hâ¯ ion source. Review of Scientific Instruments, 2016, 87, 02B102.	1.3	6
36	The effect of cavity tuning on oxygen beam currents of an A-ECR type 14 GHz electron cyclotron resonance ion source. Review of Scientific Instruments, 2016, 87, 093301.	1.3	4

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37	Photoelectron emission from metal surfaces induced by radiation emitted by a 14 GHz electron cyclotron resonance ion source. Review of Scientific Instruments, 2016, 87, 02A506.	1.3	2
38	New progress of high current gasdynamic ion source (invited). Review of Scientific Instruments, 2016, 87, 02A716.	1.3	38
39	Ion source research and development at University of JyvÃskylÃ: Studies of different plasma processes and towards the higher beam intensities. Review of Scientific Instruments, 2016, 87, 02A725.	1.3	1
40	Optimizing charge breeding techniques for ISOL facilities in Europe: Conclusions from the EMILIE project. Review of Scientific Instruments, 2016, 87, 02B510.	1.3	12
41	Kinetic instabilities in pulsed operation mode of a 14 GHz electron cyclotron resonance ion source. Review of Scientific Instruments, 2016, 87, 02A701.	1.3	6
42	Limitation of the ECRIS performance by kinetic plasma instabilities (invited). Review of Scientific Instruments, 2016, 87, 02A703.	1.3	32
43	Cyclotron instability in the afterglow mode of minimum-B ECRIS. Review of Scientific Instruments, 2016, 87, 02A729.	1.3	5
44	Correlations between density distributions, optical spectra, and ion species in a hydrogen plasma (invited). Review of Scientific Instruments, 2016, 87, 02A704.	1.3	11
45	Dynamic regimes of cyclotron instability in the afterglow mode of minimum-Belectron cyclotron resonance ion source plasma. Plasma Physics and Controlled Fusion, 2016, 58, 045019.	2.1	13
46	Diagnostics of a charge breeder electron cyclotron resonance ion source helium plasma with the injection of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Na</mml:mi></mml:mrow><mml:n /><mml:none /><mml:mrow><mml:mn>23</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow><mml:mrow><mml:mn>1</mml:mn><mml:m Physical Review Accelerators and Beams, 2016, 19, .	1.6	16
47	Suppression of cyclotron instability in Electron Cyclotron Resonance ion sources by two-frequency heating. Physics of Plasmas, 2015, 22, .	1.9	41
48	The relationship between visible light emission and species fraction of the hydrogen ion beams extracted from 2.45 GHz microwave discharge. Review of Scientific Instruments, 2015, 86, 083309.	1.3	5
49	Injected 1+ ion beam as a diagnostics tool of charge breeder ECR ion source plasmas. Plasma Sources Science and Technology, 2015, 24, 035014.	3.1	23
50	Neutron generator for BNCT based on high current ECR ion source with gyrotron plasma heating. Applied Radiation and Isotopes, 2015, 106, 29-33.	1.5	14
51	Breakdown transient study of plasma distributions in a 2.45 GHz hydrogen discharge. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 781, 50-56.	1.6	8
52	Microwave emission related to cyclotron instabilities in a minimum-Belectron cyclotron resonance ion source plasma. Plasma Sources Science and Technology, 2015, 24, 045017.	3.1	33
53	Limitations of electron cyclotron resonance ion source performances set by kinetic plasma instabilities. Review of Scientific Instruments, 2015, 86, 023301.	1.3	31
54	Photoelectron emission from metal surfaces induced by VUV-emission of filament driven hydrogen arc discharge plasma. AIP Conference Proceedings, 2015, , .	0.4	9

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55	A CW radiofrequency ion source for production of negative hydrogen ion beams for cyclotrons. AIP Conference Proceedings, 2015, , .	0.4	11
56	An experimental study of waveguide coupled microwave heating with conventional multicusp negative ion sources. AIP Conference Proceedings, 2015, , .	0.4	3
57	Beam current oscillations driven by cyclotron instabilities in a minimum-Belectron cyclotron resonance ion source plasma. Plasma Sources Science and Technology, 2014, 23, 025020.	3.1	66
58	Ultra-fast intensified frame images from an electron cyclotron resonance hydrogen plasma at 2.45 GHz: Some space distributions of visible and monochromatic emissions. Review of Scientific Instruments, 2014, 85, 02A902.	1.3	15
59	High current proton beams production at Simple Mirror Ion Source 37. Review of Scientific Instruments, 2014, 85, 02A702.	1.3	38
60	Transverse distribution of beam current oscillations of a 14 GHz electron cyclotron resonance ion source. Review of Scientific Instruments, 2014, 85, 02A909.	1.3	3
61	The effect of plasma electrode collar structure on the performance of the JYFL 14GHz electron cyclotron resonance ion source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 726, 41-46.	1.6	7
62	Double einzel lens extraction for the JYFL 14 GHz ECR ion source designed with IBSimu. Journal of Instrumentation, 2013, 8, P05003-P05003.	1.2	18
63	Oscillations of ECR ion source beam current along the beam transport of the JYFL K-130 cyclotron. Journal of Instrumentation, 2013, 8, T02005-T02005.	1.2	8
64	The electron cyclotron resonance ion source with arc-shaped coils concept (invited). Review of Scientific Instruments, 2012, 83, 02A312.	1.3	3
65	Plasma instability in the afterglow of electron cyclotron resonance discharge sustained in a mirror trap. Physics of Plasmas, 2012, 19, 122501.	1.9	25
66	Studies of plasma breakdown and electron heating on a 14â€‰GHz ECR ion source through measurement of plasma bremsstrahlung. Plasma Sources Science and Technology, 2011, 20, 055007.	3.1	25
67	Nuclear Structure at the Extremes; In-beam Î³-ray Spectroscopy of [sup 180]Pb. , 2011, , .		0
68	Alpha-particle capture reactions in inverse kinematics relevant to p-process nucleosynthesis. , 2011, , .		1
69	Effect of Ion Escape Velocity and Conversion Surface Material on H[sup â^’] Production. AIP Conference Proceedings, 2011, , .	0.4	6
70	Diagnostics of plasma decay and afterglow transient of an electron cyclotron resonance ion source. Plasma Sources Science and Technology, 2010, 19, 045027.	3.1	13
71	Electron Cyclotron Resonance Ion Sources for Highly-Charged Ion Beams. , 2009, , .		2
72	Plasma breakdown diagnostics with the biased disc of electron cyclotron resonance ion source. Plasma Sources Science and Technology, 2009, 18, 035018.	3.1	19

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73	The effect of magnetic field strength on the time evolution of high energy bremsstrahlung radiation created by an electron cyclotron resonance ion source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 600, 525-533.	1.6	23
74	Ion beam development for the needs of the JYFL nuclear physics programme. Review of Scientific Instruments, 2008, 79, 02A303.	1.3	4
75	Upgrades for the RADEF Facility. , 2007, , .		29
76	A-PHOENIX, an electron cyclotron resonance ion source for the Spiral 2 facility. Review of Scientific Instruments, 2006, 77, 03A323.	1.3	7
77	Emittance and plasma potential measurements in double-frequency heating mode with the 14GHz electron cyclotron resonance ion source at the university of JyvÃ½skylÃ½. Review of Scientific Instruments, 2006, 77, 03A309.	1.3	8
78	Decay studies of neutron-deficient odd-mass At and Bi isotopes. European Physical Journal A, 2005, 25, 181-182.	2.5	17
79	ECRIS Operation With Multiple Frequencies. AIP Conference Proceedings, 2005, , .	0.4	2
80	Recent ECRIS Related Research And Development Work At JYFL. AIP Conference Proceedings, 2005, , .	0.4	2
81	Effect of the gas mixing technique on the plasma potential and emittance of the JYFL 14 GHz electron cyclotron resonance ion source. Review of Scientific Instruments, 2005, 76, 093304.	1.3	20
82	Î±decay studies of very neutron-deficient francium and radium isotopes. Physical Review C, 2005, 71, .	2.9	62
83	A new plasma potential measurement instrument for plasma ion sources. Review of Scientific Instruments, 2004, 75, 3138-3145.	1.3	34
84	Investigations into the alpha-decay of 195At. European Physical Journal A, 2003, 16, 457-467.	2.5	54
85	Emittance studies of ARTEMIS-the new ECR ion source for the coupled cyclotron facility at NSCL/MSU. AIP Conference Proceedings, 2001, , .	0.4	0
86	The first results with the new JYFL 14 GHz ECR ion source. Nuclear Instruments & Methods in Physics Research B, 2001, 174, 379-384.	1.4	63
87	Metal ions from the volatile compounds method for the production of metal ion beams. Review of Scientific Instruments, 1998, 69, 785-787.	1.3	26
88	New gas feeding system at the JYFL electron cyclotron resonance ion source. Review of Scientific Instruments, 1997, 68, 2707-2710.	1.3	0