

An-Bang Sun

List of Publications by Year in descending order

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56
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citing authors

#	ARTICLE	IF	CITATIONS
1	Streamer precursor transition in N_2 – SF_6 mixtures under positive repetitive submicrosecond pulses. High Voltage, 2022, 7, 382-389.	4.7	9
2	1d3v PIC/MCC simulation of dielectric barrier discharge dynamics in hydrogen sulfide. Plasma Science and Technology, 2022, 24, 025401.	1.5	0
3	A comparison of particle and fluid models for positive streamer discharges in air. Plasma Sources Science and Technology, 2022, 31, 015012.	3.1	12
4	Structural characteristics of the upstream sheath of the ion optics and its application in evaluating the beam performance of an ion thruster. Journal of Applied Physics, 2022, 131, .	2.5	5
5	Investigation of a novel ring-cusp magnetically confined plasma bridge neutralizer. Review of Scientific Instruments, 2022, 93, 034501.	1.3	4
6	On the electron sheath theory and its applications in plasma surface interactions. Plasma Science and Technology, 2022, 24, 095401.	1.5	5
7	A computational study of steady and stagnating positive streamers in N_2 – O_2 mixtures. Plasma Sources Science and Technology, 2022, 31, 065011.	3.1	14
8	On the Ohmic-dominant heating mode of capacitively coupled plasma inverted by boundary electron emission. Applied Physics Letters, 2022, 121, .	3.3	4
9	Issues in the numerical modelling of positive ion extraction. Computer Physics Communications, 2021, 259, 107629.	7.5	9
10	Two methods of simulating corona current pulses in SF_6 under negative DC voltage. , 2021, , .		0
11	Review on ionization and quenching mechanisms of Trichel pulse*. Chinese Physics B, 2021, 30, 055207.	1.4	4
12	Fractal analysis of positive streamer branching produced with field ionization in gaseous, liquid, and supercritical CO_2 . , 2021, , .		0
13	Unveiling the role of dielectric trap states on capacitively coupled radio-frequency plasma discharge: dynamic charging behaviors. Plasma Sources Science and Technology, 2021, 30, 055007.	3.1	7
14	Effect of Gas-Mixture Ratio on the Characteristics of Positive DC Corona Discharge in SF_6/N_2 Gas Mixtures. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 829-837.	2.9	6
15	On the pulsed pulseless mode transition of negative DC corona in atmospheric nitrogen. Physics of Plasmas, 2021, 28, 063505.	1.9	2
16	Numerical and theoretical modeling of the sheath upstream of ion optics: sheath structure transition and its effect on the beam divergence. Plasma Sources Science and Technology, 2021, 30, 075019.	3.1	5
17	Comparing simulations and experiments of positive streamers in air: steps toward model validation. Plasma Sources Science and Technology, 2021, 30, 095002.	3.1	23
18	Effects of a negative corona discharge on subsequent positive streamers. Journal Physics D: Applied Physics, 2021, 54, 485202.	2.8	3

#	ARTICLE	IF	CITATIONS
19	3D particle-in-cell simulation of positive streamer initiation in highly pressurized gaseous, liquid and supercritical CO ₂ with field ionization. High Voltage, 2021, 6, 16-24.	4.7	6
20	Pulse-By-Pulse Streamer-To-Leader Transition In N ₂ -SF ₆ Mixtures Under Repetitive Sub-Microsecond Pulses. , 2021, , .		0
21	Plasma plume evolution of a capillary discharge based pulsed plasma thruster: An optical diagnosis study. Physics of Plasmas, 2021, 28, .	1.9	5
22	Numerical Study on the Effect of Electric Field Non-uniformity on the Pulse Characteristics of Positive Corona Discharge in SF ₆ /N ₂ Gas Mixtures. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 1949-1956.	2.9	5
23	Effect of transverse airflow on the deflection of negative corona discharge on the Trichel pulse mode at atmospheric pressure. AIP Advances, 2021, 11, .	1.3	7
24	Effect of trace SF ₆ on negative corona characteristics in SF ₆ /N ₂ gas mixtures under DC voltages. AIP Advances, 2020, 10, .	1.3	8
25	A computational study of negative surface discharges: Characteristics of surface streamers and surface charges. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 1178-1186.	2.9	26
26	A computational study of positive streamers interacting with dielectrics. Plasma Sources Science and Technology, 2020, 29, 065004.	3.1	35
27	A 3D numerical study of positive streamers interacting with localized plasma regions. Journal Physics D: Applied Physics, 2020, 53, 425204.	2.8	14
28	The pulsed mode of negative DC corona in nitrogen at atmosphere pressure: Comparison with Trichel pulses in air. Physics of Plasmas, 2020, 27, .	1.9	8
29	Intense boundary emission destroys normal radio-frequency plasma sheath. Physical Review E, 2020, 101, 033203.	2.1	12
30	Review on development of carbon nanotube field emission cathode for space propulsion systems. High Voltage, 2020, 5, 409-415.	4.7	20
31	Experimental study on pulse characteristics of negative corona discharge in SF ₆ /N ₂ gas mixtures under DC voltages. AIP Advances, 2020, 10, .	1.3	9
32	Effect of Epoxy Resin Spacers on Corona Characteristics in SF ₆ /N ₂ Mixtures under Positive DC Voltages. , 2020, , .		0
33	On the role of secondary electron emission in capacitively coupled radio-frequency plasma sheath: A theoretical ground. Plasma Processes and Polymers, 2019, 16, 1900093.	3.0	16
34	Transition from glow-like to streamer-like discharge in atmospheric pressure dielectric barrier discharge controlled by variable dielectric surface layer permittivity. Physics of Plasmas, 2019, 26, .	1.9	11
35	Three-dimensional fluid simulations of the Cs plasma release in the ionosphere. AIP Advances, 2019, 9, 015117.	1.3	4
36	Integrated modeling of plasma-dielectric interaction: kinetic boundary effects. Plasma Sources Science and Technology, 2019, 28, 055001.	3.1	16

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37	Experimental Study on Corona Discharge Characteristics of SF ₆ /N ₂ Gas Mixture in Needle-plane Model. , 2019, , .		0
38	3D Particle-in-Cell Simulation of Positive Needle-to-Plane Streamer Discharge in SF ₆ with Field Ionization. , 2019, , .		2
39	Inside Cover Picture: Plasma Process. Polym. 11/2019. Plasma Processes and Polymers, 2019, 16, 1970024.	3.0	1
40	Computational study on the aerodynamics of a long-shrouded contra-rotating rotor in hover. International Journal of Micro Air Vehicles, 2019, 11, 175682931983368.	1.3	0
41	Particle simulation of grid system for krypton ion thrusters. Chinese Journal of Aeronautics, 2018, 31, 719-726.	5.3	15
42	Characteristics of atmospheric Ar/NH ₃ DBD and its comparison with He/N ₂ DBD. Journal Physics D: Applied Physics, 2018, 51, 225201.	2.8	8
43	Confluence or independence of microwave plasma bullets in atmospheric argon plasma jet plumes. Journal of Applied Physics, 2018, 123, .	2.5	17
44	Experimental study on the discharge ignition in a capillary discharge based pulsed plasma thruster. Physics of Plasmas, 2018, 25, 093512.	1.9	7
45	PIC/MCC simulation of capacitively coupled discharges in helium: boundary effects. Plasma Sources Science and Technology, 2018, 27, 054002.	3.1	15
46	Development and analysis of a novel printed circuit board electrostatic comb system for micro-newton thrust stand calibration. Review of Scientific Instruments, 2018, 89, 075104.	1.3	7
47	Formation mechanism of streamer discharges in liquids: a review. High Voltage, 2016, 1, 74-80.	4.7	86
48	Analysis of Numerical Simulation Results of LIPS-200 Lifetime Experiments. Plasma Science and Technology, 2016, 18, 611-616.	1.5	13
49	PIC/MCC simulation of capacitively coupled discharges: Effect of particle management and integration. Computer Physics Communications, 2016, 206, 35-44.	7.5	52
50	Integrated static and dynamic modeling of an ionic polymer-metal composite actuator. Journal of Intelligent Material Systems and Structures, 2015, 26, 1164-1178.	2.5	11
51	3-D Particle Modeling of Positive Streamer Inception From a Needle Electrode in Supercritical Nitrogen. IEEE Transactions on Plasma Science, 2014, 42, 2416-2417.	1.3	14
52	The inception of pulsed discharges in air: simulations in background fields above and below breakdown. Journal Physics D: Applied Physics, 2014, 47, 445205.	2.8	27
53	A time scale for electrical screening in pulsed gas discharges. Journal Physics D: Applied Physics, 2014, 47, 365203.	2.8	30
54	Nonlinear ion-acoustic structures in a nonextensive electron-positron-ion-dust plasma: Modulational instability and rogue waves. Annals of Physics, 2012, 332, 38-55.	2.8	48

#	ARTICLE	IF	CITATIONS
55	Asymptotic-Preserving Particle-In-Cell method for the Vlasov-Poisson system near quasineutrality. Journal of Computational Physics, 2010, 229, 5630-5652.	3.8	49