Wan-dong Liu

List of Publications by Year
in descending order

79 papers	630 citations	687363 13 h-index	713466 21 g-index
79 all docs	79 docs citations	79 times ranked	441 citing authors

#	Article	IF	Citations
1	Microwave Doppler reflectometer system in the Experimental Advanced Superconducting Tokamak. Review of Scientific Instruments, 2013, 84, 103511.	1.3	46
2	An eight-channel Doppler backscattering system in the experimental advanced superconducting tokamak. Review of Scientific Instruments, 2017, 88, 073504.	1.3	41
3	Experimental observation of ion-acoustic waves in an inhomogeneous dusty plasma. Physics of Plasmas, 2001, 8, 1459-1462.	1.9	36
4	Progress of the Keda Torus eXperiment Project in China: design and mission. Plasma Physics and Controlled Fusion, 2014, 56, 094009.	2.1	35
5	Millimeter-wave imaging diagnostics systems on the EAST tokamak (invited). Review of Scientific Instruments, 2016, 87, 11D901.	1.3	29
6	Ambipolar diffusion in an inhomogeneous dusty plasma. Physics of Plasmas, 2002, 9, 1584-1588.	1.9	27
7	The electron cyclotron emission imaging system on EAST with continuous large observation area. Journal of Instrumentation, 2018, 13, P02009-P02009.	1.2	21
8	Five-channel tunable W-band Doppler backscattering system in the experimental advanced superconducting tokamak. Review of Scientific Instruments, 2019, 90, 024704.	1.3	21
9	Overview of Keda Torus eXperiment initial results. Nuclear Fusion, 2017, 57, 116038.	3.5	19
10	Optics design for J-TEXT ECE imaging with field curvature adjustment lens. Review of Scientific Instruments, 2014, 85, 11D854.	1.3	18
11	Electrostatic fluctuations and related transport in the edge and core plasma of the Keda Tokamakâ€5C. Physics of Plasmas, 1996, 3, 1022-1028.	1.9	17
12	Design of interferometer system for Keda Torus eXperiment using terahertz solid-state diode sources. Review of Scientific Instruments, 2014, 85, 11D828.	1.3	17
13	An overview of diagnostic upgrade and experimental progress in the KTX. Nuclear Fusion, 2019, 59, 112013.	3.5	15
14	Electron Cyclotron Emission Imaging Observations of m/n = 1/1 and Higher Harmonic Modes during Sawtooth Oscillation in ICRF Heating Plasma on EAST. Chinese Physics Letters, 2015, 32, 065201.	3.3	12
15	Design of a stabilizing shell for KTX. Fusion Engineering and Design, 2016, 108, 28-34.	1.9	12
16	The eddy current probe array for Keda Torus eXperiment. Review of Scientific Instruments, 2016, 87, 113503.	1.3	11
17	Electromagnetic diagnostic system for the Keda Torus eXperiment. Review of Scientific Instruments, 2017, 88, 093513.	1.3	11
18	Investigation of electromagnetic geodesic acoustic mode in EAST RF-heating plasma. Physics of Plasmas, 2018, 25, .	1.9	11

#	Article	IF	Citations
19	Observations of compound sawteeth in ion cyclotron resonant heating plasma using ECE imaging on experimental advanced superconducting tokamak. Physics of Plasmas, 2016, 23, .	1.9	10
20	Compatible operation of the power system for steady state and pulse modes in a magnetic torus KT-5D. Review of Scientific Instruments, 2006, 77, 123502.	1.3	9
21	Optics System Design of Microwave Imaging Reflectometry for the EAST Tokamak. Plasma Science and Technology, 2016, 18, 449-452.	1.5	9
22	Observations of zonal flows in electrode biasing experiments on the Joint Texas Experimental tokamak. Physics of Plasmas, 2016, 23, .	1.9	9
23	The role of geodesic acoustic mode on reducing the turbulent transport in the edge plasma of tokamak. Physics of Plasmas, 2018, 25, 012317.	1.9	8
24	Simulation of feedback control on tearing modes using different sensors in a reversed field pinch and application to the Keda Torus eXperiment. Plasma Physics and Controlled Fusion, 2014, 56, 075015.	2.1	7
25	Simulation and design of feedback control on resistive wall modes in Keda Torus eXperiment. Physics of Plasmas, 2014, 21, 122506.	1.9	7
26	Coupling circuit model and discharge waveform prediction for Keda Torus eXperiment. Fusion Engineering and Design, 2015, 100, 495-500.	1.9	7
27	Compact and lightweight support platform with electromagnetic disturbance elimination for interferometer on reversed field pinch Keda Torus eXperiment. Review of Scientific Instruments, 2016, 87, 11E122.	1.3	7
28	Analysis of sawtooth collapse time using electron cyclotron emission imaging on EAST tokamak. Radiation Effects and Defects in Solids, 2017, 172, 760-767.	1.2	7
29	Theoretical and experimental study of the microwave cut-off probe for electron density measurements in low-temperature plasmas. Journal of Applied Physics, 2011, 110, .	2.5	6
30	Monopole Antenna Probe for Density Measurements in Cold Plasmas. Plasma Science and Technology, 2011, 13, 197-200.	1.5	6
31	Kinetic effects on geodesic acoustic mode from combined collisions and impurities. Physics of Plasmas, 2015, 22, .	1.9	6
32	Determination of plasma displacement based on eddy current diagnostics for the Keda Torus eXperiment. Physics of Plasmas, 2017, 24, .	1.9	6
33	A novel, tunable, multimodal microwave system for microwave reflectometry system. Review of Scientific Instruments, 2018, 89, 093501.	1.3	6
34	Coherent modes and turbulences observations with multi-channel Doppler reflectometer on experimental advanced superconducting tokamak. Physics of Plasmas, 2020, 27, .	1.9	6
35	Optical fiber interferometer application for high electron density measurements on compact torus plasmas. Review of Scientific Instruments, 2020, 91, 063501.	1.3	6
36	Measurement of density profile and fluctuations using a multi-channel terahertz solid-state interferometer system on Keda Torus eXperiment (KTX). Review of Scientific Instruments, 2021, 92, 053514.	1.3	6

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37	Development of a compact torus injection system for the Keda Torus eXperiment. Plasma Science and Technology, 2022, 24, 045102.	1.5	6
38	Observation of spatial intermittency in Tokamak plasma turbulence. Physics of Plasmas, 1999, 6, 3263-3266.	1.9	5
39	Ray Tracing for Doppler Backscattering System in the Experimental Advanced Superconducting Tokamak. Plasma Science and Technology, 2015, 17, 728-732.	1.5	5
40	Design of a Feedback Control System for Keda Torus Experiment Equilibrium Field Power Supply. Fusion Science and Technology, 2017, 72, 137-147.	1.1	5
41	The investigation of quasi coherent mode on EAST using Doppler reflectometry. Plasma Science and Technology, 2021, 23, 095106.	1.5	5
42	Fast mega pixels video imaging of a toroidal plasma in KT5D device. Review of Scientific Instruments, 2005, 76, 043502.	1.3	4
43	Nonlinear enhancement of plasma density in linear combination of multiple collisional internal inductively coupled plasma sources. Physics of Plasmas, 2010, 17, 103503.	1.9	4
44	Capability Assessment of the Equilibrium Field System in KTX. Plasma Science and Technology, 2016, 18, 90-96.	1.5	4
45	Investigations on the time evolution of the plasma density in argon electron-beam plasma at intermediate pressure. Plasma Science and Technology, 2017, 19, 035003.	1.5	4
46	An accurate automated technique for quasi-optics measurement of the microwave diagnostics for fusion plasma. Plasma Science and Technology, 2017, 19, 084002.	1.5	4
47	Influence of lithium coating on the optics of Doppler backscatter system. Review of Scientific Instruments, 2015, 86, 103503.	1.3	3
48	Comparison of Three Methods in Extracting Coherent Modes from a Doppler Backscatter System. Chinese Physics Letters, 2015, 32, 125201.	3.3	3
49	A multi-channel capacitive probe for electrostatic fluctuation measurement in the Madison Symmetric Torus reversed field pinch. Review of Scientific Instruments, 2017, 88, 023502.	1.3	3
50	Two-dimensional numerical simulation of a continuous needle-like argon electron-beam plasma. Physics of Plasmas, 2017, 24, 053502.	1.9	3
51	Two-fluid MHD regime of resistive drift-wave instability. Physics of Plasmas, 2018, 25, .	1.9	3
52	Design of the poloidal field system for KTX. Plasma Science and Technology, 2018, 20, 115601.	1.5	3
53	MHD Mode Analysis Using the Unevenly Spaced Mirnov Coils in the Keda Torus eXperiment. IEEE Transactions on Plasma Science, 2019, 47, 3298-3304.	1.3	3
54	Error field feedback control system in the Keda Torus eXperiment and open loop control experiment. Physics of Plasmas, 2020, 27, 052502.	1.9	3

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55	Instantaneous spherical electron focusing in a Penning trap. Physics of Plasmas, 2000, 7, 3912.	1.9	2
56	Study of the effects of the perpendicular velocity gradient on a Doppler backscattering system using a 2D full wave code. Physics of Plasmas, 2017, 24, .	1.9	2
57	Scaling relations for a needle-like electron beam plasma from the self-similar behavior in beam propagation. Physics of Plasmas, 2017, 24, 103509.	1.9	2
58	Interferometer system for Keda Torus eXperiment using terahertz solid-state diode sources. EPJ Web of Conferences, 2017, 149, 03019.	0.3	2
59	Characteristic analysis of surface waves in a sensitive plasma absorption probe. Physics of Plasmas, 2018, 25, 013501.	1.9	2
60	Diagnostic capacity of electron cyclotron emission imaging system with continuous large observation area on EAST tokamak. Review of Scientific Instruments, 2018, 89, 093503.	1.3	2
61	In situ relative self-dependent calibration of electron cyclotron emission imaging via shape matching. Review of Scientific Instruments, 2018, 89, 10H119.	1.3	2
62	Forward Scattering Measurement Based on Terahertz Microwave Interferometer on KTX Reversed Field Pinch. IEEE Transactions on Plasma Science, 2019, 47, 2660-2664.	1.3	2
63	Study of electromagnetic mode contributing inward particle pinch in the scrape-off layer during H-mode discharge. Plasma Physics and Controlled Fusion, 2019, 61, 064002.	2.1	2
64	Fast radial scanning probe system on KTX. Plasma Science and Technology, 2020, 22, 045602.	1.5	2
65	Observation of inward transport flux accompanied with the long-lived mode during the L-H transition in the HL-2A tokamak. Physics of Plasmas, 2020, 27, .	1.9	2
66	The theoretical study on intermittency and propagation of geodesic acoustic mode in L-mode discharge near tokamak edge. Plasma Science and Technology, 2021, 23, 035101.	1.5	2
67	Measurement of helicity flux density using the eddy-current diagnostic system in Keda Torus eXperiment device. Physics of Plasmas, 2022, 29, .	1.9	2
68	A global mechanical analysis and optimization of vacuum vessel and attached structure of KTX device. , 2013, , .		1
69	A novel approach to estimating the Doppler shift frequency from quadrature mixer output. Review of Scientific Instruments, 2017, 88, 073503.	1.3	1
70	Construction of an ${{m{H}}}_{alpha }$ diagnostic system and its application to determine neutral hydrogen densities on the Keda Torus eXperiment. Chinese Physics B, 2019, 28, 105201.	1.4	1
71	Two-dimensional modeling image of space charge migration in a needle-like electron beam plasma. Physics of Plasmas, 2019, 26, .	1.9	1
72	An automatic beam alignment system based on relative reference points for Thomson scattering diagnosis system. Review of Scientific Instruments, 2019, 90, 126102.	1.3	1

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73	Bolometer measurements of the radiated power and estimates of the effective ion charge Z on the Keda Torus eXperiment. Fusion Engineering and Design, 2020, 152, 111416.	1.9	1
74	The cross-polarization scattering system for the magnetic fluctuation measurement in the Experimental Advanced Superconducting Tokamak. Review of Scientific Instruments, 2021, 92, 043511.	1.3	1
75	Investigation of the Effects of the Radial Electric Field by Electrode Biasing in a Toroidal Plasma. AIP Conference Proceedings, 2003, , .	0.4	0
76	A parametric method for correcting polluted plasma current signal and its application on Keda Torus eXperiment. Review of Scientific Instruments, 2019, 90, 123513.	1.3	0
77	Experimental investigation of a partial collapse during the sawtooth instability in EAST. Radiation Effects and Defects in Solids, 2021, 176, 591-600.	1.2	0
78	Long-time measurements of line-integrated plasma electron density using a two-color homodyne optical fiber interferometer. Review of Scientific Instruments, 2021, 92, 093506.	1.3	0
79	Measurement of Electron Density Evolution by the Optical Fiber Interferometer on Theta Pinch Plasmas*. , 2021, , .		0