Wei Jiang

List of Publications by Year in descending order

54 papers	908 citations	471509 17 h-index	501196 28 g-index
54 all docs	54 docs citations	54 times ranked	431 citing authors

#	Article	IF	Citations
1	Collisionless Bounce Resonance Heating in Dual-Frequency Capacitively Coupled Plasmas. Physical Review Letters, 2011, 107, 055002.	7.8	101
2	Implicit and electrostatic particle-in-cell/Monte Carlo model in two-dimensional and axisymmetric geometry: I. Analysis of numerical techniques. Plasma Sources Science and Technology, 2010, 19, 045023.	3.1	74
3	Heating mechanisms and particle flow balancing of capacitively coupled plasmas driven by combined dc/rf sources. Physics of Plasmas, 2008, 15, .	1.9	58
4	Implicit and electrostatic particle-in-cell/Monte Carlo model in two-dimensional and axisymmetric geometry: II. Self-bias voltage effects in capacitively coupled plasmas. Plasma Sources Science and Technology, 2011, 20, 035013.	3.1	53
5	Two-dimensional particle-in cell/Monte Carlo simulations of a packed-bed dielectric barrier discharge in air at atmospheric pressure. New Journal of Physics, 2015, 17, 083056.	2.9	44
6	Numerical simulations of electrical asymmetry effect on electronegative plasmas in capacitively coupled rf discharge. Journal of Applied Physics, 2011, 109, 013308.	2.5	41
7	A brief review of dual-frequency capacitively coupled discharges. Current Applied Physics, 2011, 11, S2-S8.	2.4	35
8	Magnetical asymmetry effect in capacitively coupled plasmas: effects of the magnetic field gradient, pressure, and gap length. Plasma Sources Science and Technology, 2018, 27, 035008.	3.1	34
9	Magnetical asymmetric effect in geometrically and electrically symmetric capacitively coupled plasma. Plasma Processes and Polymers, 2017, 14, 1700087.	3.0	32
10	Separate control between geometrical and electrical asymmetry effects in capacitively coupled plasmas. Journal Physics D: Applied Physics, 2012, 45, 305203.	2.8	30
11	Electrical breakdown in dual-frequency capacitively coupled plasma: a collective simulation. Plasma Sources Science and Technology, 2021, 30, 065029.	3.1	27
12	A time-dependent analytical sheath model for dual-frequency capacitively coupled plasma. Physics of Plasmas, 2006, 13, 113502.	1.9	25
13	Numerical characterization of magnetized capacitively coupled argon plasmas driven by combined dc/rf sources. Physics of Plasmas, 2017, 24, .	1.9	22
14	Kinetic simulation of direct-current driven microdischarges in argon at atmospheric pressure. Journal Physics D: Applied Physics, 2014, 47, 435201.	2.8	19
15	Electrical asymmetry effects in magnetized capacitively coupled plasmas in argon. Plasma Sources Science and Technology, 2017, 26, 065011.	3.1	19
16	On the energy conservation electrostatic particle-in-cell/Monte Carlo simulation: Benchmark and application to the radio frequency discharges. Chinese Physics B, 2014, 23, 035204.	1.4	18
17	Numerical modeling of tokamak breakdown phase driven by pure Ohmic heating under ideal conditions. Nuclear Fusion, 2016, 56, 126017.	3.5	18
18	Implicit electrostatic particle-in-cell/Monte Carlo simulation for the magnetized plasma: Algorithms and application in gas-inductive breakdown. Chinese Physics B, 2015, 24, 065207.	1.4	16

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19	Impact of different packing beads methods for streamer generation and propagation in packed-bed dielectric barrier discharge. Journal Physics D: Applied Physics, 2020, 53, 185202.	2.8	16
20	Particle-in-cell and Monte Carlo collision simulations of the cathode sheath in an atmospheric direct-current arc discharge. Plasma Sources Science and Technology, 2016, 25, 05LT01.	3.1	14
21	Quantum hydrodynamic modeling of edge modes in chiral Berry plasmons. Physical Review B, 2017, 96, .	3.2	14
22	Valley-polarized edge pseudomagnetoplasmons in graphene: A two-component hydrodynamic model. Physical Review B, 2018, 97, .	3.2	14
23	On the breakdown modes and parameter space of ohmic tokamak start-up. Journal of Plasma Physics, 2018, 84, .	2.1	14
24	Enhancement of surface discharge in catalyst pores in dielectric barrier discharges. Journal of Applied Physics, 2019, 125, .	2.5	14
25	Surface-charging effect of capacitively coupled plasmas driven by combined dc/rf sources. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 287-292.	2.1	13
26	Kinetic analysis of direct-current driven microdischarges with thermo-field electron emission at atmospheric pressure. Journal Physics D: Applied Physics, 2020, 53, 455201.	2.8	13
27	Numerical characterization of local electrical breakdown in sub-micrometer metallized film capacitors. New Journal of Physics, 2014, 16, 113036.	2.9	12
28	Electron energy probability function modulation with external electron beam in capacitive coupled radio frequency discharges. Plasma Processes and Polymers, 2018, 15, 1700169.	3.0	10
29	Electron kinetics in capacitively coupled plasmas modulated by electron injection. Journal of Applied Physics, 2017, 122, .	2.5	9
30	Self-consistent simulation of the impedance matching network for single frequency capacitively coupled plasma. Journal Physics D: Applied Physics, 2022, 55, 165201.	2.8	9
31	Stopping power of two-dimensional spin quantum electron gases. Nuclear Instruments & Methods in Physics Research B, 2015, 349, 72-78.	1.4	7
32	Numerical characterization of plasma breakdown in reversed field pinches. Nuclear Fusion, 2018, 58, 026007.	3.5	7
33	Pseudomagnetic field modulation of stopping power for a charged particle moving above graphene. Physics of Plasmas, 2018, 25, .	1.9	7
34	Computational characterization of electron-beam-sustained plasma. Physics of Plasmas, 2019, 26, .	1.9	7
35	Computational analysis of direct current breakdown process in SF6 at low pressure. Journal Physics D: Applied Physics, 2021, 54, 445201.	2.8	7
36	Numerical characterization of breakdown process of dc-driven micro-discharge sustained by thermionic emission. Journal Physics D: Applied Physics, 0, , .	2.8	7

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37	The effects of match circuit on the breakdown process of capacitively coupled plasma driven by radio frequency. Journal of Applied Physics, 2022, 131, 153301.	2.5	6
38	Implicit Temporal Discretization and Exact Energy Conservation for Particle Methods Applied to the Poissonâ€“Boltzmann Equation. Plasma, 2018, 1, 242-258.	1.8	5
39	How bead shapes affect the plasma streamer characteristics in packed-bed dielectric barrier discharges: a kinetic modeling study. Plasma Science and Technology, 2020, 22, 034013.	1.5	5
40	Discharge Enhancement Phenomenon and Streamer Control in Dielectric Barrier Discharge with Many Pores. Catalysts, 2020, 10, 68.	3.5	5
41	On the breakdown process of capacitively coupled plasma in carbon tetrafluoride. Journal Physics D: Applied Physics, 2022, 55, 255203.	2.8	5
42	Enhancement of valley polarization in graphene with an irradiating charged particle. Physics of Plasmas, 2019, 26, 012102.	1.9	4
43	Note on the energy transport in capacitively coupled plasmas. Plasma Sources Science and Technology, 2022, 31, 047001.	3.1	4
44	Computational study of microdischarges driven by electron beam injection with particle-in-cell/Monte Carlo collision simulations. Journal of Applied Physics, 2022, 131, .	2.5	4
45	Effect of Stern-Gerlach force on negative magnetoresistance and Hall resistance in spin-dependent viscous flow. Physical Review B, 2020, 102, .	3.2	3
46	High-frequency magnetotransport in a viscous electron fluid under a Stern-Gerlach force. Physical Review B, 2021, 104, .	3.2	3
47	Two-dimensional electromagnetic quantum-hydrodynamic simulations of isochoric heating of a solid target by proton beams. Physics of Plasmas, 2015, 22, 022701.	1.9	2
48	The influence of weak transverse magnetic field on plasma dissipation process in the post-arc phase in a vacuum interrupter. Plasma Science and Technology, 0, , .	1.5	1
49	Numerical characterization of capacitively coupled plasmas modulated by ion beam injection. Plasma Sources Science and Technology, 2022, 31, 045028.	3.1	1
50	Plasma density evolution in plasma opening switch obtained by a time-resolved sensitive He-Ne interferometer. Science China: Physics, Mechanics and Astronomy, 2014, 57, 442-446.	5.1	0
51	Influence Of Duty Cycle On Pulse Modulated Rf Capacitively-Coupled Argon Discharge. , 2017, , .		0
52	Stopping Power Modulation by Pump Waves of Charged Particles Moving above Two-Dimensional Electron Gases. Laser and Particle Beams, 2021, 2021, .	1.0	0
53	BCS-BEC crossover of ultracold ions driven by density-dependent short-range interactions in a quantum plasma. Physical Review A, 2021, 104, .	2.5	0
54	Effect of Viscosity on Stopping Power for a Charged Particle Moving above Two-Dimensional Electron Gas. Laser and Particle Beams, 2022, 2022, .	1.0	0