Roman Wolfgang Schrittwieser

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5460084/publications.pdf

Version: 2024-02-01

110	2,315	218677	243625
papers	citations	26 h-index	44 g-index

110	110	110	1582
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Turbulent transport reduction byEÂBvelocity shear during edge plasma biasing: recent experimental results. Plasma Physics and Controlled Fusion, 2003, 45, 621-643.	2.1	131
3	Major results from the first plasma campaign of the Wendelstein 7-X stellarator. Nuclear Fusion, 2017, 57, 102020.	3.5	128
4	Plasma wall interaction and its implication in an all tungsten divertor tokamak. Plasma Physics and Controlled Fusion, 2007, 49, B59-B70.	2.1	110
5	Measurements with an emissive probe in the CASTOR tokamak. Plasma Physics and Controlled Fusion, 2002, 44, 567-578.	2.1	90
6	On the current-driven electrostatic ion-cyclotron instability: a review. IEEE Transactions on Plasma Science, 1991, 19, 457-501.	1.3	74
7	Double Layer Dynamics in a Collisionless Magnetoplasma. Journal of the Physical Society of Japan, 1985, 54, 2516-2529.	1.6	66
8	Instability as a source for traveling ion waves. Physics of Fluids, 1976, 19, 70.	1.4	65
9	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
10	The current-driven, ion-acoustic instability in a collisionless plasma. Plasma Physics, 1979, 21, 61-73.	0.9	53
11	Overview of ASDEX Upgrade results. Nuclear Fusion, 2017, 57, 102015.	3.5	53
12	Overview of the TCV tokamak program: scientific progress and facility upgrades. Nuclear Fusion, 2017, 57, 102011.	3.5	52
13	A novel approach to direct measurement of the plasma potential. European Physical Journal D, 2004, 54, C95-C99.	0.4	50
14	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
15	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
16	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
17	Modulation of the current-driven ion-cyclotron instability by the potential relaxation instability. Physics of Fluids, 1983, 26, 2250.	1.4	40
18	Resonant coupling between ion bounce in a potential well and the potential relaxation instability. Physics of Plasmas, 1994, 1, 32-42.	1.9	40

#	Article	IF	Citations
19	A new plasma source based on contact ionization. Journal of Applied Physics, 1985, 58, 598-600.	2.5	36
20	Overview of ASDEX Upgrade results. Nuclear Fusion, 2013, 53, 104003.	3.5	36
21	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
22	Modification of SOL profiles and fluctuations with line-average density and divertor flux expansion in TCV. Nuclear Fusion, 2017, 57, 116014.	3.5	35
23	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
24	Laser-heated emissive plasma probe. Review of Scientific Instruments, 2008, 79, 083508.	1.3	32
25	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
26	A new simple emissive probe. Review of Scientific Instruments, 1996, 67, 849-850.	1.3	27
27	Collisionless drift instability and ion heating in a current-carrying inhomogeneous plasma. Physics of Fluids, 1980, 23, 1774.	1.4	26
28	Stationary Double Layers in a Collisionless Magnetoplasma. Journal of the Physical Society of Japan, 1983, 52, 875-884.	1.6	26
29	Ballâ€Pen Probe Measurements in Lâ€Mode and Hâ€Mode on ASDEX Upgrade. Contributions To Plasma Physics, 2010, 50, 854-859.	1.1	24
30	Application of Emissive Probes for Plasma Potential Measurements in Fusion Devices. Contributions To Plasma Physics, 2001, 41, 494-503.	1.1	23
31	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
32	Overview of progress in European medium sized tokamaks towards an integrated plasma-edge/wall solution ^a. Nuclear Fusion, 2017, 57, 102014.	3.5	23
33	On the interaction between two fireballs in low-temperature plasma. Physics of Plasmas, 2015, 22, 113511.	1.9	22
34	Ion sheath oscillations in double plasma machines. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 216, 296-302.	2.1	21
35	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
36	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

#	Article	IF	Citations
37	The electrostatic ion-cyclotron instability-a two-dimensional potential relaxation instability. Plasma Physics and Controlled Fusion, 1985, 27, 1063-1067.	2.1	20
38	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
39	Test-Wave Propagation in the Presence of a Large-Amplitude Electron Plasma Wave. Physical Review Letters, 1976, 37, 1684-1687.	7.8	18
40	Direct measurements of the plasma potential by katsumata-type probes. European Physical Journal D, 2006, 56, B145-B150.	0.4	17
41	Observation of double layers in a convergent magnetic field. IEEE Transactions on Plasma Science, 1992, 20, 607-613.	1.3	16
42	Experimental study of the creation of a fire-rod II: Emissive probe measurements. Contributions To Plasma Physics, 2003, 43, 11-24.	1.1	15
43	Neutral gas dynamics in fireballs. Journal of Applied Physics, 2011, 109, 113305.	2.5	15
44	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
45	Properties and control of anode double layer oscillations and related phenomena. Physical Review E, 2003, 68, 016405.	2.1	14
46	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
47	Tunnel probes for measurements of the electron and ion temperature in fusion plasmas. Review of Scientific Instruments, 2004, 75, 4328-4330.	1.3	13
48	Current filaments in turbulent magnetized plasmas. Plasma Physics and Controlled Fusion, 2009, 51, 124053.	2.1	13
49	Highly supersonic ion pulses in a collisionless magnetized plasma. Physics of Fluids, 1982, 25, 48.	1.4	12
50	Electrostatic ion-cyclotron instability driven by a slow electron drift. Plasma Physics and Controlled Fusion, 1984, 26, 1597-1604.	2.1	12
51	Simple heatable Langmuir probe for alkali plasmas. Review of Scientific Instruments, 1997, 68, 3751-3754.	1.3	12
52	On the contamination of Langmuir probe surfaces in a potassium plasma. Plasma Physics and Controlled Fusion, 2000, 42, 217-223.	2.1	12
53	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
54	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

#	Article	IF	Citations
55	Arrangement of emissive and cold probes for fluctuation and Reynolds stress measurements. Review of Scientific Instruments, 2004, 75, 4331-4333.	1.3	11
56	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
57	Plasma Fireballs. IEEE Transactions on Plasma Science, 2008, 36, 1000-1001.	1.3	11
58	Overview of ASDEX Upgrade results. Nuclear Fusion, 2009, 49, 104009.	3.5	11
59	Plasma potential probes for hot plasmas. European Physical Journal D, 2019, 73, 1.	1.3	11
60	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
61	Revised generalized Child-Langmuir law. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 246, 318-324.	2.1	10
62	New Insights Into the Formation of Nonlinear Space Charge Structures in Various Plasmas. Physica Scripta, 2000, T84, 122.	2.5	10
63	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
64	On the mechanism of the electrostatic ion cyclotron instability. Plasma Physics and Controlled Fusion, 1989, 31, 1863-1877.	2.1	9
65	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
66	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
67	Can the electrostatic ion-cyclotron instability by driven by a two-dimensional sheath?. Plasma Physics and Controlled Fusion, 1984, 26, 1591-1595.	2.1	8
68	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
69	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
70	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
71	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
72	Temperature profile measurement of graphite material using a CO₂laser. Physica Scripta, 2010, 82, 055402.	2.5	7

#	Article	IF	Citations
73	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
74	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
75	Current Jumps and Hysteresis in a Singleâ€ended Qâ€Machine in Connection with the Electrostatic Ionâ€Cyclotron Instability. Contributions To Plasma Physics, 1999, 39, 223-233.	1.1	6
76	Fluctuation measurements with emissive probes in tokamaks. European Physical Journal D, 2002, 52, 1115-1120.	0.4	6
77	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
78	Observation of the ionâ€“ion instability and its suppression mechanism in a dusty double plasma device. Plasma Physics and Controlled Fusion, 2005, 47, 1415-1429.	2.1	6
79	Cavity-hollow cathode-sputtering source for titanium films. Journal of Plasma Physics, 2010, 76, 655-664.	2.1	6
80	Ion space charge instability induced by a grid in a Q-machine plasma. Physics Letters, Section A: General, Atomic and Solid State Physics, 1975, 53, 427-428.	2.1	5
81	A simple source for a plasma. Plasma Sources Science and Technology, 1996, 5, 603-606.	3.1	5
82	The effect of the collector sheath on the potential relaxation instability. Plasma Physics and Controlled Fusion, 1996, 38, 2155-2162.	2.1	5
83	A nozzle beam source for the production of metastable rare gas atoms. Plasma Sources Science and Technology, 1997, 6, 247-249.	3.1	5
84	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
85	Measurement of emission current and temperature profile of emissive probe materials using CO2 LASER. Current Applied Physics, 2011, 11, 1215-1221.	2.4	5
86	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
87	Possible excitation and ionisation processes in a â€œcollisionlessâ€•alkaline plasma. International Journal of Mass Spectrometry, 1999, 184, 129-143.	1.5	4
88	Pulsed Regime of a Hollow-Cathode Discharge Used in a Sputter Source. Japanese Journal of Applied Physics, 2006, 45, 8132-8136.	1.5	4
89	Palm trees and islands â€“ Current filaments in the edge of JET. Journal of Nuclear Materials, 2011, 415, S451-S454.	2.7	4
90	Concentric double hollow grid cathode discharges. International Journal of Mass Spectrometry, 2019, 436, 83-90.	1.5	4

#	Article	IF	Citations
91	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
92	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
93	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
94	Measurements of HFâ€Plasma Oscilations by means of a Laserâ€Heated Emissive Probe. Contributions To Plasma Physics, 2013, 53, 92-95.	1.1	3
95	Izukaet al.Respond. Physical Review Letters, 1983, 50, 218-218.	7.8	2
96	The Electrostatic Ion-Cyclotron Instability Excited by a Current to a Strip Collector. Physica Scripta, 1986, 34, 821-824.	2.5	2
97	Similarity rules for collisionless hot-filament discharges. Contributions To Plasma Physics, 2003, 43, 94-110.	1.1	2
98	Detached Glow Above a Titanium Hollow Cathode Sputter Source. IEEE Transactions on Plasma Science, 2011, 39, 2568-2569.	1.3	2
99	Nonlinear Effects Related to the Simultaneous Excitation of Three Instabiities in Magnetized Plasma. Contributions To Plasma Physics, 2011, 51, 554-559.	1.1	2
100	Diamond-Coated Plasma Probes for Hot and Hazardous Plasmas. Materials, 2020, 13, 4524.	2.9	2
101	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
102	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
103	Positively Biased Probes in Magnetized Plasmas. Contributions To Plasma Physics, 2011, 51, 560-566.	1.1	1
104	Analysis of thermal response of new diagnostic probe in TCV. Fusion Engineering and Design, 2020, 156, 111744.	1.9	1
105	Theory Lack Shouldn't Prevent Publication. Physics Today, 1992, 45, 128-130.	0.3	0
106	Nonlinear Dynamics of a Harmonically Forced Double Layer in a Discharge Plasma. Progress of Theoretical Physics Supplement, 2000, 139, 353-362.	0.1	0
107	Preface: Contrib. Plasma Phys. 9/2010. Contributions To Plasma Physics, 2010, 50, 795-795.	1.1	0
108	High-Frequency Instabilities in Sheaths and Fireballs. IEEE Transactions on Plasma Science, 2011, 39, 2448-2449.	1.3	0

#	Article	IF	Citations
109	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
110	â˜60Change of the Potential Relaxation Instability in a plasma containing heavy C ions. , 2000, , 497-500.		0