

Robert I Pinsker

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8466062/publications.pdf>

Version: 2024-02-01

97
papers

2,076
citations

201674

27
h-index

254184

43
g-index

98
all docs

98
docs citations

98
times ranked

1128
citing authors

#	ARTICLE	IF	CITATIONS
1	Quiescent Double Barrier Regime in the DIII-D Tokamak. <i>Physical Review Letters</i> , 2001, 86, 4544-4547.	7.8	134
2	Nondimensional transport scaling in DIII-D: Bohm versus gyro-Bohm resolved. <i>Physics of Plasmas</i> , 1995, 2, 2342-2348.	1.9	102
3	Electron heat transport in improved confinement discharges in DIII-D. <i>Physics of Plasmas</i> , 1999, 6, 1978-1984.	1.9	100
4	Measurements of fast-ion acceleration at cyclotron harmonics using Balmer-alpha spectroscopy. <i>Plasma Physics and Controlled Fusion</i> , 2007, 49, 1457-1475.	2.1	100
5	Investigation of the formation of a fully pressure-driven tokamak*. <i>Physics of Plasmas</i> , 1994, 1, 1568-1575.	1.9	81
6	100% noninductive operation at high beta using off-axis ECCD in DIII-D. <i>Nuclear Fusion</i> , 2005, 45, 1419-1426.	3.5	80
7	Gyroradius Scaling of Electron and Ion Transport. <i>Physical Review Letters</i> , 1995, 74, 1763-1766.	7.8	75
8	Long pulse high performance discharges in the DIII-D tokamak. <i>Nuclear Fusion</i> , 2001, 41, 1585-1599.	3.5	68
9	Behaviour of electron and ion transport in discharges with an internal transport barrier in the DIII-D tokamak. <i>Nuclear Fusion</i> , 1999, 39, 1723-1732.	3.5	61
10	Progress toward fully noninductive, high beta conditions in DIII-D. <i>Physics of Plasmas</i> , 2006, 13, 056106.	1.9	57
11	High harmonic ion cyclotron heating in DIII-D: Beam ion absorption and sawtooth stabilization. <i>Nuclear Fusion</i> , 1999, 39, 1369-1389.	3.5	51
12	Progress toward long-pulse high-performance Advanced Tokamak discharges on the DIII-D tokamak. <i>Physics of Plasmas</i> , 2001, 8, 2208-2216.	1.9	50
13	Understanding and control of transport in Advanced Tokamak regimes in DIII-D. <i>Physics of Plasmas</i> , 2000, 7, 1959-1967.	1.9	49
14	Initial physics results from the National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2001, 8, 1977-1987.	1.9	46
15	Fast wave and electron cyclotron current drive in the DIII-D tokamak. <i>Nuclear Fusion</i> , 1995, 35, 773-786.	3.5	44
16	Absorption of fast waves by electrons on the DIII-D tokamak. <i>Physical Review Letters</i> , 1992, 69, 289-292.	7.8	36
17	Energy Transport in Tokamak Plasmas with Central Current Density Control Using Fast Waves. <i>Physical Review Letters</i> , 1996, 77, 3141-3144.	7.8	36
18	Whistlers, helicons, and lower hybrid waves: The physics of radio frequency wave propagation and absorption for current drive via Landau damping. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	36

#	ARTICLE	IF	CITATIONS
19	Radio frequency measurements of energetic-particle-driven emission using the ion cyclotron emission diagnostic on the DIII-D tokamak. Review of Scientific Instruments, 2018, 89, 101102.	1.3	35
20	Fast wave current drive in H mode plasmas on the DIII-D tokamak. Nuclear Fusion, 1999, 39, 1421-1432.	3.5	34
21	Radiofrequency experiments in JFT-2M: Demonstration of innovative applications of a travelling wave antenna. Nuclear Fusion, 2001, 41, 1767-1775.	3.5	34
22	Recent progress in ICRF physics. Plasma Physics and Controlled Fusion, 1998, 40, A35-A52.	2.1	33
23	Development of impedance matching technologies for ICRF antenna arrays. Plasma Physics and Controlled Fusion, 1998, 40, A215-A229.	2.1	32
24	Exploration of high harmonic fast wave heating on the National Spherical Torus Experiment. Physics of Plasmas, 2003, 10, 1733-1738.	1.9	31
25	Advanced tokamak research in DIII-D. Plasma Physics and Controlled Fusion, 2004, 46, B213-B233.	2.1	30
26	Central ion cyclotron emission in the DIII-D tokamak. Nuclear Fusion, 2019, 59, 086011.	3.5	30
27	Observation of parametric decay correlated with edge heating using an ion Bernstein wave antenna on DIII-D. Nuclear Fusion, 1993, 33, 777-793.	3.5	27
28	Recent results from DIII-D and their implications for next generation tokamaks. Plasma Physics and Controlled Fusion, 1990, 32, 869-887.	2.1	25
29	Fast wave current drive at high ion cyclotron harmonics on DIII-D. Plasma Physics and Controlled Fusion, 2001, 43, 1747-1758.	2.1	25
30	The combined effect of EPs and TAEs on energetic ion confinement and sawtooth stabilization. Nuclear Fusion, 2001, 41, 513-518.	3.5	25
31	Experiments on helicons in DIII-D—investigation of the physics of a reactor-relevant non-inductive current drive technology. Nuclear Fusion, 2018, 58, 106007.	3.5	25
32	Advanced tokamak profile evolution in DIII-D. Physics of Plasmas, 2003, 10, 1691-1697.	1.9	24
33	Current drive with fast waves, electron cyclotron waves, and neutral injection in the DIII-D tokamak. Plasma Physics and Controlled Fusion, 1993, 35, A53-A70.	2.1	22
34	Absorption of fast waves at moderate to high ion cyclotron harmonics on DIII-D. Nuclear Fusion, 2006, 46, S416-S424.	3.5	21
35	Ion Bernstein wave antenna loading measurements on the DIII-D tokamak. Nuclear Fusion, 1993, 33, 627-642.	3.5	20
36	Low-frequency whistler waves in quiescent runaway electron plasmas. Plasma Physics and Controlled Fusion, 2019, 61, 014007.	2.1	20

#	ARTICLE	IF	CITATIONS
37	Measurements of ICRF loading on DIII-D with and without a Faraday shield. Nuclear Fusion, 1997, 37, 211-224.	3.5	19
38	High performance advanced tokamak regimes in DIII-D for next-step experiments. Physics of Plasmas, 2004, 11, 2616-2626.	1.9	19
39	Multi-scale transport in the DIII-D ITER baseline scenario with direct electron heating and projection to ITER. Physics of Plasmas, 2018, 25, .	1.9	18
40	Plasma mass density, species mix, and fluctuation diagnostics using a fast Alfvén wave. Review of Scientific Instruments, 1997, 68, 478-479.	1.3	17
41	The quiescent double barrier regime in DIII-D. Plasma Physics and Controlled Fusion, 2002, 44, A123-A135.	2.1	17
42	Iterated finite-orbit Monte Carlo simulations with full-wave fields for modeling tokamak ion cyclotron resonance frequency wave heating experiments. Physics of Plasmas, 2010, 17, .	1.9	17
43	Introduction to wave heating and current drive in magnetized plasmas. Physics of Plasmas, 2001, 8, 1219.	1.9	16
44	Fast wave propagation studies in the DIII-D tokamak. Physics of Plasmas, 1996, 3, 2306-2315.	1.9	14
45	Advances in physics understanding of high poloidal beta regime toward steady-state operation of CFETR. Physics of Plasmas, 2021, 28, .	1.9	14
46	Monte Carlo orbit/full wave simulation of ion cyclotron resonance frequency wave damping on resonant ions in tokamaks. Physics of Plasmas, 2005, 12, 072505.	1.9	13
47	Internal Electric Field Structure of Launched Fast Magnetosonic Waves in the DIII-D Tokamak. Physical Review Letters, 1998, 80, 2330-2333.	7.8	12
48	Upgrades to the ion cyclotron emission diagnostic on the DIII-D tokamak. Review of Scientific Instruments, 2021, 92, 033543.	1.3	12
49	The high-power helicon program at DIII-D: gearing up for first experiments. Nuclear Fusion, 2021, 61, 116034.	3.5	12
50	Determination of internal radio frequency electric field profiles via millimeter wave reflectometry in the DIII-D Tokamak. Review of Scientific Instruments, 1997, 68, 462-465.	1.3	11
51	Magnetic islands at the field reversal surface in reversed field pinches. Physics of Fluids, 1986, 29, 782.	1.4	10
52	Review of Scientific Instruments, 1995, 66, 1225-1228.	1.3	10
53	Analysis of combined fast wave current drive and neutral beam injection in the DIII-D tokamak. Physics of Plasmas, 2002, 9, 1318-1325.	1.9	10
54	Stabilization of Alfvén Eigenmodes in DIII-D via Controlled Energetic Ion Density Ramp and Validation of Theory and Simulations. Physical Review Letters, 2021, 126, 155001.	7.8	10

#	ARTICLE	IF	CITATIONS
55	Novel internal measurements of ion cyclotron frequency range fast-ion driven modes. Nuclear Fusion, 0, , .	3.5	10
56	Experimentally determined profiles of fast wave current drive in a tokamak. Physics of Plasmas, 1996, 3, 2846-2848.	1.9	9
57	Recent Results on Coupling Fast Waves to High Performance Plasmas on DIII-D. AIP Conference Proceedings, 2011, , .	0.4	9
58	Development of Next-Step-Relevant ICRF Technology in the DIII-D Program. Fusion Science and Technology, 2005, 48, 1238-1248.	1.1	8
59	Simulation of fast Alfvén wave interaction with beam ions over a range of cyclotron harmonics in DIII-D tokamak. Nuclear Fusion, 2006, 46, S409-S415.	3.5	8
60	Toroidally resolved structure of divertor heat flux in RMP H-mode discharges on DIII-D. Journal of Nuclear Materials, 2011, 415, S901-S905.	2.7	8
61	Review of tokamak experiments on direct electron heating and current drive with fast waves. AIP Conference Proceedings, 1994, , .	0.4	7
62	The ergodic limit of multipass absorption for fast wave current drive in tokamaks. Physics of Plasmas, 1994, 1, 3915-3927.	1.9	7
63	Calculation of direct coupling to the electron Bernstein wave with a waveguide antenna. AIP Conference Proceedings, 2001, , .	0.4	7
64	Using AORSA to simulate helicon waves in DIII-D. AIP Conference Proceedings, 2015, , .	0.4	6
65	Calculation of coupling to the electron Bernstein wave with a phased waveguide array. Plasma Physics and Controlled Fusion, 2005, 47, 335-355.	2.1	5
66	Sawtooth control using beam ions accelerated by fast waves in the DIII-D tokamak. Physics of Plasmas, 2007, 14, 112517.	1.9	5
67	The technology of fast wave current drive antennas. Fusion Engineering and Design, 1994, 24, 91-102.	1.9	4
68	Phased operation of the DIII-D FWCD antenna array with a single power source. Fusion Engineering and Design, 1994, 24, 103-133.	1.9	4
69	Non-inductive current drive experiments on DIII - D, and future plans. Fusion Engineering and Design, 1995, 26, 49-58.	1.9	4
70	Operating The Upgraded NSTX HHFW Antenna Array In An Environment With Li-coated Surfaces. AIP Conference Proceedings, 2011, , .	0.4	4
71	Effect of the scrape-off layer in AORSA full wave simulations of fast wave minority, mid/high harmonic, and helicon heating regimes. AIP Conference Proceedings, 2015, , .	0.4	3
72	A High Power Helicon Antenna Design for DIII-D. Fusion Science and Technology, 2017, 72, 623-627.	1.1	3

#	ARTICLE	IF	CITATIONS
73	Fast wave direct electron heating in advanced inductive and ITER baseline scenario discharges in DIII-D. , 2014, , .		2
74	High efficiency off-axis current drive by high frequency fast waves. , 2014, , .		2
75	Comparison of coupling to 5â€…GHz lower hybrid waves and 0.5â€…GHz helicon waves. AIP Conference Proceedings, 2015, , .	0.4	2
76	X-Ray Energy Analysis for Radio Frequency Current Drive Experiments in the DIII-D Tokamak. Japanese Journal of Applied Physics, 1993, 32, 3975-3984.	1.5	1
77	Electron Bernstein Wave Experiments in the MST Reversed Field Pinch. AIP Conference Proceedings, 2003, , .	0.4	1
78	Monte-Carlo Orbit/Full Wave Simulation of Fast Alfvén Wave (FW) Damping on Resonant Ions in Tokamaks. AIP Conference Proceedings, 2005, , .	0.4	1
79	Absorption of Fast Waves at Moderate to High Ion Cyclotron Harmonics on DIII-D. AIP Conference Proceedings, 2005, , .	0.4	1
80	Modeling of Discharges with Fast Wave Power in DIII-D. AIP Conference Proceedings, 2005, , .	0.4	1
81	Vulnerability of Feedthroughs Operated at a Low-Impedance Point on DIII-D. , 2005, , .		1
82	Progress towards high-performance steady-state operation on DIII-D. Fusion Engineering and Design, 2006, 81, 2807-2815.	1.9	1
83	Synergy in Two-Frequency Fast Wave Cyclotron Harmonic Absorption in DIII-D. , 2009, , .		1
84	CMA diagrams, inverse wave normal surfaces, and fast and slow wave propagation in the lower hybrid range of frequencies. AIP Conference Proceedings, 2020, , .	0.4	1
85	Unipolar currents and electrostatic probe characteristics in a gas discharge plasma. Journal of Applied Physics, 1983, 54, 1289-1292.	2.5	0
86	Internal, nonperturbing, radio frequency wave monitor reflectometer system on the DIII-D tokamak	1.3	0
87	Plasma Heating in the Ion Cyclotron Range of Frequencies in DIII-D. Fusion Science and Technology, 2005, 48, 1149-1158.	1.1	0
88	EBW Experiments in the Madison Symmetric Torus. AIP Conference Proceedings, 2005, , .	0.4	0
89	A Method of Tuning Resonant Loops. AIP Conference Proceedings, 2007, , .	0.4	0
90	Time-Dependent Modeling of Nonlinear Plasma Response to Fast Waves With Multiple Damping Mechanisms. AIP Conference Proceedings, 2007, , .	0.4	0

#	ARTICLE	IF	CITATIONS
91	Effect of Energetic Trapped Particles Produced by ICRF Wave Heating on Sawtooth Instability in the DIII-D Tokamak. AIP Conference Proceedings, 2007, , .	0.4	0
92	Design Concepts For A Long Pulse Upgrade For The DIII-D Fast Wave Antenna Array. , 2009, , .		0
93	Use of Fast Ion D-Alpha diagnostics for understanding ICRF effects. , 2009, , .		0
94	Modeling of Synergy Between 4 th and 6 th Harmonic Absorptions of Fast Waves on Injected Beams in DIII-D Tokamak. AIP Conference Proceedings, 2011, , .	0.4	0
95	Fast RF power diagnostics for the DIII-D fast wave current drive system using commercial FPGA-based systems. , 2013, , .		0
96	Initial Testing of Optical Arc Detector inside 285/300 Fast Wave Antenna Box on DIII-D. Fusion Science and Technology, 2013, 64, 530-532.	1.1	0
97	Guided radar system for arc detection: Initial results at DIII-D. , 2014, , .		0