

# Franko Greiner

## List of Publications by Year in descending order

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67  
papers

2,090  
citations

236925

25  
h-index

243625

44  
g-index

72  
all docs

72  
docs citations

72  
times ranked

982  
citing authors

#	ARTICLE	IF	CITATIONS
1	Study of edge turbulence in dimensionally similar laboratory plasmas. <i>Physics of Plasmas</i> , 2004, 11, 2558-2564.	1.9	273
2	Investigation of the parallel dynamics of drift-wave turbulence in toroidal plasmas. <i>Plasma Physics and Controlled Fusion</i> , 2007, 49, 1005-1017.	2.1	225
3	Effect of neutral gas motion on the rotation of dust clusters in an axial magnetic field. <i>Physics of Plasmas</i> , 2009, 16, .	1.9	74
4	Comparison of Langmuir and emissive probes as diagnostics for turbulence studies in the low-temperature plasma of the torsatron TJ-K. <i>Plasma Physics and Controlled Fusion</i> , 2005, 47, 569-579.	2.1	70
5	Nonlinear dynamical behavior of thermionic low pressure discharges. II. Experimental. <i>Physics of Plasmas</i> , 1995, 2, 1822-1836.	1.9	69
6	Experiments and particle-in-cell simulation on self-oscillations and period doubling in thermionic discharges at low pressure. <i>Physical Review Letters</i> , 1993, 70, 3071-3074.	7.8	57
7	Imaging Mie ellipsometry: dynamics of nanodust clouds in an argon-acetylene plasma. <i>Plasma Sources Science and Technology</i> , 2012, 21, 065005.	3.1	57
8	Chaos control and taming of turbulence in plasma devices. <i>Physics of Plasmas</i> , 2001, 8, 1961-1968.	1.9	56
9	Magnetizing a Complex Plasma without a Magnetic Field. <i>Physical Review Letters</i> , 2012, 109, 155003.	7.8	56
10	Mass changes of microparticles in a plasma observed by a phase-resolved resonance method. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	55
11	Self-excited dust-acoustic waves in an electron-depleted nanodusty plasma. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	53
12	van der Pol behavior of relaxation oscillations in a periodically driven thermionic discharge. <i>Physical Review E</i> , 1995, 52, 4316-4327.	2.1	52
13	Wake Formation and Wake Field Effects in Complex Plasmas. <i>Contributions To Plasma Physics</i> , 2012, 52, 804-812.	1.1	52
14	Scaling of characteristic turbulent structures in the torsatron TJ-K. <i>Physics of Plasmas</i> , 2005, 12, 032504.	1.9	47
15	Charging and coupling of a vertically aligned particle pair in the plasma sheath. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	47
16	Nonlinear dynamical behavior of thermionic low pressure discharges. I. Simulation. <i>Physics of Plasmas</i> , 1995, 2, 1810-1821.	1.9	43
17	Ion-Wake-Mediated Particle Interaction in a Magnetized-Plasma Flow. <i>Physical Review Letters</i> , 2012, 109, 135001.	7.8	43
18	Exploring the wake of a dust particle by a continuously approaching test grain. <i>Physics of Plasmas</i> , 2015, 22, 053702.	1.9	41

#	ARTICLE	IF	CITATIONS
19	Generation of Intermittent Turbulent Events at the Transition from Closed to Open Field Lines in a Toroidal Plasma. <i>Physical Review Letters</i> , 2009, 102, 255001.	7.8	38
20	Comparative experimental study of coherent structures in a simple magnetized torus. <i>Plasma Physics and Controlled Fusion</i> , 2001, 43, 525-542.	2.1	37
21	Effects of charge depletion in dusty plasmas. <i>Physics of Plasmas</i> , 2011, 18, 013703.	1.9	37
22	Kinetic Mie ellipsometry to determine the time-resolved particle growth in nanodusty plasmas. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 465203.	2.8	34
23	Diagnostics and characterization of nanodust and nanodusty plasmas. <i>European Physical Journal D</i> , 2018, 72, 1.	1.3	32
24	Preparation of magnetized nanodusty plasmas in a radio frequency-driven parallel-plate reactor. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	29
25	Determination of dust grain charge and screening lengths in the plasma sheath by means of a controlled cluster rotation. <i>Physics of Plasmas</i> , 2010, 17, 083703.	1.9	27
26	Probing a dusty magnetized plasma with self-excited dust-density waves. <i>Physical Review E</i> , 2018, 97, 033203.	2.1	27
27	Non-Maxwellian and magnetic field effects in complex plasma wakes. <i>European Physical Journal D</i> , 2018, 72, 1.	1.3	27
28	Observation of large-scale coherent structures under strong $E \times B$ -shear in the torsatron TJ-K. <i>Plasma Physics and Controlled Fusion</i> , 2007, 49, 777-789.	2.1	23
29	Experiments and Simulations of Particle Flows in a Magnetized Dust Torus. <i>Contributions To Plasma Physics</i> , 2012, 52, 813-818.	1.1	23
30	Size and density evolution of a single microparticle embedded in a plasma. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	22
31	Observation of Mode like Coherent Structures in Curved Magnetic Fields of a Simple Magnetized Torus. <i>Contributions To Plasma Physics</i> , 2004, 44, 335-346.	1.1	20
32	Probing the Plasma Sheath by the Continuous Mass Loss of Microparticles. <i>IEEE Transactions on Plasma Science</i> , 2013, 41, 764-768.	1.3	20
33	On the amplitude of dust-density waves in inhomogeneous dusty plasmas. <i>Physics of Plasmas</i> , 2017, 24, 033704.	1.9	20
34	Prospects and limitations of conditional averaging. <i>Physica Scripta</i> , 2006, T122, 25-33.	2.5	19
35	Dynamic ion shadows behind finite-sized objects in collisionless magnetized plasma flows. <i>New Journal of Physics</i> , 2018, 20, 073027.	2.9	18
36	Spatio-temporally resolved investigations of layered particle growth in a reactive argon-acetylene plasma. <i>Plasma Sources Science and Technology</i> , 2019, 28, 115016.	3.1	18

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37	Stable and unstable discharge modes of a multipole confined thermionic gas discharge at low pressure. <i>Plasma Sources Science and Technology</i> , 1994, 3, 134-141.	3.1	17
38	A multi-parameter chi-square fitting procedure and applications in spectroscopy. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1989, 41, 69-78.	2.3	16
39	Long-term spatio-temporal evolution of the dust distribution in dusty argon rf plasmas. <i>Plasma Sources Science and Technology</i> , 2016, 25, 055004.	3.1	16
40	High-precision <i>in-situ</i> size measurements of single microparticles in an RF plasma. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	16
41	Controlling chaos in the Pierce diode. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1998, 239, 103-108.	2.1	15
42	Resonance methods for the characterization of dust particles in plasmas. <i>Journal of Plasma Physics</i> , 2016, 82, .	2.1	15
43	Molecular dynamics simulations of wake structures behind a microparticle in a magnetized ion flow. I. Collisionless limit with cold ion beam. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	15
44	Influence of Negative Ions on Drift Waves in a Low-Density Ar/O <sub>2</sub> Plasma. <i>Contributions To Plasma Physics</i> , 2011, 51, 769-784.	1.1	14
45	Experiments on wake structures behind a microparticle in a magnetized plasma flow. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	14
46	Molecular dynamics simulations of wake structures behind a microparticle in a magnetized ion flow. II. Effects of velocity spread and ion collisions. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	14
47	Improved conditional averaging technique for plasma fluctuation diagnostics. <i>Plasma Physics and Controlled Fusion</i> , 2007, 49, 485-497.	2.1	12
48	<i>In-situ</i> analysis of optically thick nanoparticle clouds. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	12
49	Diagnostics of void expansion during cyclic growth and formation of layered nanoparticle clouds. <i>Journal of Applied Physics</i> , 2017, 121, 113302.	2.5	11
50	A minimally invasive electrostatic particle extractor for nanodusty plasmas and its application for the verification of in situ Mie polarimetry. <i>Plasma Sources Science and Technology</i> , 2021, 30, 035011.	3.1	9
51	Sheared and unsheared rotation of driven dust clusters. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	7
52	The Pierce diode as a model for the stability of thermionic gas discharges. <i>Journal Physics D: Applied Physics</i> , 1997, 30, 2979-2990.	2.8	6
53	Charging of an irregularly shaped particle in the sheath of an rf plasma. <i>Physics of Plasmas</i> , 2018, 25, 073702.	1.9	6
54	Effect of Centrifugal Forces on the Interparticle Distance of Two Dust Particles Confined in a Plasma. <i>IEEE Transactions on Plasma Science</i> , 2010, 38, 788-791.	1.3	5

#	ARTICLE	IF	CITATIONS
55	Chaos and Chaos Control in Plasmas. Physica Scripta, 2000, T84, 128.	2.5	4
56	Nonlinear Dynamics and Chaos in Gas Discharge Systems. European Physical Journal Special Topics, 1995, 05, C6-131-C6-136.	0.2	4
57	Radiative transfer simulations for in-situ particle size diagnostic in reactive, particle growing plasmas. Journal Physics D: Applied Physics, 0, , .	2.8	4
58	Linear study of the nonmodal growth of drift waves in dusty plasmas. Physics of Plasmas, 2010, 17, 063703.	1.9	3
59	Trapping of nanodust clouds in a magnetized plasma. AIP Conference Proceedings, 2013, , .	0.4	3
60	Growth and treatment of hydrogenated amorphous carbon nanoparticles in a low-pressure plasma. Plasma Processes and Polymers, 2022, 19, .	3.0	3
61	Comparative experimental study of large-scale fluctuations in a toroidally magnetized low- $\beta^2$ plasma. AIP Conference Proceedings, 2002, , .	0.4	2
62	Comparison of Emissive and Plugged Probes DC Plasma Potential Measurements in a Magnetised Plasma. AIP Conference Proceedings, 2003, , .	0.4	2
63	Torus-Shaped Dust Clouds in Magnetized Anodic Plasmas. AIP Conference Proceedings, 2008, , .	0.4	1
64	Nanodust in Magnetized Plasma. , 2011, , .		1
65	Chaos in Plasmas: A Case Study in Thermionic Discharges. , 1994, , 501-521.		1
66	Dynamics of 2D Dust Clusters with a Perpendicular Magnetic Field. AIP Conference Proceedings, 2008, , .	0.4	0
67	Dust trajectories as high precision diagnostic. AIP Conference Proceedings, 2011, , .	0.4	0