Chengxun

List of Publications by Year in Descending Order

100 papers	530 citations	12 h-index	16 g-index
119 ext. papers	660 ext. citations	2 avg, IF	3.93 L-index

#	Paper	IF	Citations
100	Attenuation of Microwave Radiation by Post-Anode Plasma in a Composite Grid Electrode Structure. *IEEE Access*, **2022**, 10, 7675-7683	3.5	
99	[illegible] *Technical Physics*, **2022**, 92, 366	0	
98	Specificities of the Nonlocal EDF Formation in a Dusty Plasma With the Different Spatial Distribution of the Microparticle Density. *IEEE Transactions on Plasma Science*, **2022**, 1-8	1.3	0
97	Spectral characteristics of a short glow discharge with a grid anode. *AIP Advances*, **2022**, 12, 035202	1.5	2
96	Tunable transmission near Dirac-like point in the designed plasma photonic crystal. *Physics of Plasmas*, **2022**, 29, 033505	2.1	2
95	Microwave Diagnostics of Cold Atmospheric Pressure Plasma Jets Based on the Radiation Pattern Measurements. *IEEE Transactions on Plasma Science*, **2022**, 1-6	1.3	
94	On the Possibility of Creating Absolute Negative Conductivity in a Local Stationary Plasma With an Inverse EDF. *IEEE Transactions on Plasma Science*, **2022**, 1-5	1.3	
93	Influence of Electron-Electron Collisions on the Formation of Inverse Electron Distribution Function and Absolute Negative Conductivity in Nonlocal Plasma of a DC Glow Discharge. *IEEE Transactions on Plasma Science*, **2022**, 1-6	1.3	
92	Parametric study of coaxial dielectric barrier discharge in atmospheric pressure argon. *Physics of Plasmas*, **2021**, 28, 113505	2.1	
91	Diagnostics of a microhollow cathode discharge at atmospheric pressure. *Plasma Science and Technology*, **2021**, 23, 064001	1.5	2
90	The Possibility of Measuring Electron Density of Plasma at Atmospheric Pressure by a Microwave Cavity Resonance Spectroscopy. *IEEE Transactions on Plasma Science*, **2021**, 49, 1001-1008	1.3	1
89	A method of electron density of positive column diagnosis□combining machine learning and Langmuir probe. *AIP Advances*, **2021**, 11, 045028	1.5	3
88	Analysis of parameters of coaxial dielectric barrier discharges in argon flow at atmospheric pressure. *Journal of Applied Physics*, **2021**, 129, 153305	2.5	1
87	Features of the EEDF formation in the dusty plasma of the positive column of a glow discharge. *Plasma Sources Science and Technology*, **2021**, 30, 047001	3.5	1
86	Machine learning combined with Langmuir probe measurements for diagnosis of dusty plasma of a positive column. *Plasma Science and Technology*, **2021**, 23, 095403	1.5	3
85	Ambipolar Trap for Dust Particles in a V-Shaped Homogeneous Positive Column of Glow Discharge at Low and Medium Pressures. *IEEE Transactions on Plasma Science*, **2021**, 49, 997-1000	1.3	
84	[illegible] *Technical Physics*, **2021**, 91, 1108	0	

83	Influence of Discharge Current, Pressure, and Magnetic Field on the Spatial Distribution of Particles and Fluxes in the Dusty Plasma of the Positive Column of DC Glow Discharge. *IEEE Transactions on Plasma Science*, **2021**, 49, 878-885	1.3	3
82	Magnetically insulated baffled probe (MIBP) for low-temperature and fusion-boundary plasma studies. *Plasma Physics and Controlled Fusion*, **2021**, 63, 093001	2	0
81	Formation of inverse EDF in glow discharges with an inhomogeneous electric field. *Plasma Sources Science and Technology*, **2021**, 30, 095006	3.5	4
80	Measurement of the densities of plasma and ambient gas particles using a short direct current discharge. *Physics of Plasmas*, **2020**, 27, 053508	2.1	1
79	Transition from periodic to chaotic oscillations in a planar gas discharge-semiconductor system. *Plasma Sources Science and Technology*, **2020**, 29, 065009	3.5	2
78	Longitudinal structure and plasma parameters of an entire DC glow discharge as obtained using a 1D fluid-based model with non-local ionization. *Plasma Sources Science and Technology*, **2020**, 29, 075003	3.5	3
77	Evidence of effective local control of a plasma's nonlocal electron distribution function. *Plasma Sources Science and Technology*, **2020**, 29, 077001	3.5	4
76	Formation of inverse electron distribution function and absolute negative conductivity in nonlocal plasma of a dc glow discharge. *Physical Review E*, **2020**, 101, 031202	2.4	10
75	Boundary conditions for drift-diffusion equations in gas-discharge plasmas. *Physics of Plasmas*, **2020**, 27, 013505	2.1	2
74	Paschen curves and current–voltage characteristics of large-area short glow discharge with different electrode structures. *Physics of Plasmas*, **2020**, 27, 123509	2.1	3
73	Influence of the Spatial Distribution of the Dust Particle Density on the Radial Profile Formation of Particles and Fluxes in a Dusty Plasma of DC Glow Discharge. *IEEE Transactions on Plasma Science*, **2020**, 48, 375-387	1.3	6
72	Measurements of plasma parameters in a hollow electrode AC glow discharge in helium. *Plasma Science and Technology*, **2020**, 22, 034006	1.5	7
71	The Influence of Plasma Distribution on Microwave Reflection in a Plasma-Metal Model. *IEEE Transactions on Plasma Science*, **2020**, 48, 359-363	1.3	3
70	Conductivity and Permittivity in Plasma With Nonequilibrium Electron Distribution Function. *IEEE Transactions on Plasma Science*, **2020**, 48, 388-393	1.3	1
69	Theoretical research on the transport and ionization rate coefficients in glow discharge dusty plasma. *Plasma Science and Technology*, **2020**, 22, 034003	1.5	4
68	The smooth effect of fast electron detection in the positive column in DC glow discharge. *AIP Advances*, **2019**, 9, 095033	1.5	1
67	1D photonic crystal filled with low-temperature plasma for controlling broadband microwave transmission. *AIP Advances*, **2019**, 9, 065302	1.5	9
66	Diagnostics of large volume coaxial gridded hollow cathode DC discharge. *Plasma Sources Science and Technology*, **2019**, 28, 067001	3.5	6

65	Analysis and optimization of microwave reflections in a plasma-metal model. *Journal of Applied Physics*, **2019**, 125, 163306	2.5	2
64	A kinetic model for investigating the dielectric properties of rocket exhaust dusty plasmas. *Physics of Plasmas*, **2019**, 26, 043704	2.1	0
63	Influence of metastable atoms on the formation of nonlocal EDF, electron reaction rates, and transport coefficients in argon plasma. *Plasma Sources Science and Technology*, **2019**, 28, 035017	3.5	4
62	The Influence of the Ambipolar Field on the Levitation Conditions of Dust Particles in the Positive Column of the Glow Discharge With a Change the Spatial Orientation of the Discharge Tube. *IEEE Transactions on Plasma Science*, **2019**, 47, 4391-4395	1.3	2
61	Formation of nonmonotonic profiles of densities and fluxes of charged particles and ambipolar field reversal in argon dusty plasmas. *Plasma Sources Science and Technology*, **2019**, 28, 095020	3.5	7
60	Influence of dust particles on spatial distributions of particles and fluxes in positive column of glow discharge. *Plasma Science and Technology*, **2019**, 21, 115404	1.5	7
59	Nonlocal control of plasma conductivity. *Physics of Plasmas*, **2019**, 26, 073301	2.1	3
58	Calculation of nonlocal EDF using a one-dimensional Boltzmann equation solver. *Physics of Plasmas*, **2019**, 26, 023509	2.1	3
57	Research on small-scale structures of ice particle density and electron density in the mesopause region. *Annales Geophysicae*, **2019**, 37, 1079-1094	2	0
56	Effects of Non-Maxwellian Electron Distribution Function to the Propagation Coefficients of Electromagnetic Waves in Plasma. *IEEE Transactions on Plasma Science*, **2019**, 47, 100-103	1.3	3
55	Measurement of Microwave Propagation in Weakly Ionized Dusty Plasma. *IEEE Transactions on Plasma Science*, **2019**, 47, 109-112	1.3	1
54	Nonlinear propagation characteristics and ring structure of a Gaussian beam in collisionless plasmas with high order paraxial ray theory. *Optik*, **2019**, 179, 744-749	2.5	1
53	Influence of electron–electron collisions on the formation of a nonlocal EDF. *Plasma Sources Science and Technology*, **2019**, 28, 015001	3.5	4
52	Influence of dust particles on DC glow discharge plasma. *Physics of Plasmas*, **2018**, 25, 023701	2.1	12
51	Influence of dust particles on positive column of DC glow discharge. *Journal of Applied Physics*, **2018**, 123, 103301	2.5	14
50	Numerical simulation and analysis of electromagnetic-wave absorption of a plasma slab created by a direct-current discharge with gridded anode. *Journal of Applied Physics*, **2018**, 123, 113303	2.5	8
49	Vortex electron flux and EDF nonlocality of moderate and high-pressure gas discharge plasmas. *Plasma Sources Science and Technology*, **2018**, 27, 045007	3.5	4
48	The nonlocal electron kinetics for a low-pressure glow discharge dusty plasma. *Physics of Plasmas*, **2018**, 25, 053702	2.1	3

47	Nonlinear propagation characteristics of multi-Gaussian beams in collisionless plasmas. *Journal of the Optical Society of America B: Optical Physics*, **2018**, 35, 3088	1.7	2
46	Determining the spectrum of penning electrons by current to a wall probe in nonlocal negative glow plasma. *Physics of Plasmas*, **2018**, 25, 104501	2.1	12
45	Ponderomotive force induced nonlinear interaction between powerful terahertz waves and plasmas. *Optik*, **2018**, 175, 250-255	2.5	4
44	Propagation characteristics of microwaves in dusty plasmas with multi-collisions. *Plasma Science and Technology*, **2017**, 19, 055301	1.5	7
43	Local Magnetic Control in a Large-Scale Low-Pressure Nonlocal Plasma Source. *IEEE Transactions on Plasma Science*, **2017**, 45, 3114-3117	1.3	1
42	On self-sustainment of DC discharges with gridded anode. *Journal of Applied Physics*, **2017**, 122, 143304	2.5	7
41	Probe Diagnostics of Plasma Parameters in a Large-Volume Glow Discharge With Coaxial Gridded Hollow Electrodes. *IEEE Transactions on Plasma Science*, **2017**, 45, 3110-3113	1.3	9
40	Ambipolar field role in formation of electron distribution function in gas discharge plasma. *Scientific Reports*, **2017**, 7, 14613	4.9	12
39	Propagation characters of multi-Gaussian beam with large eccentric displacement in collisionless plasma: Higher order paraxial theory. *Physics of Plasmas*, **2017**, 24, 062306	2.1	
38	1D kinetic simulations of a short glow discharge in helium. *Physics of Plasmas*, **2017**, 24, 073507	2.1	13
37	The role of the ambipolar field in the formation of the EDF and the criteria of the local approximation. *Journal of Physics: Conference Series*, **2017**, 927, 012080	0.3	
36	Numerical and Experimental Diagnostics of Dusty Plasma in a Coaxial Gridded Hollow Cathode Discharge. *IEEE Transactions on Plasma Science*, **2016**, 44, 2973-2978	1.3	18
35	Broadband microwave characteristics of a novel coaxial gridded hollow cathode argon plasma. *Review of Scientific Instruments*, **2016**, 87, 083506	1.7	2
34	The electrical conductivity of weakly ionized plasma containing dust particles. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2016**, 380, 2540-2543	2.3	5
33	Absolute continuum intensity diagnostics of a novel large coaxial gridded hollow cathode argon plasma. *Physics of Plasmas*, **2016**, 23, 083525	2.1	4
32	Properties of a large volume glow discharge helium plasma by measuring the broadband microwave phase shift in different pressures. *Physics of Plasmas*, **2016**, 23, 063302	2.1	5
31	Propagation of electromagnetic wave in dusty plasma and the influence of dust size distribution. *Physics of Plasmas*, **2016**, 23, 073702	2.1	10
30	Propagation of electromagnetic waves in a weak collisional and fully ionized dusty plasma. *Physics of Plasmas*, **2016**, 23, 043302	2.1	19

29	Transmission characteristics of microwave in a glow-discharge dusty plasma. *Physics of Plasmas*, **2016**, 23, 073705	2.1	5
28	Broadband microwave measurement of electron temperature of a large coaxial gridded hollow cathode helium plasma. *Physics of Plasmas*, **2016**, 23, 103304	2.1	2
27	Novel dynamic tuning of broadband visible metamaterial perfect absorber using graphene. *Journal of Applied Physics*, **2016**, 120, 033101	2.5	18
26	Broadband microwave propagation in a novel large coaxial gridded hollow cathode helium plasma. *Physics of Plasmas*, **2016**, 23, 063304	2.1	5
25	The dielectric function of weakly ionized dusty plasmas. *Physics of Plasmas*, **2016**, 23, 073301	2.1	2
24	Broadband microwave propagation in a novel large volume glow discharge argon plasma **2016**,		1
23	The method of impedance transformation for electromagnetic waves propagating in one-dimension plasma photonic crystal. *Physics of Plasmas*, **2016**, 23, 083524	2.1	4
22	A novel chiral nano structure for optical activities and negative refractive index. *Optik*, **2016**, 127, 5738-5742	2.5	7
21	A numerical study of dynamic tunability of perfect absorption with temperature in the visible region based on a nanostructure containing multilayer graphene. *Optics Communications*, **2016**, 372, 172-179	2	6
20	Investigation of Low-Pressure Glow Discharge in a Coaxial Gridded Hollow Cathode. *IEEE Transactions on Plasma Science*, **2016**, 44, 2965-2972	1.3	13
19	Propagation of electromagnetic waves in a weakly ionized dusty plasma. *Journal Physics D: Applied Physics*, **2015**, 48, 465201	3	21
18	The structure and optical properties of lead-free transparent KNLTN-La0.01 ceramics prepared by conventional sintering technique. *Materials Science-Poland*, **2014**, 32, 597-603	0.6	0
17	Soliton switching in inhomogeneous nonlocal media. *Optik*, **2014**, 125, 1075-1078	2.5	8
16	The terahertz characteristics of a sandwich type microplasma structure. *Journal of Applied Physics*, **2013**, 114, 123302	2.5	5
15	Spatial solitons in nonlocal materials with defocusing defects. *Optics Communications*, **2012**, 285, 1456-1460	2	1
14	Lagrangian approach for dark soliton in nonlocal nonlinear media. *Optics Communications*, **2012**, 285, 3631-3635	2	6
13	Propagating characters of Gaussian laser beam in plasmas with non-homogeneous radial temperature distribution. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2012**, 376, 1211-1214	2.3	
12	Propagation characteristics of a Gaussian laser beam in plasma with modulated collision frequency. *Physics of Plasmas*, **2012**, 19, 083114	2.1	3

List of Publications

11	Analytical calculations of intense Gaussian laser beam propagating in plasmas with relativistic collision correction. *Physics of Plasmas*, **2012**, 19, 103109	2.1	4
10	Dark and gray solitons in nematic liquid crystals. *Physica Scripta*, **2012**, 85, 015402	2.6	9
9	Self-focusing and defocusing of Gaussian laser beams in plasmas with linear temperature ramp. *Physics of Plasmas*, **2011**, 18, 073107	2.1	19
8	Propagation of terahertz waves in an atmospheric pressure microplasma with Epstein electron density profile. *Journal of Applied Physics*, **2011**, 109, 063305	2.5	15
7	Propagation properties of broadband terahertz pulses through a bounded magnetized thermal plasma. *Nuclear Instruments & Methods in Physics Research B*, **2011**, 269, 23-29	1.2	22
6	Propagation of Gaussian laser beam in cold plasma of Drude model. *Physics of Plasmas*, **2011**, 18, 113105	2.1	20
5	Propagation of broadband terahertz pulses through a dense-magnetized-collisional-bounded plasma layer. *Physics of Plasmas*, **2010**, 17, 113304	2.1	30
4	The effect of B-site cations on the properties of KTaxNb1-xO3 [100] surface: A study of density functional theory. *Computational Materials Science*, **2010**, 50, 338-343	3.2	4
3	Use of plasma electron spectroscopy method to detect organic molecules: hydrocarbons, alcohols, and ammonia in nonlocal plasma of short glow discharge. *Plasma Sources Science and Technology*,	3.5	1
2	Tunable triangular and honeycomb plasma structures in dielectric barrier discharge with mesh-liquid electrodes. *Plasma Science and Technology*,	1.5	1
1	Introduction to the Kinetics of Glow Discharges		5