

Michael E Mauel

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8373561/publications.pdf>

Version: 2024-02-01

147
papers

4,067
citations

218677

26
h-index

118850

62
g-index

150
all docs

150
docs citations

150
times ranked

2889
citing authors

#	ARTICLE	IF	CITATIONS
1	Halo current rotation scaling in post-disruption plasmas. Nuclear Fusion, 2022, 62, 026044.	3.5	1
2	Preface to the 29th volume of Physics of Plasmas. Physics of Plasmas, 2022, 29, 010401.	1.9	0
3	Editorial: Preface to the 28th volume of Physics of Plasmas. Physics of Plasmas, 2021, 28, 010401.	1.9	0
4	Suppression of ITG turbulence due to spectral shift during biasing induced H-mode on HBT-EP. Physics of Plasmas, 2021, 28, .	1.9	4
5	Foreword to Special Issue: Papers from the 62nd Annual Meeting of the APS Division of Plasma Physics, November 9â€“13, 2020. Physics of Plasmas, 2021, 28, .	1.9	0
6	10.1063/5.0061234.1. , 2021, , .		0
7	Announcement: The 2020 James Clerk Maxwell Prize for Plasma Physics. Physics of Plasmas, 2021, 28, 080201.	1.9	0
8	Suppression of MHD modes with active phase-control of probe-injected currents. Nuclear Fusion, 2021, 61, 096017.	3.5	2
9	Self-organized confinement in whole-device modeling of laboratory magnetospheres. Physics of Plasmas, 2021, 28, .	1.9	1
10	A dimensionality reduction algorithm for mapping tokamak operational regimes using a variational autoencoder (VAE) neural network. Nuclear Fusion, 2021, 61, 126063.	3.5	6
11	Announcement: The 2020 Ronald C. Davidson Award for Plasma Physics. Physics of Plasmas, 2021, 28, 100201.	1.9	0
12	Announcement: The 2019 Ronald C. Davidson Award for Plasma Physics. Physics of Plasmas, 2020, 27, 100201.	1.9	0
13	Foreword to Special Issue: Papers from the 61st Annual Meeting of the APS Division of Plasma Physics, October 21â€“25, 2019, Fort Lauderdale, FL, USA. Physics of Plasmas, 2020, 27, .	1.9	0
14	Announcement: The 2019 James Clerk Maxwell Prize for Plasma Physics. Physics of Plasmas, 2020, 27, 080201.	1.9	1
15	Editorial: Preface to the 27th Volume of Physics of Plasmas. Physics of Plasmas, 2020, 27, 010401.	1.9	0
16	Observation of weakly damped modes using high resolution measurement of turbulence in a dipole confined plasma. Physics of Plasmas, 2020, 27, 014501.	1.9	3
17	Foreword to Special Issue: Papers from the 60th Annual Meeting of the APS Division of Plasma Physics, November 5â€“9, 2018, Portland, OR, USA. Physics of Plasmas, 2019, 26, .	1.9	0
18	The 2018 James Clerk Maxwell Prize for Plasma Physics. Physics of Plasmas, 2019, 26, 080201.	1.9	1

#	ARTICLE	IF	CITATIONS
19	Announcement: The 2018 Ronald C. Davidson Award for Plasma Physics. <i>Physics of Plasmas</i> , 2019, 26, 050201.	1.9	0
20	Referee acknowledgment for 2018. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	0
21	Mode rotation control in a tokamak with a feedback-driven biased electrode. <i>Review of Scientific Instruments</i> , 2019, 90, 023503.	1.3	6
22	Editorial: Preface to the 26th Volume of <i>Physics of Plasmas</i> . <i>Physics of Plasmas</i> , 2019, 26, .	1.9	0
23	Shaping effects on toroidal magnetohydrodynamic modes in the presence of plasma and wall resistivity. <i>Physics of Plasmas</i> , 2018, 25, 012517.	1.9	2
24	Referee acknowledgment for 2017. <i>Physics of Plasmas</i> , 2018, 25, 019801.	1.9	0
25	Editorial: Preface to the 25th Volume of <i>Physics of Plasmas</i> . <i>Physics of Plasmas</i> , 2018, 25, 010401.	1.9	0
26	Announcement: The 2017 Ronald C. Davidson Award for Plasma Physics. <i>Physics of Plasmas</i> , 2018, 25, 083503.	1.9	0
27	Foreword to Special Issue: Papers from the 59th Annual Meeting of the APS Division of Plasma Physics, October 23–27, 2017, Milwaukee, Wisconsin, USA. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	0
28	Announcement: The 2017 James Clerk Maxwell Prize for Plasma Physics. <i>Physics of Plasmas</i> , 2018, 25, 055401.	1.9	0
29	Turbulent fluctuations during pellet injection into a dipole confined plasma torus. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	13
30	Referee acknowledgment for 2016. <i>Physics of Plasmas</i> , 2017, 24, 039801.	1.9	0
31	Announcement: The 2016 Ronald C. Davidson Award for Plasma Physics. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	0
32	Announcement: The 2016 James Clerk Maxwell Prize for Plasma Physics. <i>Physics of Plasmas</i> , 2017, 24, 055401.	1.9	0
33	Foreword to Special Issue: Papers from the 58th Annual Meeting of the APS Division of Plasma Physics, October 31–November 4, 2016, San Jose, California, USA. <i>Physics of Plasmas</i> , 2017, 24, 055301.	1.9	0
34	Referee acknowledgment for 2015. <i>Physics of Plasmas</i> , 2016, 23, 039801.	1.9	0
35	Preface to the Special Issue: Strategic Opportunities for Fusion Energy. <i>Journal of Fusion Energy</i> , 2016, 35, 1-3.	1.2	5
36	Editor's Preface to the 23rd Volume of <i>Physics of Plasmas</i> . <i>Physics of Plasmas</i> , 2016, 23, 010401.	1.9	0

#	ARTICLE	IF	CITATIONS
37	Announcement: The 2015 James Clerk Maxwell Prize for Plasma Physics. <i>Physics of Plasmas</i> , 2016, 23, 055401.	1.9	0
38	Foreword to Special Issue: Papers from the 57th Annual Meeting of the APS Division of Plasma Physics, November 16–20, 2015, Savannah, Georgia, USA. <i>Physics of Plasmas</i> , 2016, 23, 055301.	1.9	0
39	Improved feedback control of wall stabilized kink modes with different plasma-wall couplings and mode rotation. <i>Plasma Physics and Controlled Fusion</i> , 2016, 58, 045001.	2.1	8
40	Imaging free-falling particles for multipoint measurement of plasma fluctuations. <i>Review of Scientific Instruments</i> , 2015, 86, 083510.	1.3	3
41	Design and installation of a ferromagnetic wall in tokamak geometry. <i>Review of Scientific Instruments</i> , 2015, 86, 103504.	1.3	5
42	Mixing in fusion plasmas. <i>Physica Scripta</i> , 2015, 90, 030201.	2.5	1
43	High-Speed imaging of the plasma response to resonant magnetic perturbations in HBT-EP. <i>Plasma Physics and Controlled Fusion</i> , 2015, 57, 045008.	2.1	4
44	Local regulation of interchange turbulence in a dipole-confined plasma torus using	1.9	0
45	<i>Plasmas</i> , 2015, 22, 056102.	1.9	10
46	Fast, multi-channel real-time processing of signals with microsecond latency using graphics processing units. <i>Review of Scientific Instruments</i> , 2014, 85, 045114.	1.3	8
47	Pressure profiles of plasmas confined in the field of a magnetic dipole. <i>Plasma Physics and Controlled Fusion</i> , 2014, 56, 095021.	2.1	7
48	In situ α -artificial plasma calibration of tokamak magnetic sensors. <i>Review of Scientific Instruments</i> , 2013, 84, 063502.	1.3	7
49	Measurement of 3D plasma response to external magnetic perturbations in the presence of a rotating external kink. <i>Physics of Plasmas</i> , 2013, 20, 102503.	1.9	15
50	Adaptive control of rotating magnetic perturbations in HBT-EP using GPU processing. <i>Plasma Physics and Controlled Fusion</i> , 2013, 55, 084003.	2.1	12
51	High resolution detection and excitation of resonant magnetic perturbations in a wall-stabilized tokamak. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	8
52	High-speed, multi-input, multi-output control using GPU processing in the HBT-EP tokamak. <i>Fusion Engineering and Design</i> , 2012, 87, 1895-1899.	1.9	20
53	The high beta tokamak-extended pulse magnetohydrodynamic mode control research program. <i>Plasma Physics and Controlled Fusion</i> , 2011, 53, 074016.	2.1	25
54	Fluctuation driven transport and stationary profiles. <i>Physics of Plasmas</i> , 2011, 18, 050703.	1.9	8

#	ARTICLE	IF	CITATIONS
55	A high-power spatial filter for Thomson scattering stray light reduction. Review of Scientific Instruments, 2011, 82, 033501.	1.3	6
56	Observations and modeling of the electron cyclotron emission background in the Levitated Dipole Experiment. Journal of Physics: Conference Series, 2010, 227, 012021.	0.4	3
57	28 GHz Gyrotron ECRH on LDX. Journal of Fusion Energy, 2010, 29, 588-591.	1.2	0
58	Turbulent inward pinch of plasma confined by a levitated dipole magnet. Nature Physics, 2010, 6, 207-212.	16.7	93
59	Millimeter-wave radiometer diagnostics of harmonic electron cyclotron emission in the Levitated Dipole Experiment. Review of Scientific Instruments, 2010, 81, 10D910.	1.3	1
60	Transport Induced by Large Scale Convective Structures in a Dipole-Confined Plasma. Physical Review Letters, 2010, 105, 205004.	7.8	7
61	Stationary density profiles in the Levitated Dipole Experiment: toward fusion without tritium fuel. Plasma Physics and Controlled Fusion, 2010, 52, 124036.	2.1	7
62	A digital control system for external magnetohydrodynamic modes in tokamak plasmas. Review of Scientific Instruments, 2009, 80, 043503.	1.3	7
63	Global and local characterization of turbulent and chaotic structures in a dipole-confined plasma. Physics of Plasmas, 2009, 16, 055902.	1.9	12
64	Multichannel microwave interferometer for the levitated dipole experiment. Review of Scientific Instruments, 2009, 80, 043502.	1.3	8
65	A Kalman filter for feedback control of rotating external kink instabilities in the presence of noise. Physics of Plasmas, 2009, 16, 056112.	1.9	21
66	137 and 165 GHz radiometer measurements of hot electrons in LDX. , 2009, , .		0
67	Density Profiles in the Levitated Dipole Experiment. Journal of Fusion Energy, 2008, 27, 11-15.	1.2	5
68	Feedback suppression of rotating external kink instabilities in the presence of noise. Physics of Plasmas, 2008, 15, 080704.	1.9	10
69	Stabilization of a low-frequency instability in a dipole plasma. Journal of Plasma Physics, 2008, 74, 733-740.	2.1	8
70	Experiments and modelling of external kink mode control using modular internal feedback coils. Nuclear Fusion, 2007, 47, 1293-1299.	3.5	15
71	Quench Detection for the Levitated Dipole Experiment (LDX) Charging Coil. IEEE Transactions on Applied Superconductivity, 2007, 17, 2482-2485.	1.7	0
72	Equilibrium Reconstruction of Anisotropic Pressure Profile in the Levitated Dipole Experiment. Journal of Fusion Energy, 2007, 26, 99-102.	1.2	2

#	ARTICLE	IF	CITATIONS
73	Varying Electron Cyclotron Resonance Heating on the Levitated Dipole Experiment. Journal of Fusion Energy, 2007, 26, 57-60.	1.2	2
74	Effects of the Hot Electron Interchange Instability on Plasma Confined in a Dipolar Magnetic Field. Journal of Fusion Energy, 2007, 26, 139-144.	1.2	7
75	Design and initial operation of the LDX facility. Fusion Engineering and Design, 2006, 81, 2371-2380.	1.9	26
76	Controllability and Reduced State Space Models for Feedback Control of the Resistive Wall Kink Mode. , 2006, , .		2
77	Production and study of high-beta plasma confined by a superconducting dipole magnet. Physics of Plasmas, 2006, 13, 056111.	1.9	55
78	Scientific Challenges, Opportunities and Priorities for the U.S. Fusion Energy Sciences Program. Journal of Fusion Energy, 2005, 24, 13-114.	1.2	3
79	Dynamics and control of resistive wall modes with magnetic feedback control coils: experiment and theory. Nuclear Fusion, 2005, 45, 285-293.	3.5	38
80	Suppression of rotating external kink instabilities using optimized mode control feedback. Physics of Plasmas, 2005, 12, 040703.	1.9	20
81	Excitation of the centrifugally driven interchange instability in a plasma confined by a magnetic dipole. Physics of Plasmas, 2005, 12, 055703.	1.9	11
82	Observation of Centrifugally Driven Interchange Instabilities in a Plasma Confined by a Magnetic Dipole. Physical Review Letters, 2005, 94, 175002.	7.8	18
83	Magnetic field perturbations in closed-field-line systems with zero toroidal magnetic field. Physics of Plasmas, 2004, 11, 2318-2321.	1.9	11
84	High-speed optical diagnostic that uses interference filters to measure Doppler shifts. Review of Scientific Instruments, 2004, 75, 4077-4081.	1.3	6
85	Fusion: choose Japan for international balance. Nature, 2004, 428, 365-365.	27.8	1
86	Report of the Second Fusion Energy Sciences Committee of Visitors. Journal of Fusion Energy, 2004, 23, 237-261.	1.2	0
87	Dynamical plasma response of resistive wall modes to changing external magnetic perturbations. Physics of Plasmas, 2004, 11, 2573-2579.	1.9	49
88	Report of the First Fusion Energy Sciences Committee of Visitors. Journal of Fusion Energy, 2003, 22, 127-138.	1.2	0
89	Suppression of nonlinear frequency-sweeping of resonant interchange modes in a magnetic dipole with applied radio frequency fields. Physics of Plasmas, 2003, 10, 1549-1555.	1.9	15
90	Observation of Nonlinear Frequency-Sweeping Suppression with rf Diffusion. Physical Review Letters, 2003, 90, 185001.	7.8	33

#	ARTICLE	IF	CITATIONS
91	Effect of magnetic islands on the local plasma behavior in a tokamak experiment. Physics of Plasmas, 2002, 9, 3938-3945.	1.9	20
92	Measurement of the global structure of interchange modes driven by energetic electrons trapped in a magnetic dipole. Physics of Plasmas, 2002, 9, 2507-2517.	1.9	22
93	Status of the floating coil of the Levitated Dipole Experiment. IEEE Transactions on Applied Superconductivity, 2002, 12, 666-669.	1.7	4
94	Numerical simulation of phase-space flows in the Collisionless Terrella experiment. IEEE Transactions on Plasma Science, 2002, 30, 8-9.	1.3	6
95	Advanced Technology Paths to Global Climate Stability: Energy for a Greenhouse Planet. Science, 2002, 298, 981-987.	12.6	1,195
96	Modeling of active control of external magnetohydrodynamic instabilities. Physics of Plasmas, 2001, 8, 2170-2180.	1.9	175
97	Report of the FESAC Panel on a Burning Plasma Program Strategy to Advance Fusion Energy. Journal of Fusion Energy, 2001, 20, 85-112.	1.2	0
98	Dipole equilibrium and stability. Nuclear Fusion, 2001, 41, 301-308.	3.5	25
99	High temperature superconducting levitation coil for the Levitated Dipole Experiment (LDX). IEEE Transactions on Applied Superconductivity, 2001, 11, 2004-2009.	1.7	12
100	Design, fabrication and test of the react and wind, Nb3Sn, LDX floating coil. IEEE Transactions on Applied Superconductivity, 2001, 11, 2010-2013.	1.7	10
101	Title is missing!. Journal of Fusion Energy, 2000, 19, 169-228.	1.2	1
102	Review of the Fusion Materials Research Program. Journal of Fusion Energy, 2000, 19, 45-64.	1.2	0
103	The feedback phase instability in the HBT-EP tokamak. Nuclear Fusion, 2000, 40, 1791-1794.	3.5	8
104	Suppression of resistive wall instabilities with distributed, independently controlled, active feedback coils. Physics of Plasmas, 2000, 7, 3133-3136.	1.9	61
105	The Levitated Dipole Experiment (LDX) magnet system. IEEE Transactions on Applied Superconductivity, 1999, 9, 378-381.	1.7	26
106	Nonstationary signal analysis of magnetic islands in plasmas. Review of Scientific Instruments, 1999, 70, 4545-4551.	1.3	12
107	The Report of the Subpanel to FESAC Concerning Alternative Concepts. Journal of Fusion Energy, 1999, 18, 161-193.	1.2	1
108	Magnetohydrodynamic stability in a levitated dipole. Physics of Plasmas, 1999, 6, 3431-3434.	1.9	60

#	ARTICLE	IF	CITATIONS
109	Stabilization of kink instabilities by eddy currents in a segmented wall and comparison with ideal MHD theory. Nuclear Fusion, 1998, 38, 1029-1042.	3.5	21
110	Active control of 2/1 magnetic islands in a tokamak. Physics of Plasmas, 1998, 5, 1855-1863.	1.9	55
111	Feedback stabilization of MHD instabilities. Nuclear Fusion, 1997, 37, 1647-1655.	3.5	1
112	Laboratory Observations of Wave-Induced Radial Transport within an "Artificial Radiation Belt". European Physical Journal Special Topics, 1997, 07, C4-307-C4-318.	0.2	10
113	Rotational and magnetic shear stabilization of magnetohydrodynamic modes and turbulence in DIII-D high performance discharges. Physics of Plasmas, 1996, 3, 1951-1958.	1.9	122
114	Alternative concepts: A report to the Fusion Energy Sciences Advisory Committee. Journal of Fusion Energy, 1996, 15, 249-280.	1.2	2
115	Observation of wave-induced chaotic radial transport in a laboratory toroidal experiment. Physics of Plasmas, 1996, 3, 2143-2148.	1.9	13
116	Demonstration of high-performance negative central magnetic shear discharges in the DIII-D tokamak. Physics of Plasmas, 1996, 3, 1983-1991.	1.9	81
117	Observation of wall stabilization and active control of low-frequency magnetohydrodynamic instabilities in a tokamak. Physics of Plasmas, 1996, 3, 1926-1934.	1.9	39
118	The formation and evolution of negative central magnetic shear current profiles on DIII-D. Plasma Physics and Controlled Fusion, 1996, 38, 869-881.	2.1	33
119	Confinement and stability of DIII-D negative central shear discharges. Plasma Physics and Controlled Fusion, 1996, 38, 1439-1443.	2.1	4
120	Observations of enhanced core confinement in negative magnetic shear discharges with an L mode edge on DIII-D. Nuclear Fusion, 1996, 36, 1271-1280.	3.5	47
121	Recent D-T results on TFTR. Plasma Physics and Controlled Fusion, 1995, 37, A69-A85.	2.1	22
122	Observation of Chaotic Particle Transport Induced by Drift-Resonant Fluctuations in a Magnetic Dipole Field. Physical Review Letters, 1995, 74, 1351-1354.	7.8	30
123	Deuterium-tritium high confinement (H-mode) studies in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1995, 2, 2366-2374.	1.9	26
124	Effect of toroidal plasma flow and flow shear on global magnetohydrodynamic MHD modes. Physics of Plasmas, 1995, 2, 2236-2241.	1.9	201
125	Enhanced Confinement and Stability in DIII-D Discharges with Reversed Magnetic Shear. Physical Review Letters, 1995, 75, 4421-4424.	7.8	573
126	Wave-induced chaotic radial transport of energetic electrons in a laboratory toroidal experiment. Physics of Plasmas, 1995, 2, 4185-4194.	1.9	23

#	ARTICLE	IF	CITATIONS
127	Initial high beta operation of the HBT-EP Tokamak. Journal of Fusion Energy, 1993, 12, 303-310.	1.2	13
128	High poloidal beta long pulse experiments in the Tokamak Fusion Test Reactor*. Physics of Fluids B, 1993, 5, 2525-2531.	1.7	9
129	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
130	Observation of ballooning modes in high-temperature tokamak plasmas. Physical Review Letters, 1992, 69, 2376-2379.	7.8	25
131	A fluid description for the discharge equilibrium of a divergent electron cyclotron resonance plasma source. Physics of Fluids B, 1992, 4, 4177-4186.	1.7	12
132	Operation at the tokamak equilibrium poloidal beta-limit in TFTR. Nuclear Fusion, 1992, 32, 1468-1473.	3.5	11
133	A Description of a D- ³ He Fusion Reactor Based on a Dipole Magnetic Field. Fusion Science and Technology, 1992, 22, 27-34.	0.6	10
134	An experiment to measure collisionless radial transport of energetic electrons confined by a dipole magnetic field. IEEE Transactions on Plasma Science, 1992, 20, 626-630.	1.3	17
135	On Arnol'd diffusion in a perturbed magnetic dipole field. Geophysical Research Letters, 1992, 19, 941-944.	4.0	12
136	High poloidal beta equilibria in the Tokamak Fusion Test Reactor limited by a natural inboard poloidal field null. Physics of Fluids B, 1991, 3, 2277-2284.	1.7	63
137	Overview of TFTR transport studies. Plasma Physics and Controlled Fusion, 1991, 33, 1509-1536.	2.1	59
138	Production and identification of the ion-temperature-gradient instability. Physical Review Letters, 1991, 66, 429-432.	7.8	38
139	Measurement of internal magnetic field pitch using Li pellet injection on TFTR (invited). Review of Scientific Instruments, 1990, 61, 2908-2913.	1.3	26
140	Whistler instability in an electron cyclotron resonance heated, mirror confined plasma. Physics of Fluids B, 1990, 2, 242-252.	1.7	29
141	Energetic particle stabilization of ballooning modes in finite-aspect-ratio tokamaks. Physics of Fluids, 1988, 31, 332.	1.4	4
142	Measurement of large displacements of the toroidal current centroid using an external coil diagnostic. Review of Scientific Instruments, 1988, 59, 1057-1062.	1.3	3
143	Ballooning mode stability of elongated high-beta tokamaks. Physics of Fluids, 1987, 30, 3843.	1.4	7
144	137 GHz gyrotron diagnostic for instability studies in Tara. Review of Scientific Instruments, 1986, 57, 1983-1985.	1.3	11

#	ARTICLE	IF	CITATIONS
145	Plasma potential enhancement by rf heating near the ion-cyclotron frequency. Physics of Fluids, 1986, 29, 902.	1.4	21
146	TARA diagnostic set. Review of Scientific Instruments, 1985, 56, 960-962.	1.3	4
147	Electron-cyclotron heating in a pulsed mirror experiment. Physics of Fluids, 1984, 27, 2899.	1.4	43