

Ronald E Waltz

List of Publications by Year in descending order

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48
papers

4,201
citations

186265

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48
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49
docs citations

49
times ranked

1400
citing authors

#	ARTICLE	IF	CITATIONS
1	A gyro-Landau-fluid transport model. <i>Physics of Plasmas</i> , 1997, 4, 2482-2496.	1.9	493
2	Toroidal gyro-Landau fluid model turbulence simulations in a nonlinear ballooning mode representation with radial modes. <i>Physics of Plasmas</i> , 1994, 1, 2229-2244.	1.9	422
3	Noncircular, finite aspect ratio, local equilibrium model. <i>Physics of Plasmas</i> , 1998, 5, 973-978.	1.9	420
4	A theory-based transport model with comprehensive physics. <i>Physics of Plasmas</i> , 2007, 14, 055909.	1.9	303
5	Anomalous Transport Scaling in the DIII-D Tokamak Matched by Supercomputer Simulation. <i>Physical Review Letters</i> , 2003, 91, 045001.	7.8	234
6	Gyro-Landau fluid equations for trapped and passing particles. <i>Physics of Plasmas</i> , 2005, 12, 102508.	1.9	203
7	Tokamak profile prediction using direct gyrokinetic and neoclassical simulation. <i>Physics of Plasmas</i> , 2009, 16, .	1.9	175
8	Ion temperature gradient turbulence simulations and plasma flux surface shape. <i>Physics of Plasmas</i> , 1999, 6, 4265-4271.	1.9	162
9	The first transport code simulations using the trapped gyro-Landau-fluid model. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	129
10	Theory and simulation of rotational shear stabilization of turbulence. <i>Physics of Plasmas</i> , 1998, 5, 1784-1792.	1.9	127
11	Implementation and application of two synthetic diagnostics for validating simulations of core tokamak turbulence. <i>Physics of Plasmas</i> , 2009, 16, .	1.9	119
12	Gyrokinetic simulations of ion and impurity transport. <i>Physics of Plasmas</i> , 2005, 12, 022305.	1.9	107
13	Measurements of core electron temperature and density fluctuations in DIII-D and comparison to nonlinear gyrokinetic simulations. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	102
14	Gyro-Landau fluid models for toroidal geometry. <i>Physics of Fluids B</i> , 1992, 4, 3138-3151.	1.7	96
15	The local limit of global gyrokinetic simulations. <i>Physics of Plasmas</i> , 2004, 11, L25-L28.	1.9	89
16	Coupled ion temperature gradient and trapped electron mode to electron temperature gradient mode gyrokinetic simulations. <i>Physics of Plasmas</i> , 2007, 14, 056116.	1.9	84
17	Gyrokinetic theory and simulation of angular momentum transport. <i>Physics of Plasmas</i> , 2007, 14, 122507.	1.9	80
18	Measurements of the cross-phase angle between density and electron temperature fluctuations and comparison with gyrokinetic simulations. <i>Physics of Plasmas</i> , 2010, 17, 056103.	1.9	77

#	ARTICLE	IF	CITATIONS
19	Gyrokinetic simulations of off-axis minimum-q profile corrugations. <i>Physics of Plasmas</i> , 2006, 13, 052301.	1.9	75
20	Advances in validating gyrokinetic turbulence models against L- and H-mode plasmas. <i>Physics of Plasmas</i> , 2011, 18, 056113.	1.9	69
21	The effect of ion-scale dynamics on electron-temperature-gradient turbulence. <i>Plasma Physics and Controlled Fusion</i> , 2007, 49, 1209-1220.	2.1	64
22	Magnetic fluctuations, ambipolarity, charge filamentation, and plasma rotation in tokamaks. <i>Physics of Fluids</i> , 1982, 25, 1269.	1.4	56
23	Gyrokinetic simulations of mesoscale energetic particle-driven Alfvénic turbulent transport embedded in microturbulence. <i>Physics of Plasmas</i> , 2010, 17, 112319.	1.9	56
24	Particle pinch and collisionality in gyrokinetic simulations of tokamak plasma turbulence. <i>Physics of Plasmas</i> , 2009, 16, 060702.	1.9	55
25	Velocity-space resolution, entropy production, and upwind dissipation in Eulerian gyrokinetic simulations. <i>Physics of Plasmas</i> , 2006, 13, 032310.	1.9	39
26	Gyrokinetic simulation of global and local Alfvén eigenmodes driven by energetic particles in a DIII-D discharge. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	39
27	Studies of turbulence and transport in Alcator C-Mod ohmic plasmas with phase contrast imaging and comparisons with gyrokinetic simulations. <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 065006.	2.1	34
28	Reversal of Simple Hydrogenic Isotope Scaling Laws in Tokamak Edge Turbulence. <i>Physical Review Letters</i> , 2020, 125, 015001.	7.8	32
29	Projected profile similarity in gyrokinetic simulations of Bohm and gyro-Bohm scaled DIII-D L and H modes. <i>Physics of Plasmas</i> , 2006, 13, 072304.	1.9	24
30	Predictions of the near edge transport shortfall in DIII-D L-mode plasmas using the trapped gyro-Landau-fluid model. <i>Physics of Plasmas</i> , 2015, 22, 012507.	1.9	24
31	Gyrokinetic simulations with external resonant magnetic perturbations: Island torque and nonambipolar transport with plasma rotation. <i>Physics of Plasmas</i> , 2012, 19, 032508.	1.9	23
32	Alfvén eigenmode stability and critical gradient energetic particle transport using the Trapped-Gyro-Landau-Fluid model. <i>Physics of Plasmas</i> , 2017, 24, 072305.	1.9	21
33	Reversal of turbulent gyroBohm isotope scaling due to nonadiabatic electron drive. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	20
34	On the nature of rotational shear stabilization in toroidal geometry and its numerical representation. <i>Physics of Plasmas</i> , 1994, 1, 2835-2842.	1.9	18
35	Reduced equations for electromagnetic turbulence in tokamaks. <i>Physics of Plasmas</i> , 2003, 10, 168-178.	1.9	18
36	Density peaking and turbulent pinch in DIII-D discharges. <i>Physics of Plasmas</i> , 2006, 13, 074505.	1.9	17

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37	Nonlinear theory of drift-cyclotron kinetics and the possible breakdown of gyro-kinetics. Physics of Plasmas, 2013, 20, .	1.9	15
38	Prediction of Alfvén eigenmode energetic particle transport in ITER scenarios with a critical gradient model. Nuclear Fusion, 2020, 60, 016032.	3.5	13
39	Multispecies density peaking in gyrokinetic turbulence simulations of low collisionality Alcator C-Mod plasmas. Physics of Plasmas, 2015, 22, .	1.9	12
40	Quasilinear model for energetic particle diffusion in radial and velocity space. Physics of Plasmas, 2013, 20, .	1.9	11
41	Theory and simulation of quasilinear transport from external magnetic field perturbations in a DIII-D plasma. Physics of Plasmas, 2015, 22, .	1.9	8
42	Nonlinear verification of a linear critical gradient model for energetic particle transport by Alfvén eigenmodes. Physics of Plasmas, 2017, 24, .	1.9	8
43	Anti-symmetric plasma moment equations with conservative discrete counterparts. Physics of Plasmas, 2018, 25, .	1.9	8
44	Testing the high turbulence level breakdown of low-frequency gyrokinetics against high-frequency	1.9	5
45	Quasilinear critical gradient model for Alfvén eigenmode driven energetic particle transport with intermittency. Nuclear Fusion, 2021, 61, 036043.	3.5	2
46	Simulations of plasmas and fluids using anti-symmetric models. Journal of Computational Physics, 2021, 445, 110631.	3.8	2
47	Cyclokinetic models and simulations for high-frequency turbulence in fusion plasmas. Frontiers of Physics, 2016, 11, 1.	5.0	1
48	Overview of the CIT Physics Design. Fusion Science and Technology, 1991, 19, 1109-1114.	0.6	0