

Eric Fredrickson

List of Publications by Year in descending order

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102
papers

3,344
citations

136740

32
h-index

161609

54
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106
all docs

106
docs citations

106
times ranked

1298
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of edge harmonic oscillations on the divertor heat flux in NSTX. <i>Physics of Plasmas</i> , 2022, 29, 012503.	0.7	1
2	Comment on "Theory of Alfvén-slow frequency gaps and discovery of Alfvén-slow eigenmodes in tokamaks" [<i>Phys. Plasmas</i> 26, 082508 (2019)]. <i>Physics of Plasmas</i> , 2021, 28, 074701.	0.7	1
3	MHD-blob correlations in NSTX. <i>Physics of Plasmas</i> , 2020, 27, .	0.7	6
4	Phase-space dynamics of Alfvén mode chirping. <i>Physics of Plasmas</i> , 2020, 27, 052108.	0.7	7
5	Simulation of Alfvénic avalanche onset in NSTX. <i>Physics of Plasmas</i> , 2020, 27, 022117.	0.7	8
6	Analytic stability boundaries for compressional and global Alfvén eigenmodes driven by fast ions. II. Interaction via Landau resonance. <i>Physics of Plasmas</i> , 2020, 27, 022512.	0.7	5
7	Verification and application of resonance broadened quasi-linear (RBQ) model with multiple Alfvénic instabilities. <i>Physics of Plasmas</i> , 2019, 26, 072507.	0.7	7
8	Geodesic modes driven by untrapped resonances of NB energetic ions in tokamaks. <i>Physics of Plasmas</i> , 2019, 26, 102508.	0.7	2
9	Modeling of chirping toroidal Alfvén eigenmodes in NSTX. <i>Physics of Plasmas</i> , 2019, 26, 092103.	0.7	8
10	Numerical simulations of global Alfvén eigenmodes excitation and stabilization in NSTX-U. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	15
11	Collisional enhancement of energetic particle Alfvénic resonance width in tokamaks. <i>Physics of Plasmas</i> , 2019, 26, 032508.	0.7	8
12	Emission in the ion cyclotron range of frequencies (ICE) on NSTX and NSTX-U. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	23
13	Collisional resonance function in discrete-resonance quasilinear plasma systems. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	10
14	Resonances between high energy particles and ideal magnetohydrodynamic modes in tokamaks. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	13
15	The Sawtooth Oscillation Effect on Fast-Ion Energy Spectra in ITER Plasma and Neutral Particle Analyzer Measurements. <i>Doklady Physics</i> , 2018, 63, 100-103.	0.2	0
16	Energetic-particle-modified global Alfvén eigenmodes. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	8
17	Compressional Alfvén eigenmodes in rotating spherical tokamak plasmas. <i>Plasma Physics and Controlled Fusion</i> , 2017, 59, 035007.	0.9	6
18	Nonlinear simulations of beam-driven compressional Alfvén eigenmodes in NSTX. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	22

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19	Theory and observation of the onset of nonlinear structures due to eigenmode destabilization by fast ions in tokamaks. <i>Physics of Plasmas</i> , 2017, 24, 122508.	0.7	20
20	Compact and multi-view solid state neutral particle analyzer arrays on National Spherical Torus Experiment-Upgrade. <i>Review of Scientific Instruments</i> , 2016, 87, 11D803.	0.6	10
21	Phase space effects on fast ion distribution function modeling in tokamaks. <i>Physics of Plasmas</i> , 2016, 23, 056106.	0.7	7
22	Energetic particle-driven compressional Alfvén eigenmodes and prospects for ion cyclotron emission studies in fusion plasmas. <i>New Journal of Physics</i> , 2016, 18, 105010.	1.2	29
23	Ion cyclotron emission studies: Retrospects and prospects. <i>Plasma Physics Reports</i> , 2016, 42, 430-439.	0.3	14
24	Physics Basis for an Advanced Physics and Advanced Technology Tokamak Power Plant Configuration: ARIES-ACT1. <i>Fusion Science and Technology</i> , 2015, 67, 75-106.	0.6	8
25	Anomalous fast ion losses at high \hat{I}^2 on the tokamak fusion test reactor. <i>Physics of Plasmas</i> , 2015, 22, 032501.	0.7	5
26	Numerical study of Alfvén eigenmodes in the Experimental Advanced Superconducting Tokamak. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	18
27	Comparing the line broadened quasilinear model to Vlasov code. <i>Physics of Plasmas</i> , 2014, 21, 032119.	0.7	14
28	Comparison of methods for numerical calculation of continuum damping. <i>Physics of Plasmas</i> , 2014, 21, 052508.	0.7	11
29	Properties of Alfvén eigenmodes in the Toroidal Alfvén Eigenmode range on the National Spherical Torus Experiment-Upgrade. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	5
30	Non-linear modulation of short wavelength compressional Alfvén eigenmodes. <i>Physics of Plasmas</i> , 2013, 20, 042112.	0.7	18
31	Excitation of Alfvén modes by energetic particles in magnetic fusion. , 2012, , .		0
32	1.5D quasilinear model and its application on beams interacting with Alfvén eigenmodes in DIII-D. <i>Physics of Plasmas</i> , 2012, 19, 092511.	0.7	39
33	Measurements and modeling of Alfvén eigenmode induced fast ion transport and loss in DIII-D and ASDEX Upgrade. <i>Physics of Plasmas</i> , 2011, 18, .	0.7	90
34	Effects of toroidal rotation shear on toroidicity-induced Alfvén eigenmodes in the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2010, 17, 122501.	0.7	17
35	Three-wave interactions between fast-ion driven modes in the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2009, 16, .	0.7	7
36	Experimental studies on fast-ion transport by Alfvén wave avalanches on the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2009, 16, .	0.7	56

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37	Beta-induced Alfvén-acoustic eigenmodes in National Spherical Torus Experiment and DIII-D driven by beam ions. <i>Physics of Plasmas</i> , 2009, 16, .	0.7	75
38	Modeling fast-ion transport during toroidal Alfvén eigenmode avalanches in National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2009, 16, 122505.	0.7	59
39	Use of Fast Ion D-Alpha diagnostics for understanding ICRF effects. , 2009, , .		0
40	Alfvén cascade modes at high $\hat{\Gamma}^2$ in the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	20
41	Excitation of Alfvén eigenmodes by low energy beam ions in the DIII-D and JET tokamaks. <i>Physics of Plasmas</i> , 2008, 15, 056107.	0.7	33
42	Intense Geodesic Acousticlike Modes Driven by Suprathermal Ions in a Tokamak Plasma. <i>Physical Review Letters</i> , 2008, 101, 185001.	2.9	132
43	Chapter 2: Magnetic Diagnostics. <i>Fusion Science and Technology</i> , 2008, 53, 304-334.	0.6	76
44	Stochastic RF Heating of Thermal Ions. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	0
45	Coupling of global toroidal Alfvén eigenmodes and reversed shear Alfvén eigenmodes in DIII-D. <i>Physics of Plasmas</i> , 2007, 14, 056102.	0.7	36
46	$\hat{\Gamma}^2$ suppression of Alfvén cascade modes in the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2007, 14, .	0.7	41
47	Transport with reversed shear in the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2007, 14, 056119.	0.7	37
48	Tearing Mode Stability of Model Plasmas in NCSX. <i>Fusion Science and Technology</i> , 2007, 51, 232-237.	0.6	1
49	Collective fast ion instability-induced losses in National Spherical Tokamak Experiment. <i>Physics of Plasmas</i> , 2006, 13, 056109.	0.7	89
50	Characterization of small, Type V edge-localized modes in the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2006, 13, 092510.	0.7	33
51	Effect of plasma shaping on performance in the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2006, 13, 056122.	0.7	33
52	Alfvén eigenmodes in reversed shear plasmas in JT-60U negative-ion-based neutral beam injection discharges. <i>Physics of Plasmas</i> , 2005, 12, 082509.	0.7	40
53	Double-Gap Alfvén Eigenmodes: Revisiting Eigenmode Interaction with the Alfvén Continuum. <i>Physical Review Letters</i> , 2005, 95, 265003.	2.9	10
54	Trapped electron stabilization of ballooning modes in low aspect ratio toroidal plasmas. <i>Physics of Plasmas</i> , 2004, 11, 4784-4795.	0.7	15

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55	Phenomenology of compressional Alfvén eigenmodes. <i>Physics of Plasmas</i> , 2004, 11, 3653-3659.	0.7	28
56	Beam ion driven instabilities in the National Spherical Tokamak Experiment. <i>Physics of Plasmas</i> , 2004, 11, 2586-2593.	0.7	36
57	Self-consistent equilibrium model of low aspect-ratio toroidal plasma with energetic beam ions. <i>Physics of Plasmas</i> , 2003, 10, 3240-3251.	0.7	53
58	Wave driven fast ion loss in the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2003, 10, 2852-2862.	0.7	58
59	H-mode threshold and dynamics in the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2003, 10, 1755-1764.	0.7	27
60	The internal kink mode in an anisotropic flowing plasma with application to modeling neutral beam injected sawtooth discharges. <i>Physics of Plasmas</i> , 2003, 10, 1034-1047.	0.7	38
61	Observation of spontaneous neoclassical tearing modes. <i>Physics of Plasmas</i> , 2002, 9, 548-559.	0.7	47
62	Compressional Alfvén eigenmode dispersion in low aspect ratio plasmas. <i>Physics of Plasmas</i> , 2002, 9, 3483-3488.	0.7	19
63	Observation of Compressional Alfvén Modes During Neutral-Beam Heating on the National Spherical Torus Experiment. <i>Physical Review Letters</i> , 2001, 87, 145001.	2.9	77
64	Nature of Monster Sawteeth and Their Relationship to Alfvén Instabilities in Tokamaks. <i>Physical Review Letters</i> , 2000, 84, 1212-1215.	2.9	31
65	Direct Observation of the Resistive Wall Mode in a Tokamak and Its Interaction with Plasma Rotation. <i>Physical Review Letters</i> , 1999, 82, 3811-3814.	2.9	150
66	Role of Alfvén instabilities in energetic ion transport. <i>Physics of Plasmas</i> , 1999, 6, 1880-1884.	0.7	33
67	Tokamak Fusion Test Reactor charge exchange atom spectrometry using a natural diamond detector. <i>Review of Scientific Instruments</i> , 1999, 70, 1107-1110.	0.6	24
68	Effective temperatures, sawtooth mixing, and stochastic diffusion ripple loss of fast H ⁺ minority ions driven by ion cyclotron heating in the Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1999, 6, 2430-2436.	0.7	21
69	Saturation of alpha particle driven instability in Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1999, 6, 629-632.	0.7	24
70	Fast particle finite orbit width and Larmor radius effects on low-n toroidicity induced Alfvén eigenmode excitation. <i>Physics of Plasmas</i> , 1999, 6, 2802-2807.	0.7	99
71	Neoclassical tearing modes in Tokamak Fusion Test Reactor experiments. I. Measurements of magnetic islands and $\hat{\Gamma}^2$. <i>Physics of Plasmas</i> , 1998, 5, 1076-1084.	0.7	35
72	Measuring $\hat{\Gamma}^2$ from electron temperature fluctuations in the Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1998, 5, 450-454.	0.7	31

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73	Kinetic theory of plasma adiabatic major radius compression in tokamaks. Physics of Plasmas, 1998, 5, 1345-1353.	0.7	1
74	Fusion plasma experiments on TFTR: A 20 year retrospective. Physics of Plasmas, 1998, 5, 1577-1589.	0.7	91
75	Toroidal Alfvén eigenmodes in TFTR deuterium-tritium plasmas. Physics of Plasmas, 1998, 5, 1703-1711.	0.7	33
76	HINST: A two-dimensional code for high-n toroidicity induced Alfvén eigenmodes stability. Physics of Plasmas, 1998, 5, 3389-3397.	0.7	25
77	Deuterium-tritium plasmas in novel regimes in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1997, 4, 1714-1724.	0.7	27
78	The stability of advanced operational regimes on the Tokamak Fusion Test Reactor. Physics of Plasmas, 1997, 4, 1589-1595.	0.7	16
79	Alpha-driven magnetohydrodynamics (MHD) and MHD-induced alpha loss in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1997, 4, 1610-1616.	0.7	16
80	Correlation between excitation of Alfvén modes and degradation of ICRF heating efficiency in TFTR. , 1997, , .		0
81	Alpha particle losses from Tokamak Fusion Test Reactor deuterium-tritium plasmas. Physics of Plasmas, 1996, 3, 1875-1880.	0.7	25
82	Confinement analysis in low-confinement mode of hydrogen isotope experiments on the Tokamak Fusion Test Reactor. Physics of Plasmas, 1996, 3, 4521-4535.	0.7	12
83	Tomography of full sawtooth crashes on the Tokamak Fusion Test Reactor. Physics of Plasmas, 1996, 3, 1647-1655.	0.7	65
84	A threshold for excitation of neoclassical tearing modes. Physics of Plasmas, 1996, 3, 3379-3385.	0.7	63
85	Tomography of (2, 1) and (3, 2) magnetic island structures on Tokamak Fusion Test Reactor. Physics of Plasmas, 1996, 3, 2631-2640.	0.7	19
86	Off-Axis Sawteeth and Double-Tearing Reconnection in Reversed Magnetic Shear Plasmas in TFTR. Physical Review Letters, 1996, 77, 3553-3556.	2.9	147
87	High-frequency core localized modes in neutral beam heated plasmas on TFTR. Physics of Plasmas, 1996, 3, 593-605.	0.7	33
88	First Observation of Alpha Particle Loss Induced by Kinetic Ballooning Modes in TFTR Deuterium-Tritium Experiments. Physical Review Letters, 1996, 76, 1071-1074.	2.9	26
89	Observation of Nonlinear Neoclassical Pressure-Gradient-Driven Tearing Modes in TFTR. Physical Review Letters, 1995, 74, 4663-4666.	2.9	361
90	Excitation of Alfvén cyclotron instability by charged fusion products in tokamaks. Physics of Plasmas, 1995, 2, 1961-1971.	0.7	58

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91	\hat{I}^2 limit disruptions in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1995, 2, 4216-4229.	0.7	37
92	Parametric variations of ion transport in TFTR. AIP Conference Proceedings, 1994, , .	0.3	3
93	Anomalous losses of deuteriumâ€“deuterium fusion products in the Tokamak Fusion Test Reactor*. Physics of Plasmas, 1994, 1, 1469-1478.	0.7	29
94	Investigation of ballooning modes in high poloidal beta plasmas in the Tokamak Fusion Test Reactor*. Physics of Fluids B, 1993, 5, 2571-2577.	1.7	21
95	Measurements of the radial structure and poloidal spectra of toroidal AlfvÃ©n eigenmodes in the Tokamak Fusion Test Reactor. Physics of Fluids B, 1992, 4, 3707-3712.	1.7	32
96	Investigation of global AlfvÃ©n instabilities in the Tokamak Fusion Test Reactor. Physics of Fluids B, 1992, 4, 2122-2126.	1.7	37
97	Highâ€“Q plasmas in the TFTR tokamak. Physics of Fluids B, 1991, 3, 2308-2314.	1.7	17
98	Experiments utilizing ion cyclotron range of frequencies heating on the TFTR tokamak. Physics of Fluids B, 1991, 3, 2270-2276.	1.7	9
99	MeV ion confinement in the TFTR tokamak. Physics of Fluids B, 1990, 2, 1411-1414.	1.7	14
100	Modeâ€“particle resonances during nearâ€“tangential neutral beam injection in the Tokamak Fusion Test Reactor. Physics of Fluids B, 1990, 2, 1584-1588.	1.7	26
101	Lowâ€“frequency MHD diagnostics on TFTR. Review of Scientific Instruments, 1990, 61, 3025-3027.	0.6	2
102	Image reconstructions of ECE and xâ€“ray signals for high \hat{I}^2 plasmas on TFTR. Review of Scientific Instruments, 1990, 61, 3265-3267.	0.6	19