

George R Tynan

List of Publications by Year in descending order

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200
papers

7,235
citations

53660

45
h-index

69108

77
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202
all docs

202
docs citations

202
times ranked

3729
citing authors

#	ARTICLE	IF	CITATIONS
1	Transport by intermittent convection in the boundary of the DIII-D tokamak. <i>Physics of Plasmas</i> , 2001, 8, 4826-4833.	0.7	322
2	Transport by intermittency in the boundary of the DIII-D tokamak. <i>Physics of Plasmas</i> , 2003, 10, 1670-1677.	0.7	273
3	Beyond paradigm: Turbulence, transport, and the origin of the radial electric field in low to high confinement mode transitions in the DIII-D tokamak. <i>Physics of Plasmas</i> , 1995, 2, 2397-2407.	0.7	265
4	Evaluation of a proposal for reliable low-cost grid power with 100% wind, water, and solar. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 6722-6727.	3.3	250
5	Demonstration of a Narrow Energy Spread, $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> < mml:mo > \hat{1}^4 < /mml:mo > < mml:mn > 0.5 < /mml:mn > < mml:mtext > \hat{\epsilon} \% < /mml:mtext > < mml:mtext > \hat{\epsilon} \% < /mml:mtext >$ Beam from a Two-Stage Laser Wakefield Accelerator. <i>Physical Review Letters</i> , 2011, 107, 045001.	2.9	213
6	Physics of zonal flows. <i>Physics of Plasmas</i> , 2006, 13, 055502.	0.7	172
7	First Evidence of the Role of Zonal Flows for the $L \rightarrow H$ Transition at Marginal Input Power in the EAST Tokamak. <i>Physical Review Letters</i> , 2011, 107, 125001.	2.9	152
8	A review of experimental drift turbulence studies. <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 113001.	0.9	142
9	Increased Nonlinear Coupling between Turbulence and Low-Frequency Fluctuations at the $L \rightarrow H$ Transition. <i>Physical Review Letters</i> , 2001, 87, 135001.	2.9	137
10	Observation of Turbulent-Driven Shear Flow in a Cylindrical Laboratory Plasma Device. <i>Physical Review Letters</i> , 2006, 96, 195002.	2.9	132
11	Implementation and application of two synthetic diagnostics for validating simulations of core tokamak turbulence. <i>Physics of Plasmas</i> , 2009, 16, .	0.7	119
12	Spatio-temporal evolution of the $L \rightarrow H$ transition. <i>Physics of Plasmas</i> , 2012, 19, .	0.7	117
13	Observation of turbulent-driven shear flow in a cylindrical laboratory plasma device. <i>Plasma Physics and Controlled Fusion</i> , 2006, 48, S51-S73.	0.9	112
14	On the transition to drift turbulence in a magnetized plasma column. <i>Physics of Plasmas</i> , 2005, 12, 052320.	0.7	110
15	Experimental progress on zonal flow physics in toroidal plasmas. <i>Nuclear Fusion</i> , 2007, 47, S718-S726.	1.6	109
16	Steady-state convection and fluctuation-driven particle transport in the H-mode transition. <i>Physical Review Letters</i> , 1992, 68, 3032-3035.	2.9	102
17	Measurements of core electron temperature and density fluctuations in DIII-D and comparison to nonlinear gyrokinetic simulations. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	102
18	Characterization of an azimuthally symmetric helicon wave high density plasma source. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1997, 15, 2885-2892.	0.9	97

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19	On the nonlinear turbulent dynamics of shear-flow decorrelation and zonal flow generation. <i>Physics of Plasmas</i> , 2001, 8, 2691-2699.	0.7	90
20	Evaluating business models for microgrids: Interactions of technology and policy. <i>Energy Policy</i> , 2017, 103, 47-61.	4.2	88
21	Quenching of the Nonlocal Electron Heat Transport by Large External Magnetic Fields in a Laser-Produced Plasma Measured with Imaging Thomson Scattering. <i>Physical Review Letters</i> , 2007, 98, 135001.	2.9	84
22	Zonal flow triggers the L-H transition in the Experimental Advanced Superconducting Tokamak. <i>Physics of Plasmas</i> , 2012, 19, 072311.	0.7	83
23	Frequency-Resolved Nonlinear Turbulent Energy Transfer into Zonal Flows in Strongly Heated L -Mode Plasmas in the HL-2A Tokamak. <i>Physical Review Letters</i> , 2012, 108, 245001.	2.9	82
24	Enhanced particle confinement and turbulence reduction due to $E \times B$ shear in the TEXTOR tokamak. <i>Nuclear Fusion</i> , 2000, 40, 1397-1410.	1.6	80
25	Production of neutrons up to 18 MeV in high-intensity, short-pulse laser matter interactions. <i>Physics of Plasmas</i> , 2011, 18, .	0.7	80
26	Fluctuating zonal flows in the I-mode regime in Alcator C-Mod. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	79
27	A fast low-to-high confinement mode bifurcation dynamics in the boundary-plasma gyrokinetic code XGC1. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	79
28	Fast Low-to-High Confinement Mode Bifurcation Dynamics in a Tokamak Edge Plasma Gyrokinetic Simulation. <i>Physical Review Letters</i> , 2017, 118, 175001.	2.9	73
29	Active core profile and transport modification by application of ion Bernstein wave power in the Princeton Beta Experiment—Modification. <i>Physics of Plasmas</i> , 1995, 2, 741-751.	0.7	70
30	Turbulent edge transport in the Princeton Beta Experiment—Modified high confinement mode. <i>Physics of Plasmas</i> , 1994, 1, 3301-3307.	0.7	69
31	Investigation of carbon chemical erosion with increasing plasma flux and density. <i>Nuclear Fusion</i> , 2001, 41, 47-62.	1.6	63
32	Scaling of plasma turbulence suppression with velocity shear. <i>Nuclear Fusion</i> , 2002, 42, 117-121.	1.6	63
33	Thermal conductivity reduction of tungsten plasma facing material due to helium plasma irradiation in PISCES using the improved 3-omega method. <i>Journal of Nuclear Materials</i> , 2017, 486, 267-273.	1.3	59
34	Observation of the parametric-modulational instability between the drift-wave fluctuation and azimuthally symmetric sheared radial electric field oscillation in a cylindrical laboratory plasma. <i>Physics of Plasmas</i> , 2009, 16, 020706.	0.7	58
35	Initial results of the high resolution edge Thomson scattering upgrade at DIII-D. <i>Review of Scientific Instruments</i> , 2012, 83, 10E343.	0.6	58
36	Erosion of graphite by high flux hydrogen plasma bombardment. <i>Nuclear Fusion</i> , 1988, 28, 1041-1052.	1.6	57

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37	Multi-instability plasma dynamics during the route to fully developed turbulence in a helicon plasma. <i>Plasma Sources Science and Technology</i> , 2014, 23, 044006.	1.3	57
38	Turbulence velocimetry of density fluctuation imaging data. <i>Review of Scientific Instruments</i> , 2004, 75, 3490-3492.	0.6	56
39	Experimental Evidence for the Intimate Interaction among Sheared Flows, Eddy Structures, Reynolds Stress, and Zonal Flows across a Transition to Improved Confinement. <i>Physical Review Letters</i> , 2013, 111, .	2.9	53
40	Radially sheared azimuthal flows and turbulent transport in a cylindrical plasma. <i>Physics of Plasmas</i> , 2004, 11, 5195-5203.	0.7	52
41	Zonal-flow-driven nonlinear energy transfer in experiment and simulation. <i>Physics of Plasmas</i> , 2007, 14, 056112.	0.7	50
42	Study of nonlinear spectral energy transfer in frequency domain. <i>Physics of Plasmas</i> , 2009, 16, .	0.7	50
43	Neutral gas density depletion due to neutral gas heating and pressure balance in an inductively coupled plasma. <i>Plasma Sources Science and Technology</i> , 2007, 16, 193-199.	1.3	49
44	Zonal flow production in the Lâ€“H transition in Alcator C-Mod. <i>Plasma Physics and Controlled Fusion</i> , 2014, 56, 075013.	0.9	49
45	Studies of blob formation, propagation and transport mechanisms in basic experimental plasmas (TORPEX and CSDX). <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 055020.	0.9	47
46	Recent progress towards a physics-based understanding of the H-mode transition. <i>Plasma Physics and Controlled Fusion</i> , 2016, 58, 044003.	0.9	46
47	Statistically robust linear and nonlinear wavelet analysis applied to plasma edge turbulence. <i>Review of Scientific Instruments</i> , 1997, 68, 967-970.	0.6	44
48	Measurement of radial neutral pressure and plasma density profiles in various plasma conditions in large-area high-density plasma sources. <i>Physics of Plasmas</i> , 2000, 7, 3448-3456.	0.7	44
49	A correlation electron cyclotron emission diagnostic and the importance of multifield fluctuation measurements for testing nonlinear gyrokinetic turbulence simulations. <i>Review of Scientific Instruments</i> , 2008, 79, 103505.	0.6	44
50	Shear-induced Reynolds stress at the edge of L-mode tokamak plasmas. <i>Nuclear Fusion</i> , 2012, 52, 103013.	1.6	44
51	Compact X-pinch based point x-ray source for phase contrast imaging of inertial confinement fusion capsules. <i>Applied Physics Letters</i> , 2006, 89, 101502.	1.5	43
52	Overview of results from the National Spherical Torus Experiment (NSTX). <i>Nuclear Fusion</i> , 2009, 49, 104016.	1.6	41
53	Observation of Relativistic Effects in Collective Thomson Scattering. <i>Physical Review Letters</i> , 2010, 104, 105001.	2.9	41
54	Nonlinear energy transfer during the transition to drift-interchange turbulence. <i>Plasma Physics and Controlled Fusion</i> , 2011, 53, 095001.	0.9	41

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55	Low-field helicon discharges. Plasma Physics and Controlled Fusion, 1997, 39, A411-A420.	0.9	40
56	Fusion materials science and technology research opportunities now and during the ITER era. Fusion Engineering and Design, 2014, 89, 1579-1585.	1.0	40
57	Burn Control in Fusion Reactors via Nonlinear Stabilization Techniques. Fusion Science and Technology, 2003, 43, 18-37.	0.6	38
58	Generation of a Sheared Plasma Rotation by Emission, Propagation, and Absorption of Drift Wave Packets. Physical Review Letters, 2011, 107, 055003.	2.9	38
59	Spatial redistribution of turbulent and mean kinetic energy. Physics of Plasmas, 2012, 19, .	0.7	38
60	Statistical analysis of the turbulent Reynolds stress and its link to the shear flow generation in a cylindrical laboratory plasma device. Physics of Plasmas, 2008, 15, .	0.7	37
61	Thomson-scattering measurements in the collective and noncollective regimes in laser produced plasmas (invited). Review of Scientific Instruments, 2010, 81, 10D523.	0.6	36
62	Intrinsic Rotation from a Residual Stress at the Boundary of a Cylindrical Laboratory Plasma. Physical Review Letters, 2010, 104, 065002.	2.9	36
63	Design and performance of distributed helicon sources. Plasma Sources Science and Technology, 2001, 10, 236-249.	1.3	35
64	Fourier-domain study of drift turbulence driven sheared flow in a laboratory plasma. Physics of Plasmas, 2010, 17, 032311.	0.7	35
65	Intrinsic rotation generation in ELM-free H-mode plasmas in the DIII-D tokamak—Experimental observations. Physics of Plasmas, 2011, 18, .	0.7	35
66	Investigations of the role of nonlinear couplings in structure formation and transport regulation: experiment, simulation, and theory. Nuclear Fusion, 2003, 43, 761-780.	1.6	34
67	Carbon atom and cluster sputtering under low-energy noble gas plasma bombardment. Journal of Applied Physics, 2008, 104, .	1.1	34
68	Investigation of the time-delay estimation method for turbulent velocity inference. Review of Scientific Instruments, 2004, 75, 4278-4280.	0.6	33
69	Dynamics of H transition and I-phase in EAST. Nuclear Fusion, 2014, 54, 103002.	1.6	33
70	Measurement of Magnetic Fluctuation Induced Energy Transport in a Tokamak. Physical Review Letters, 1995, 75, 3866-3869.	2.9	32
71	Externally-driven H-mode studies in CCT. Plasma Physics and Controlled Fusion, 1996, 38, 1301-1305.	0.9	32
72	Physics of Stimulated $L \rightarrow H$ Transitions. Physical Review Letters, 2013, 110, 195002.	2.9	32

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73	Near-surface thermal characterization of plasma facing components using the 3-omega method. Journal of Nuclear Materials, 2014, 455, 56-60.	1.3	31
74	Rotational and translational temperature equilibrium in an inductively coupled plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1878-1883.	0.9	30
75	Suppression of drift wave turbulence and zonal flow formation by changing axial boundary conditions in a cylindrical magnetized plasma device. Physics of Plasmas, 2013, 20, 012304.	0.7	30
76	Formation of the Blue Core in Argon Helicon Plasma. IEEE Transactions on Plasma Science, 2015, 43, 2754-2759.	0.6	30
77	Implications of PMI and wall material choice on fusion reactor tritium self-sufficiency. Nuclear Materials and Energy, 2019, 18, 56-61.	0.6	30
78	Electrostatic biasing of the ALT-II pump limiter. Nuclear Fusion, 1994, 34, 975-983.	1.6	29
79	Neutral depletion and transport mechanisms in large-area high density plasma sources. Journal of Applied Physics, 1999, 86, 5356-5364.	1.1	29
80	Laser induced fluorescence measurements of ion velocity and temperature of drift turbulence driven sheared plasma flow in a linear helicon plasma device. Physics of Plasmas, 2012, 19, .	0.7	29
81	Turbulence Nonlinearities Shed Light on Geometric Asymmetry in Tokamak Confinement Transitions. Physical Review Letters, 2017, 118, 105003.	2.9	29
82	Evidence for Reynolds-stress driven shear flows using bispectral analysis: theory and experiment. Plasma Physics and Controlled Fusion, 2002, 44, A453-A457.	0.9	28
83	Overview of HL-2A recent experiments. Nuclear Fusion, 2019, 59, 112017.	1.6	27
84	Experimental exploration of profile control in the Princeton Beta Experimentâ€Modified (PBXâ€M) tokamak. Physics of Fluids B, 1993, 5, 2562-2570.	1.7	26
85	Shear flow and drift wave turbulence dynamics in a cylindrical plasma device. Physics of Plasmas, 2010, 17, 032302.	0.7	26
86	Direct extraction of coherent mode properties from imaging measurements in a linear plasma column. Physics of Plasmas, 2013, 20, .	0.7	25
87	Reduced deuterium retention in simultaneously damaged and annealed tungsten. Journal of Nuclear Materials, 2017, 494, 67-71.	1.3	25
88	On physical interpretation of two dimensional time-correlations regarding time delay velocities and eddy shaping. Physics of Plasmas, 2012, 19, .	0.7	24
89	Spontaneous profile self-organization in a simple realization of drift-wave turbulence. Physics of Plasmas, 2016, 23, .	0.7	24
90	Linking the micro and macro: L-H transition dynamics and threshold physics. Physics of Plasmas, 2015, 22, 032506.	0.7	23

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91	Molybdenum angular sputtering distribution under low energy xenon ion bombardment. Journal of Applied Physics, 2006, 100, 063301.	1.1	21
92	Plasma Blob Generation due to Cooperative Elliptic Instability. Physical Review Letters, 2011, 107, 195004.	2.9	21
93	Thermal conductivity degradation and recovery in ion beam damaged tungsten at different temperature. Journal of Nuclear Materials, 2018, 511, 141-147.	1.3	21
94	Erosion and Redeposition of Graphite by Hydrogen Plasmas. Fusion Science and Technology, 1989, 15, 102-107.	0.6	20
95	Measurement of magnetic fluctuation-induced heat transport in tokamaks and RFP. Plasma Physics and Controlled Fusion, 1996, 38, A213-A225.	0.9	20
96	An overview of recent HL-2A experiments. Nuclear Fusion, 2013, 53, 104009.	1.6	20
97	Control of dissociation by varying oxygen pressure in noble gas admixtures for plasma processing. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 643-650.	0.9	19
98	Numerical simulations of collisional drift-wave turbulence in a magnetized plasma column. Plasma Physics and Controlled Fusion, 2007, 49, A109-A119.	0.9	19
99	Neutral depletion in inductively coupled plasmas using hybrid-type direct simulation Monte Carlo. Journal of Applied Physics, 2008, 103, 033304.	1.1	19
100	Control of plasma parameters by using noble gas admixtures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 2131-2138.	0.9	18
101	Coexistence of Zonal Flows and Drift-Waves in a Cylindrical Magnetized Plasma. Journal of the Physical Society of Japan, 2008, 77, 114501.	0.7	18
102	SOL width in limited versus diverted discharges in DIII-D. Journal of Nuclear Materials, 2011, 415, S387-S390.	1.3	18
103	Effect of parallel currents on drift-interchange turbulence: Comparison of simulation and experiment. Physics of Plasmas, 2012, 19, .	0.7	18
104	Comparison of azimuthal ion velocity profiles using Mach probes, time delay estimation, and laser induced fluorescence in a linear plasma device. Review of Scientific Instruments, 2012, 83, 10D708.	0.6	18
105	Spatio-temporal evolution of the H α back transition. Physics of Plasmas, 2013, 20, .	0.7	18
106	Up-gradient particle flux in a drift wave-zonal flow system. Physics of Plasmas, 2015, 22, .	0.7	18
107	Electrostatic transport in L-mode scrape-off layer plasmas of Tore Supra tokamak. II. Transport by fluctuations. Physics of Plasmas, 2012, 19, 072314.	0.7	17
108	Development of core ion temperature gradients and edge sheared flows in a helicon plasma device investigated by laser induced fluorescence measurements. Physics of Plasmas, 2016, 23, .	0.7	17

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109	Deuterium retention and thermal conductivity in ion-beam displacement-damaged tungsten. Nuclear Materials and Energy, 2017, 12, 164-168.	0.6	17
110	Radial electric field required to suppress ion temperature gradient modes in the Electric Tokamak. Physics of Plasmas, 1999, 6, 4722-4727.	0.7	16
111	Dynamics of stimulated L \rightarrow H transitions. Physics of Plasmas, 2013, 20, .	0.7	16
112	Direct observations of L-I-H and H-I-L transitions with the X-point reciprocating probe in ASDEX Upgrade. Physics of Plasmas, 2014, 21, .	0.7	16
113	The physics of transport barrier formation in the PBX-M H-mode. Plasma Physics and Controlled Fusion, 1994, 36, A285-A290.	0.9	14
114	Radially sheared azimuthal flows and turbulent transport in a cylindrical helicon plasma device. Plasma Physics and Controlled Fusion, 2004, 46, A373-A379.	0.9	14
115	First observation of a new zonal-flow cycle state in the H-mode transport barrier of the experimental advanced superconducting Tokamak. Physics of Plasmas, 2012, 19, 122502.	0.7	14
116	Model development of plasma implanted hydrogenic diffusion and trapping in ion beam damaged tungsten. Nuclear Fusion, 2016, 56, 106030.	1.6	14
117	Overestimation of Mach number due to probe shadow. Physics of Plasmas, 2016, 23, 073519.	0.7	14
118	An electrostatic barrier scrape-off layer for control of core plasma effluxes in tokamaks. Plasma Physics and Controlled Fusion, 1990, 32, 483-497.	0.9	13
119	First results with amplitude modulation reflectometry on the PBX-M tokamak. Review of Scientific Instruments, 1995, 66, 403-405.	0.6	13
120	On the influence of atomic physics mechanisms on edge plasma turbulence in the TJ-92 and Princeton Beta Experiment Modified tokamaks. Physics of Plasmas, 1995, 2, 2618-2620.	0.7	13
121	Spatially distributed scintillator arrays for diagnosing runaway electron transport and energy behavior in tokamaks. Review of Scientific Instruments, 2010, 81, 10E306.	0.6	13
122	Simultaneous use of camera and probe diagnostics to unambiguously identify and study the dynamics of multiple underlying instabilities during the route to plasma turbulence. Review of Scientific Instruments, 2014, 85, 11E813.	0.6	13
123	Dynamics of intrinsic axial flows in unsheared, uniform magnetic fields. Physics of Plasmas, 2016, 23, 052311.	0.7	13
124	Machine learning prediction of electron density and temperature from He I line ratios. Review of Scientific Instruments, 2021, 92, 023505.	0.6	13
125	PISCES-RF: a liquid-cooled high-power steady-state helicon plasma device. Plasma Sources Science and Technology, 2021, 30, 055014.	1.3	13
126	Dynamics of tilted eddies in a transversal flow at the edge of tokamak plasmas and the consequences for L \rightarrow H transition. Plasma Physics and Controlled Fusion, 2013, 55, 124024.	0.9	12

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127	Validation study of a drift-wave turbulence model for CSDX linear plasma device. <i>Physics of Plasmas</i> , 2017, 24, 092310.	0.7	12
128	Tracing the Pathway from Drift-Wave Turbulence with Broken Symmetry to the Production of Sheared Axial Mean Flow. <i>Physical Review Letters</i> , 2018, 120, 205001.	2.9	12
129	Characterization of defect clusters in ion-irradiated tungsten by X-Ray diffuse scattering. <i>Journal of Nuclear Materials</i> , 2018, 510, 322-330.	1.3	12
130	Spatial profiles of neutral, ion, and etch uniformity in a large-area high-density plasma reactor. <i>Journal of Applied Physics</i> , 2001, 89, 911-914.	1.1	11
131	Density enhancement near lower hybrid resonance layer in m=0 helicon wave plasmas. <i>Physics of Plasmas</i> , 2001, 8, 358-363.	0.7	11
132	Experimentally Determined Neutral Density and Plasma Parameters in a 30 CM Ion Engine. , 2004, , .		11
133	Validating simulations of core tokamak turbulence: current status and future directions. <i>Journal of Physics: Conference Series</i> , 2008, 125, 012043.	0.3	11
134	Characterization of SOL plasma flows and potentials in ICRF-heated plasmas in Alcator C-mod. <i>Plasma Physics and Controlled Fusion</i> , 2017, 59, 105008.	0.9	11
135	Selective Plasma Etching for High-Aspect-Ratio Oxide Contact Holes. <i>Japanese Journal of Applied Physics</i> , 1998, 37, 327-331.	0.8	10
136	Isotope exchange experiments in tungsten with sequential deuterium and protium plasmas in PISCES. <i>Journal of Nuclear Materials</i> , 2013, 438, S1183-S1186.	1.3	10
137	Nonlinear dynamics of shear flows and plasma rotation in a simple laboratory plasma system. <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 124055.	0.9	9
138	Scaling properties of turbulence driven shear flow. <i>Physics of Plasmas</i> , 2010, 17, 012302.	0.7	9
139	Development of an analytical diffusion model for modeling hydrogen isotope exchange. <i>Journal of Nuclear Materials</i> , 2015, 463, 1129-1133.	1.3	9
140	Comparison of probe and narrow-band imaging measurements in a magnetized cylindrical plasma. <i>Physics of Plasmas</i> , 2019, 26, 023502.	0.7	9
141	Testing and analysis of steady-state helicon plasma source for the Material Plasma Exposure eXperiment (MPEX). <i>Fusion Engineering and Design</i> , 2020, 160, 112001.	1.0	9
142	Understanding hydrogen retention in damaged tungsten using experimentally-guided models of complex multispecies evolution. <i>Nuclear Fusion</i> , 2020, 60, 096003.	1.6	9
143	Multicentimeter long high density magnetic plasmas for optical guiding. <i>Review of Scientific Instruments</i> , 2008, 79, 10F550.	0.6	8
144	Spatiotemporal Splitting of Global Eigenmodes due to Cross-Field Coupling via Vortex Dynamics in Drift Wave Turbulence. <i>Physical Review Letters</i> , 2014, 113, 265001.	2.9	8

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145	Understanding the impact of insulating and conducting endplate boundary conditions on turbulence in CSDX through nonlocal simulations. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	8
146	Expanding the capability of reaction-diffusion codes using pseudo traps and temperature partitioning: Applied to hydrogen uptake and release from tungsten. <i>Journal of Nuclear Materials</i> , 2018, 508, 472-480.	1.3	8
147	Measurement and modeling of aluminum sputtering and ionization in the DIII-D divertor including magnetic pre-sheath effects. <i>Nuclear Fusion</i> , 2018, 58, 106019.	1.6	8
148	Hydronitrogen Molecular Assisted Recombination (HN-MAR) process in ammonia seeded deuterium plasmas. <i>Nuclear Materials and Energy</i> , 2019, 19, 390-396.	0.6	8
149	Evidence of $E \times B$ staircase in HL-2A L-mode tokamak discharges. <i>Physics of Plasmas</i> , 2021, 28, .	0.7	8
150	Flow generation, bifurcation, and transport barrier in CCT. <i>Plasma Physics and Controlled Fusion</i> , 1994, 36, A105-A110.	0.9	7
151	The Effect of BCl ₃ Addition on RuO ₂ Etching in M=0 Helicon Reactor. <i>Japanese Journal of Applied Physics</i> , 1998, 37, L502-L504.	0.8	7
152	Electron beam fluorescence temperature measurements of N ₂ in a semiconductor plasma reactor. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2004, 22, 371-376.	0.9	7
153	Sawtooth-triggered limit-cycle oscillations and I-phase in the HL-2A tokamak. <i>Nuclear Fusion</i> , 2013, 53, 123015.	1.6	7
154	Measurements of gross erosion of Al in the DIII-D divertor. <i>Journal of Nuclear Materials</i> , 2015, 463, 810-813.	1.3	7
155	Propagation Dynamics Associated with Resonant Magnetic Perturbation Fields in High-Confinement Mode Plasmas inside the KSTAR Tokamak. <i>Physical Review Letters</i> , 2017, 119, 205001.	2.9	7
156	How might controlled fusion fit into the emerging low-carbon energy system of the mid-twenty-first century?. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20200009.	1.6	7
157	Lower hybrid wave coupling in PBX-M. <i>Nuclear Fusion</i> , 1994, 34, 271-275.	1.6	6
158	Collisionless Simonâ€™s instability in a strongly doubleâ€™sheared electric field. <i>Physics of Plasmas</i> , 1994, 1, 3193-3198.	0.7	6
159	Neutral uniformity and transport mechanisms for plasma etching. <i>Physics of Plasmas</i> , 2001, 8, 3069-3076.	0.7	6
160	Nonlinear Lyapunov-based burn control in fusion reactors. <i>Fusion Engineering and Design</i> , 2002, 63-64, 569-575.	1.0	6
161	Evidence for molecular-assisted recombination of He ⁺ from particle balance measurements in helium-hydrogen mixture plasmas in PISCES-A. <i>Physics of Plasmas</i> , 2008, 15, 102505.	0.7	6
162	Implications of Energy Return on Energy Invested on Future Total Energy Demand. <i>Sustainability</i> , 2011, 3, 2433-2442.	1.6	6

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163	Investigation of peeling-ballooning stability prior to transient outbursts accompanying transitions out of H-mode in DIII-D. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	6
164	The ecology of flows and drift wave turbulence in CSDX: A model. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	6
165	Edge turbulence evolution and intermittency development near the density limit on the HL-2A tokamak. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	6
166	Isolating the detrapping of deuterium in heavy ion damaged tungsten via partial thermal desorption. <i>Journal of Nuclear Materials</i> , 2019, 522, 158-167.	1.3	6
167	Ion flow in a strongly sheared electric field. <i>Physics of Fluids B</i> , 1993, 5, 344-349.	1.7	5
168	Pellet interaction with runaway electrons. <i>Journal of Nuclear Materials</i> , 2011, 415, S849-S851.	1.3	5
169	Evolution of E \times B shear and coherent fluctuations prior to H-L transitions in DIII-D and control strategies for H-L transitions. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	5
170	Investigating flow patterns and related dynamics in multi-instability turbulent plasmas using a three-point cross-phase time delay estimation velocimetry scheme. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	5
171	Characterizing Low-Z erosion and deposition in the DIII-D divertor using aluminum. <i>Nuclear Materials and Energy</i> , 2017, 12, 441-446.	0.6	5
172	Modelling enhanced confinement in drift-wave turbulence. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	5
173	Generation of parasitic axial flow by drift wave turbulence with broken symmetry: Theory and experiment. <i>Physics of Plasmas</i> , 2018, 25, 055710.	0.7	5
174	Neutralization processes of atomic/molecular deuterium ions assisted by ND ₃ in low density D ₂ -N ₂ plasmas. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	5
175	An overview of PBX-M H-mode results. <i>Plasma Physics and Controlled Fusion</i> , 1994, 36, A51-A60.	0.9	4
176	Source formulation for electron-impact ionization for fluid plasma simulations. <i>Plasma Physics and Controlled Fusion</i> , 2009, 51, 105014.	0.9	4
177	Zonal flow shear amplification by depletion of anisotropic potential eddies in a magnetized plasma: idealized models and laboratory experiment. <i>Plasma Physics and Controlled Fusion</i> , 2013, 55, 025011.	0.9	4
178	Relating the L \rightarrow H power threshold scaling to edge turbulence dynamics. <i>Nuclear Fusion</i> , 2013, 53, 113038.	1.6	4
179	Laser induced fluorescence measurements of axial velocity, velocity shear, and parallel ion temperature profiles during the route to plasma turbulence in a linear magnetized plasma device. <i>Review of Scientific Instruments</i> , 2016, 87, 11E513.	0.6	4
180	Initial Report On The Transition to Turbulence in a Magnetized Plasma Column. <i>AIP Conference Proceedings</i> , 2003, , .	0.3	3

#	ARTICLE	IF	CITATIONS
181	Mixed Material Plasma-Surface Interactions in ITER: Recent Results from the PISCES Group. , 2010, , .		3
182	Simultaneous imaging electron- and ion-feature Thomson scattering measurements of radiatively heated Xe. Review of Scientific Instruments, 2012, 83, 10E348.	0.6	3
183	Turbulence and jet-driven zonal flows: Secondary circulation in rotating fluids due to asymmetric forcing. Physical Review E, 2019, 99, 023108.	0.8	3
184	Ion heating in the PISCES-RF liquid-cooled high-power, steady-state, helicon plasma device. Plasma Sources Science and Technology, 2021, 30, 065010.	1.3	3
185	Dissociative recombination process of ammonium for HN-MAR in high density D-N plasmas. Physics of Plasmas, 2018, 25, 123510.	0.7	2
186	Simultaneous measurements of turbulent Reynolds stresses and particle flux in both parallel and perpendicular directions in a linear magnetized plasma device. Review of Scientific Instruments, 2018, 89, 10J117.	0.6	2
187	Compact, portable, laser induced fluorescence diagnostic for laboratory plasma sources. Review of Scientific Instruments, 2021, 92, 013502.	0.6	2
188	Prospects for high gain inertial fusion energy: an introduction to the second edition. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200028.	1.6	2
189	Reduced defect recovery in self-ion damaged W due to simultaneous deuterium exposure during annealing. Nuclear Fusion, 2022, 62, 036012.	1.6	2
190	Measurement of Radial and Axial Neutral Gas Temperature in a Semi-Conductor Plasma Reactor. AIP Conference Proceedings, 2005, , .	0.3	1
191	The Physics of Zonal Flow-Drift Wave Turbulence Interactions: A Synthesis of Time-domain, Fourier Domain, and Direct Visualization Studies. , 2009, , .		1
192	Spontaneous Self-Organization in a Helicon Plasma Device: Instabilities, Bifurcation, Hysteresis and Plasma Detachment. , 2017, , .		1
193	Prospects for high gain inertial fusion energy: an introduction to the first special edition. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20200006.	1.6	1
194	Report of the FESAC Panel on a Burning Plasma Program Strategy to Advance Fusion Energy. Journal of Fusion Energy, 2001, 20, 85-112.	0.5	0
195	Magnetically Controlled Optical Plasma Waveguide for Electron Acceleration. , 2009, , .		0
196	Dynamics of formation of the blue core mode in argon helicon plasma. , 2014, , .		0
197	Discover energy inaugural editorial. Discover Energy, 2021, 1, 1.	1.1	0
198	MEASUREMENTS OF ELECTRON TEMPERATURE AND DENSITY FLUCTUATIONS AND COMPARISON TO GYROKINETIC SIMULATIONS. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
199	Global Transition From Drift Wave Dominated Regimes To Multi-Instability Plasma Dynamics And Simultaneous Formation Of A Radial Transport Barrier. , 2018, , 67-92.		0
200	Investigations of plasma response associated with Resonant Magnetic Perturbation fields using perturbation method in KSTAR H-mode plasmas. Nuclear Fusion, 0, , .	1.6	0