Shaojie Wang

List of Publications by Year
in descending order

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88	997	430874	552781
papers	citations	18 h-index	26 g-index

91	91	91	541
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Numerical computation of the transport matrix in a tokamak plasma with electrostatic turbulence. Physics of Plasmas, 2021, 28, .	1.9	2
2	Spontaneous spin-up induced by turbulence-driven topological transition of orbits in a collisionless tokamak plasma. Scientific Reports, 2020, 10, 6986.	3.3	0
3	Particleâ€inâ€Cell Simulations of Characteristics of Risingâ€Tone Chorus Waves in the Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027961.	2.4	8
4	Theory of gyrokinetic velocity moment and its application for zonal flows in a tokamak plasma. Nuclear Fusion, 2020, 60, 046015.	3.5	3
5	Transport of poloidal momentum induced by ion cyclotron range of frequencies waves. Physics of Plasmas, 2020, 27, .	1.9	0
6	Two-band whistler-mode waves excited by an electron bi-Maxwellian distribution plus parallel beams. AIP Advances, 2020, 10, 125010.	1.3	7
7	Monte Carlo orbit-following simulations including the finite Larmor radius effect based on a phase-space coordinate transform method. Computer Physics Communications, 2019, 244, 40-48.	7.5	14
8	Gyrokinetic simulation of ITG turbulence with toroidal geometry including the magnetic axis by using field-aligned coordinates. Computer Physics Communications, 2019, 242, 72-82.	7.5	6
9	Numerical computation of the transport matrix in toroidal plasma with a stochastic magnetic field. Physics of Plasmas, 2018, 25, 042501.	1.9	3
10	Loss and redistribution of energetic passing ions with resonant magnetic perturbations. Physics of Plasmas, 2018, 25, .	1.9	17
11	Inâ€“out impurity density asymmetry due to the Coriolis force in a rotating tokamak plasma. Nuclear Fusion, 2018, 58, 106036.	3.5	3
12	Particle simulation of a magnetized plasma sheath with the magnetic field parallel to the wall. Physics of Plasmas, 2018, 25, .	1.9	1
13	Theoretical analysis on lower band cascade as a mechanism for multiband chorus in the Earthâ€™s magnetosphere. AIP Advances, 2018, 8, .	1.3	7
14	Implementation of field-aligned coordinates in a semi-Lagrangian gyrokinetic code for tokamak turbulence simulation. Plasma Science and Technology, 2018, 20, 074008.	1.5	4
15	Influence of mean radial electric field on particle transport induced by RMPs in tokamak plasmas. Physics of Plasmas, 2018, 25, .	1.9	4
16	Ion heat pinch due to the magnetic drift resonance with the ion temperature gradient instability in a rotating plasma. Physics of Plasmas, 2017, 24, 030701.	1.9	7
17	Zonal flows driven by the turbulent energy flux and the turbulent toroidal Reynolds stress in a magnetic fusion torus. Physics of Plasmas, 2017, 24, .	1.9	8
18	Nonlinear gyrokinetic simulation of ion temperature gradient turbulence based on a numerical Lie-transform perturbation method. Physics of Plasmas, 2017, 24, .	1.9	15

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19	Application of High Dimensional B-Spline Interpolation in Solving the Gyro-Kinetic Vlasov Equation Based on Semi-Lagrangian Method. Communications in Computational Physics, 2017, 22, 789-802.	1.7	5
20	Quasilinear transport due to the magnetic drift resonance with the ion temperature gradient instability in a rotating plasma. Physics of Plasmas, 2017, 24, .	1.9	2
21	Nonlinear gyrokinetic theory and its application to computation of the gyrocenter motion in ripple field. Physics of Plasmas, 2016, 23, 062306.	1.9	3
22	Simulation study of entropy production in the one-dimensional Vlasov system. Physics of Plasmas, 2016, 23, 072116.	1.9	3
23	Anomalous pinch of turbulent plasmas driven by the magnetic-drift-induced Lorentz force through the Stokes-Einstein relation. Physics of Plasmas, 2016, 23, 072509.	1.9	7
24	Ambipolar radial electric field generated by anomalous transport induced by magnetic perturbations. Physics of Plasmas, 2016, 23, 054503.	1.9	5
25	Toroidal rotation induced by asymmetric cyclotron resonance absorption in minority ICRF-heated tokamak plasmas. Nuclear Fusion, 2016, 56, 046013.	3.5	2
26	Effect of Fuelling Depth on the Fusion Performance and Particle Confinement of a Fusion Reactor. Plasma Science and Technology, 2016, 18, 1155-1161.	1.5	2
27	Nonlinear tearing modes stabilization by oscillating the resonant surface. Physics of Plasmas, 2016, 23, 092510.	1.9	2
28	Nonlinear wavenumber shift of large amplitude Langmuir waves. Physics of Plasmas, 2016, 23, 072120.	1.9	1
29	Anomalous current pinch of a toroidal axisymmetric plasma with stochastic magnetic field perturbations. Physics of Plasmas, 2016, 23, 072510.	1.9	5
30	A gyrokinetic continuum code based on the numerical Lie transform (NLT) method. Journal of Computational Physics, 2016, 316, 180-192.	3.8	26
31	Transport equation for plasmas in a stationary-homogeneous turbulence. Physics of Plasmas, 2016, 23, 022303.	1.9	13
32	A new continuum approach for nonlinear kinetic simulation and transport analysis. Physics of Plasmas, 2015, 22, .	1.9	8
33	Effect of particle pinch on the fusion performance and profile features of an international thermonuclear experimental reactor-like fusion reactor. Physics of Plasmas, 2015, 22, 042501.	1.9	2
34	Reply to comment on â€˜Co-current rotation of the bulk ions due to the ion orbit loss at the edge of a tokamak plasmaâ€™. Nuclear Fusion, 2015, 55, 058002.	3.5	0
35	Kinetic effect of toroidal rotation on the geodesic acoustic mode. Physics of Plasmas, 2015, 22, .	1.9	14
36	High-Precision Nonsingular Integrator of Guiding-Center Orbit Close to Magnetic Axis in Tokamak Equilibrium Configuration. Plasma Science and Technology, 2015, 17, 280-287.	1.5	1

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37	Nonlinear gyrokinetic theory based on a new method and computation of the guiding-center orbit in tokamaks. Physics of Plasmas, 2014, 21, 042505.	1.9	11
38	Simulation of the alpha particle heating and the helium ash source in an International Thermonuclear Experimental Reactor-like tokamak with an internal transport barrier. Physics of Plasmas, 2014, 21, .	1.9	5
39	Neoclassical effects on the stabilization of tearing mode by current modulation. Physics of Plasmas, 2014, 21, 022503.	1.9	3
40	Transport induced by ion cyclotron range of frequencies waves. Physics of Plasmas, 2014, 21, 112511.	1.9	5
41	Onsager's symmetry relation and the residual parallel Reynolds stress in a magnetized plasma with electrostatic turbulence. Physics of Plasmas, 2014, 21, 092503.	1.9	6
42	Lie-transform theory of transport in plasma turbulence. Physics of Plasmas, 2014, 21, 072312.	1.9	6
43	Co-current rotation of the bulk ions due to the ion orbit loss at the edge of a tokamak plasma. Nuclear Fusion, 2014, 54, 103003.	3.5	15
44	Kinetic theory of weak turbulence in plasmas. Physical Review E, 2013, 87, 063103.	2.1	29
45	Nonlinear scattering term in the gyrokinetic Vlasov equation. Physics of Plasmas, 2013, 20, .	1.9	20
46	Nonlinear canonical gyrokinetic Vlasov equation and computation of the gyrocenter motion in tokamaks. Physics of Plasmas, 2013, 20, 012515.	1.9	10
47	Electromagnetic gauge invariance of the nonlinear gyrokinetic theory and its implication for the truncation in gyrokinetic simulations. Plasma Physics and Controlled Fusion, 2013, 55, 015009.	2.1	5
48	Numerical simulation of geodesic acoustic modes in a multi-ion system. Physics of Plasmas, 2013, 20, 072501.	1.9	16
49	Transport formulation of the gyrokinetic turbulence. Physics of Plasmas, 2012, 19, .	1.9	42
50	Toroidal rotation of multiple species of ions in tokamak plasma driven by lower-hybrid-waves. Physics of Plasmas, 2012, 19, .	1.9	3
51	Stabilization of tearing modes by oscillating the resonant surface. Physics of Plasmas, 2012, 19, .	1.9	9
52	Toroidal flows and radial electric field during the formation of an internal transport barrier in a tokamak plasma. Plasma Physics and Controlled Fusion, 2012, 54, 015003.	2.1	2
53	Linear gyrokinetic theory and computation of the gyrocenter motion based on the exact canonical variables for axisymmetric tokamaks. Physics of Plasmas, 2011, 18, .	1.9	21
54	Neoclassical polarization drift of collisionless single ion in tokamaks with arbitrary time-varying radial electric field. Physics of Plasmas, 2011, 18, .	1.9	2

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55	Influence of Energetic Ions on Tearing Modes. Physical Review Letters, 2011, 106, 075002.	7.8	62
56	Toroidal rotation and radial electric field driven by the lower-hybrid-wave in a tokamak fusion reactor. Physics of Plasmas, 2011, 18, 102502.	1.9	12
57	Ion orbit loss and pedestal width of H-mode tokamak plasmas in limiter geometry. Physics of Plasmas, 2011, 18, 032504.	1.9	9
58	Excitation of High-Frequency Internal Kink Mode by Deeply-Trapped Energetic Ions. Plasma Science and Technology, 2010, 12, 397-400.	1.5	1
59	Charge shielding in magnetized plasmas. Physics of Plasmas, 2010, 17, 112101.	1.9	4
60	Effect of impurity ions on the geodesic acoustic mode. Physics of Plasmas, 2010, 17, .	1.9	33
61	Vacuum Poloidal Magnetic Field of Tokamak in Alternating-Current Operation. Plasma Science and Technology, 2010, 12, 657-660.	1.5	8
62	Gyrokinetic equation in an exact canonical Hamiltonian coordinate system and its orbit-averaged form. Physics of Plasmas, 2009, 16, .	1.9	4
63	Explicit Rungeâ€“Kutta integrator with Hamiltonian correction for long-time simulations of guiding-center orbit in tokamak configurations. Physics of Plasmas, 2008, 15, 122511.	1.9	17
64	Damping effects of finite parallel thermal conductivity on zonal flows. Plasma Physics and Controlled Fusion, 2008, 50, 095006.	2.1	4
65	Ideal MHD stability of double transport barrier plasmas in DIII-D. Nuclear Fusion, 2008, 48, 015001.	3.5	9
66	The effect of collisional dissipation on the radial profiles of current driven by the lower-hybrid waves. Physics of Plasmas, 2008, 15, 062504.	1.9	3
67	The effect of the inductive electric field on ion poloidal rotation in all collisionality regimes for the primary ions in tokamaks. Physics of Plasmas, 2007, 14, 112516.	1.9	1
68	Quasi-steady-state ac plasma current operation in HT-7 tokamak. Nuclear Fusion, 2007, 47, 1071-1077.	3.5	24
69	Canonical Hamiltonian theory of the guiding-center motion in an axisymmetric torus, with the different time scales well separated. Physics of Plasmas, 2006, 13, 052506.	1.9	24
70	Current reversal equilibrium configurations in the alternating-current operation of tokamaks. Physics of Plasmas, 2006, 13, 054501.	1.9	8
71	Zonal Flows in Tokamak Plasmas with Toroidal Rotation. Physical Review Letters, 2006, 97, 085002.	7.8	45
72	Observation of them= 1 mode during the ramp phase of the sawtooth oscillations in LHCD plasmas on the HT-7 tokamak. Plasma Physics and Controlled Fusion, 2005, 47, 745-756.	2.1	16

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73	Sawtooth stabilization by barely trapped energetic electrons. Physics of Plasmas, 2005, 12, 062512.	1.9	4
74	Excitation of internal kink mode by barely trapped suprathermal electrons. Physics of Plasmas, 2005, 12, 092507.	1.9	18
75	An exact solution of the Gradâ€“Shafranovâ€“Helmhotz equation with central current density reversal. Physics of Plasmas, 2005, 12, 062501.	1.9	15
76	Theory of Tokamak Equilibria with Central Current Density Reversal. Physical Review Letters, 2004, 93, 155007.	7.8	39
77	Overview of JT-60U results leading to high integrated performance in reactor-relevant regimes. Nuclear Fusion, 2003, 43, 1527-1539.	3.5	32
78	Effects of Circulating Energetic Ions on Sawtooth Oscillations. Physical Review Letters, 2002, 88, 105004.	7.8	20
79	Effects of finite radial excursion on the slowing-down distribution of toroidally circulating energetic ions produced by tangential neutral beam injection. Physics of Plasmas, 2002, 9, 4654-4663.	1.9	0
80	Destabilization of Internal Kink Modes at High Frequency by Energetic Circulating Ions. Physical Review Letters, 2001, 86, 5286-5288.	7.8	27
81	Canonical Hamiltonian gyrocenter variables and gauge invariant representation of the gyrokinetic equation. Physical Review E, 2001, 64, 056404.	2.1	26
82	Three-dimensional reduced drift kinetic equation for neoclassical transport of helical plasmas in the ultralow collisionality regime. Physics of Plasmas, 2000, 7, 963-968.	1.9	0
83	Non-local collisional relaxation of neoclassical ions in tokamaks. Physics of Plasmas, 1999, 6, 1393-1396.	1.9	11
84	A low aspect ratio tokamak transmutation reactor. Fusion Engineering and Design, 1998, 41, 437-442.	1.9	16
85	Finite bootstrap current density and finite neoclassical reduction of electrical conductivity at the magnetic axis of a tokamak. Physics of Plasmas, 1998, 5, 3319-3324.	1.9	14
86	Confinement of Alpha Particles in Low-Aspect-Ratio Deuterium-Tritium Ignited Tokamaks. Fusion Science and Technology, 1998, 34, 1-5.	0.6	2
87	TFTR DT experiments. Plasma Physics and Controlled Fusion, 1997, 39, B103-B114.	2.1	35
88	Alpha particle classical transport in tokamaks. Nuclear Fusion, 1996, 36, 557-562.	3.5	1