

Roman Wolfgang Schrittwieser

List of Publications by Year in descending order

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110
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218677

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44
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110
all docs

110
docs citations

110
times ranked

1582
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of thermal response of new diagnostic probe in TCV. Fusion Engineering and Design, 2020, 156, 111744.	1.9	1
2	Diamond-Coated Plasma Probes for Hot and Hazardous Plasmas. Materials, 2020, 13, 4524.	2.9	2
3	Plasma potential probes for hot plasmas. European Physical Journal D, 2019, 73, 1.	1.3	11
4	Concentric double hollow grid cathode discharges. International Journal of Mass Spectrometry, 2019, 436, 83-90.	1.5	4
5	Major results from the first plasma campaign of the Wendelstein 7-X stellarator. Nuclear Fusion, 2017, 57, 102020.	3.5	128
6	Overview of progress in European medium sized tokamaks towards an integrated plasma-edge/wall solution ^a. Nuclear Fusion, 2017, 57, 102014.	3.5	23
7	Modification of SOL profiles and fluctuations with line-average density and divertor flux expansion in TCV. Nuclear Fusion, 2017, 57, 116014.	3.5	35
8	Overview of ASDEX Upgrade results. Nuclear Fusion, 2017, 57, 102015.	3.5	53
9	Overview of the TCV tokamak program: scientific progress and facility upgrades. Nuclear Fusion, 2017, 57, 102011.	3.5	52
10	On the interaction between two fireballs in low-temperature plasma. Physics of Plasmas, 2015, 22, 113511.	1.9	22
11	Direct Plasma Potential Measurements by Ballâ€Pen Probe and Selfâ€Emitting Langmuir Probe on COMPASS and ASDEX Upgrade. Contributions To Plasma Physics, 2014, 54, 279-284.	1.1	28
12	Electric Probe Measurements of the Poloidal Velocity in the Scrape-Off Layer of ASDEX Upgrade. Contributions To Plasma Physics, 2014, 54, 273-278.	1.1	0
13	Measurements of HFâ€Plasma Oscillations by means of a Laserâ€Heated Emissive Probe. Contributions To Plasma Physics, 2013, 53, 92-95.	1.1	3
14	Overview of ASDEX Upgrade results. Nuclear Fusion, 2013, 53, 104003.	3.5	36
15	Neutral gas dynamics in fireballs. Journal of Applied Physics, 2011, 109, 113305.	2.5	15
16	Palm trees and islands â€“ Current filaments in the edge of JET. Journal of Nuclear Materials, 2011, 415, S451-S454.	2.7	4
17	Magnetic diagnostic of SOL-filaments generated by type I ELMs on JET and ASDEX Upgrade. Journal of Nuclear Materials, 2011, 415, S869-S872.	2.7	1
18	Detached Glow Above a Titanium Hollow Cathode Sputter Source. IEEE Transactions on Plasma Science, 2011, 39, 2568-2569.	1.3	2

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19	Measurement of emission current and temperature profile of emissive probe materials using CO ₂ LASER. Current Applied Physics, 2011, 11, 1215-1221.	2.4	5
20	Positively Biased Probes in Magnetized Plasmas. Contributions To Plasma Physics, 2011, 51, 560-566.	1.1	1
21	Nonlinear Effects Related to the Simultaneous Excitation of Three Instabilities in Magnetized Plasma. Contributions To Plasma Physics, 2011, 51, 554-559.	1.1	2
22	Direct Observation of Current in Type-I Edge-Localized-Mode Filaments on the ASDEX Upgrade Tokamak. Physical Review Letters, 2011, 106, 125002.	7.8	33
23	High-Frequency Instabilities in Sheaths and Fireballs. IEEE Transactions on Plasma Science, 2011, 39, 2448-2449.	1.3	0
24	Temperature profile measurement of graphite material using a CO ₂ laser. Physica Scripta, 2010, 82, 055402.	2.5	7
25	Preface: Contrib. Plasma Phys. 9/2010. Contributions To Plasma Physics, 2010, 50, 795-795.	1.1	0
26	Towards Fast Measurement of the Electron Temperature in the SOL of ASDEX Upgrade Using Swept Langmuir Probes. Contributions To Plasma Physics, 2010, 50, 847-853.	1.1	21
27	Ball-Pen Probe Measurements in L-Mode and H-Mode on ASDEX Upgrade. Contributions To Plasma Physics, 2010, 50, 854-859.	1.1	24
28	A Probe Head for Simultaneous Measurements of Electrostatic and Magnetic Fluctuations in ASDEX Upgrade Edge Plasma. Contributions To Plasma Physics, 2010, 50, 860-865.	1.1	8
29	Cavity-hollow cathode-sputtering source for titanium films. Journal of Plasma Physics, 2010, 76, 655-664.	2.1	6
30	Overview of ASDEX Upgrade results. Nuclear Fusion, 2009, 49, 104009.	3.5	11
31	Current filaments in turbulent magnetized plasmas. Plasma Physics and Controlled Fusion, 2009, 51, 124053.	2.1	13
32	Laser-heated emissive plasma probe. Review of Scientific Instruments, 2008, 79, 083508.	1.3	32
33	Plasma Fireballs. IEEE Transactions on Plasma Science, 2008, 36, 1000-1001.	1.3	11
34	Multi-machine studies of the role of turbulence and electric fields in the establishment of improved confinement in tokamak plasmas. Plasma Physics and Controlled Fusion, 2007, 49, A29-A44.	2.1	20
35	Common physical mechanism for concentric and non-concentric multiple double layers in plasma. Plasma Physics and Controlled Fusion, 2007, 49, 237-248.	2.1	42
36	Plasma wall interaction and its implication in an all tungsten divertor tokamak. Plasma Physics and Controlled Fusion, 2007, 49, B59-B70.	2.1	110

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37	A probe-based method for measuring the transport coefficient in the tokamak edge region. European Physical Journal D, 2006, 56, 1321-1327.	0.4	11
38	Direct measurements of the plasma potential by katsumata-type probes. European Physical Journal D, 2006, 56, B145-B150.	0.4	17
39	Experimental investigation of the change of the electron saturation current of a dc-heated emissive probe. European Physical Journal D, 2006, 56, B932-B937.	0.4	14
40	Optical Emission Spectroscopy Diagnostic of Discharge Plasma in a Hollow-Cathode Sputtering Source. Japanese Journal of Applied Physics, 2006, 45, 8128-8131.	1.5	5
41	Pulsed Regime of a Hollow-Cathode Discharge Used in a Sputter Source. Japanese Journal of Applied Physics, 2006, 45, 8132-8136.	1.5	4
42	Comparative measurements of the plasma potential with the ball-pen and emissive probes on the CASTOR tokamak. European Physical Journal D, 2005, 55, 235-242.	0.4	41
43	Observation of the ion-ion instability and its suppression mechanism in a dusty double plasma device. Plasma Physics and Controlled Fusion, 2005, 47, 1415-1429.	2.1	6
44	Tunnel probes for measurements of the electron and ion temperature in fusion plasmas. Review of Scientific Instruments, 2004, 75, 4328-4330.	1.3	13
45	Arrangement of emissive and cold probes for fluctuation and Reynolds stress measurements. Review of Scientific Instruments, 2004, 75, 4331-4333.	1.3	11
46	A novel approach to direct measurement of the plasma potential. European Physical Journal D, 2004, 54, C95-C99.	0.4	50
47	Elementary processes at the origin of the generation and dynamics of multiple double layers in DP machine plasma. International Journal of Mass Spectrometry, 2004, 233, 343-354.	1.5	60
48	Experimental study of the creation of a fire-rod II: Emissive probe measurements. Contributions To Plasma Physics, 2003, 43, 11-24.	1.1	15
49	Similarity rules for collisionless hot-filament discharges. Contributions To Plasma Physics, 2003, 43, 94-110.	1.1	2
50	Effects of electron-absorbing boundaries on the plasma parameters of a hot-filament discharge. Contributions To Plasma Physics, 2003, 43, 111-121.	1.1	6
51	Turbulent transport reduction by velocity shear during edge plasma biasing: recent experimental results. Plasma Physics and Controlled Fusion, 2003, 45, 621-643.	2.1	131
52	Emissive probe measurements of plasma potential fluctuations in the edge plasma regions of tokamaks. Review of Scientific Instruments, 2003, 74, 1583-1587.	1.3	35
53	Properties and control of anode double layer oscillations and related phenomena. Physical Review E, 2003, 68, 016405.	2.1	14
54	Measurements with an emissive probe in the CASTOR tokamak. Plasma Physics and Controlled Fusion, 2002, 44, 567-578.	2.1	90

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55	Experimental Study of the Creation of a Fire-rod I: Temporal Development of the Electron Energy Distribution Function. Contributions To Plasma Physics, 2002, 42, 508-525.	1.1	23
56	Fluctuation measurements with emissive probes in tokamaks. European Physical Journal D, 2002, 52, 1115-1120.	0.4	6
57	Application of Emissive Probes for Plasma Potential Measurements in Fusion Devices. Contributions To Plasma Physics, 2001, 41, 494-503.	1.1	23
58	New Insights Into the Formation of Nonlinear Space Charge Structures in Various Plasmas. Physica Scripta, 2000, T84, 122.	2.5	10
59	On the contamination of Langmuir probe surfaces in a potassium plasma. Plasma Physics and Controlled Fusion, 2000, 42, 217-223.	2.1	12
60	Nonlinear Dynamics of a Harmonically Forced Double Layer in a Discharge Plasma. Progress of Theoretical Physics Supplement, 2000, 139, 353-362.	0.1	0
61	Change of the Potential Relaxation Instability in a plasma containing heavy C ions. , 2000, , 497-500.		0
62	Nonlinear effects in the current-voltage characteristic of a low-density Q-machine plasma: II. Related to the electrostatic ion-cyclotron instability. Journal Physics D: Applied Physics, 1999, 32, 2758-2762.	2.8	14
63	Possible excitation and ionisation processes in a collisionless alkaline plasma. International Journal of Mass Spectrometry, 1999, 184, 129-143.	1.5	4
64	Current Jumps and Hysteresis in a Single-ended Q-Machine in Connection with the Electrostatic Ion-Cyclotron Instability. Contributions To Plasma Physics, 1999, 39, 223-233.	1.1	6
65	Nonlinear effects in the current-voltage characteristic of a low-density Q-machine plasma: I. Related to the potential relaxation instability. Journal Physics D: Applied Physics, 1999, 32, 2750-2757.	2.8	11
66	A localised high frequency discharge formed in an electron-beam-produced plasma. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 241, 281-286.	2.1	4
67	Revised generalized Child-Langmuir law. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 246, 318-324.	2.1	10
68	A nozzle beam source for the production of metastable rare gas atoms. Plasma Sources Science and Technology, 1997, 6, 247-249.	3.1	5
69	Simple heatable Langmuir probe for alkali plasmas. Review of Scientific Instruments, 1997, 68, 3751-3754.	1.3	12
70	Ion sheath oscillations in double plasma machines. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 216, 296-302.	2.1	21
71	A new simple emissive probe. Review of Scientific Instruments, 1996, 67, 849-850.	1.3	27
72	A simple source for a plasma. Plasma Sources Science and Technology, 1996, 5, 603-606.	3.1	5

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73	The effect of the collector sheath on the potential relaxation instability. Plasma Physics and Controlled Fusion, 1996, 38, 2155-2162.	2.1	5
74	The influence of a biased limiter on a collisionless magnetised alkali plasma column. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 205, 189-198.	2.1	1
75	Resonant coupling between ion bounce in a potential well and the potential relaxation instability. Physics of Plasmas, 1994, 1, 32-42.	1.9	40
76	The influence of electron/ion collisions on a low-frequency plasma instability. International Journal of Mass Spectrometry and Ion Processes, 1993, 129, 205-213.	1.8	9
77	Effects of a radial electric field on low frequency instabilities in a magnetized plasma. Plasma Physics and Controlled Fusion, 1993, 35, 77-91.	2.1	9
78	Theory Lack Shouldn't Prevent Publication. Physics Today, 1992, 45, 128-130.	0.3	0
79	Observation of double layers in a convergent magnetic field. IEEE Transactions on Plasma Science, 1992, 20, 607-613.	1.3	16
80	On the current-driven electrostatic ion-cyclotron instability: a review. IEEE Transactions on Plasma Science, 1991, 19, 457-501.	1.3	74
81	Ion-beam-driven low-frequency instability at a probe in a double-plasma device. Plasma Physics and Controlled Fusion, 1991, 33, 1407-1422.	2.1	11
82	Quenching and amplification of the potential relaxation instability by control of the radial electric field. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 149, 393-397.	2.1	7
83	An experimental investigation on the influence of neutral collisions on the current-driven electrostatic ion-cyclotron instability. Physica Scripta, 1989, 39, 480-484.	2.5	7
84	On the mechanism of the electrostatic ion cyclotron instability. Plasma Physics and Controlled Fusion, 1989, 31, 1863-1877.	2.1	9
85	Electrostatic ion-cyclotron instability and potential relaxation instability excited by a ring-button electrode. Plasma Physics and Controlled Fusion, 1987, 29, 271-277.	2.1	8
86	The Electrostatic Ion-Cyclotron Instability Excited by a Current to a Strip Collector. Physica Scripta, 1986, 34, 821-824.	2.5	2
87	Determination of the frequency-controlling region of the current-driven electrostatic ion-cyclotron instability. Physics Letters, Section A: General, Atomic and Solid State Physics, 1985, 109, 160-162.	2.1	6
88	Double Layer Dynamics in a Collisionless Magnetoplasma. Journal of the Physical Society of Japan, 1985, 54, 2516-2529.	1.6	66
89	The electrostatic ion-cyclotron instability-a two-dimensional potential relaxation instability. Plasma Physics and Controlled Fusion, 1985, 27, 1063-1067.	2.1	20
90	A comment on 'interaction of lower hybrid waves with the current-driven ion-acoustic instability'. Plasma Physics and Controlled Fusion, 1985, 27, 789-791.	2.1	3

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91	A new plasma source based on contact ionization. Journal of Applied Physics, 1985, 58, 598-600.	2.5	36
92	Can the electrostatic ion-cyclotron instability be driven by a two-dimensional sheath?. Plasma Physics and Controlled Fusion, 1984, 26, 1591-1595.	2.1	8
93	Electrostatic ion-cyclotron instability driven by a slow electron drift. Plasma Physics and Controlled Fusion, 1984, 26, 1597-1604.	2.1	12
94	Coherence and threshold of current-driven potential relaxation instability. Physics Letters, Section A: General, Atomic and Solid State Physics, 1983, 95, 162-164.	2.1	10
95	Izuka et al. Respond. Physical Review Letters, 1983, 50, 218-218.	7.8	2
96	Modulation of the current-driven ion-cyclotron instability by the potential relaxation instability. Physics of Fluids, 1983, 26, 2250.	1.4	40
97	Stationary Double Layers in a Collisionless Magnetoplasma. Journal of the Physical Society of Japan, 1983, 52, 875-884.	1.6	26
98	Highly supersonic ion pulses in a collisionless magnetized plasma. Physics of Fluids, 1982, 25, 48.	1.4	12
99	Dynamics of a Potential Barrier Formed on the Tail of a Moving Double Layer in a Collisionless Plasma. Physical Review Letters, 1982, 48, 145-148.	7.8	142
100	About localization and suppression of the so-called ion-acoustic instability in a low-density single-ended Q-machine. Physics Letters, Section A: General, Atomic and Solid State Physics, 1982, 87, 175-178.	2.1	9
101	A method for measuring fast time evolutions of the plasma potential by means of a simple emissive probe. Journal of Physics E: Scientific Instruments, 1981, 14, 1291-1295.	0.7	42
102	Ion acoustic instability driven by an electron flux towards the hot plate in a single-ended q-machine. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 75, 285-287.	2.1	3
103	Stabilization of the ion acoustic instability by an ion beam in a single-ended Q-machine. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 75, 288-292.	2.1	3
104	Collisionless drift instability and ion heating in a current-carrying inhomogeneous plasma. Physics of Fluids, 1980, 23, 1774.	1.4	26
105	The current-driven, ion-acoustic instability in a collisionless plasma. Plasma Physics, 1979, 21, 61-73.	0.9	53
106	Electron current driven ion acoustic standing wave instability. Physics Letters, Section A: General, Atomic and Solid State Physics, 1978, 65, 235-238.	2.1	20
107	Influence of a negatively biased grid on the plasma in a single-ended Q-machine. Journal Physics D: Applied Physics, 1976, 9, 397-405.	2.8	6
108	Test-Wave Propagation in the Presence of a Large-Amplitude Electron Plasma Wave. Physical Review Letters, 1976, 37, 1684-1687.	7.8	18

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109	Instability as a source for traveling ion waves. <i>Physics of Fluids</i> , 1976, 19, 70.	1.4	65
110	Ion space charge instability induced by a grid in a Q-machine plasma. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1975, 53, 427-428.	2.1	5