

# James L Terry

## List of Publications by Year in descending order

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152  
papers

10,028  
citations

36303

51  
h-index

36028

97  
g-index

155  
all docs

155  
docs citations

155  
times ranked

2662  
citing authors

#	ARTICLE	IF	CITATIONS
1	I-mode pedestal relaxation events in the Alcator C-Mod and ASDEX Upgrade tokamaks. Nuclear Fusion, 2022, 62, 036004.	3.5	7
2	Deep modeling of plasma and neutral fluctuations from gas puff turbulence imaging. Review of Scientific Instruments, 2022, 93, 063504.	1.3	4
3	Dynamics and dependencies of the configuration-dependent 1–2 kHz fluctuation in W7-X. Nuclear Materials and Energy, 2021, 27, 100967.	1.3	4
4	Simulation of the SPARC plasma boundary with the UEDGE code. Nuclear Fusion, 2021, 61, 086014.	3.5	6
5	Study of passively stable, fully detached divertor plasma regimes attained in innovative long-legged divertor configurations. Nuclear Fusion, 2020, 60, 016004.	3.5	10
6	Comparison between mirror Langmuir probe and gas-puff imaging measurements of intermittent fluctuations in the Alcator C-Mod scrape-off layer. Journal of Plasma Physics, 2020, 86, .	2.1	11
7	Divertor heat flux challenge and mitigation in SPARC. Journal of Plasma Physics, 2020, 86, .	2.1	40
8	Simulations of divertor heat flux width using transport code with cross-field drifts under the BOUT++ framework. AIP Advances, 2020, 10, .	1.3	14
9	10.1063/5.0002876.1., 2020, , .		0
10	Performance assessment of long-legged tightly-baffled divertor geometries in the ARC reactor concept. Nuclear Fusion, 2019, 59, 106052.	3.5	15
11	Statistical properties of the plasma fluctuations and turbulent cross-field fluxes in the outboard mid-plane scrape-off layer of Alcator C-Mod. Nuclear Materials and Energy, 2019, 18, 193-200.	1.3	11
12	Shadowing effects in simulated Alcator C-Mod gas puff imaging data. Nuclear Materials and Energy, 2019, 19, 113-119.	1.3	7
13	Radiative heat exhaust in Alcator C-Mod I-mode plasmas. Nuclear Fusion, 2019, 59, 046018.	3.5	14
14	Edge transport and mode structure of a QCM-like fluctuation driven by the Shoelace antenna. Nuclear Fusion, 2018, 58, 056018.	3.5	2
15	Intermittent fluctuations in the Alcator C-Mod scrape-off layer for ohmic and high confinement mode plasmas. Physics of Plasmas, 2018, 25, 056103.	1.9	16
16	UEDGE modelling of detached divertor operation for long-legged divertor geometries in ARC. Contributions To Plasma Physics, 2018, 58, 791-797.	1.1	5
17	Intermittent electron density and temperature fluctuations and associated fluxes in the Alcator C-Mod scrape-off layer. Plasma Physics and Controlled Fusion, 2018, 60, 065002.	2.1	22
18	Universality of Poisson-driven plasma fluctuations in the Alcator C-Mod scrape-off layer. Physics of Plasmas, 2018, 25, 122309.	1.9	12

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19	Fast camera imaging of plasmas in Alcator C-Mod and W7-X. Nuclear Materials and Energy, 2018, 17, 269-273.	1.3	8
20	Experimental tests of an infrared video bolometer on Alcator C-Mod. Review of Scientific Instruments, 2018, 89, 103507.	1.3	5
21	Progress towards modeling tokamak boundary plasma turbulence and understanding its role in setting divertor heat flux widths. Physics of Plasmas, 2018, 25, 055905.	1.9	17
22	The dependence of divertor power sharing on magnetic flux balance in near double-null configurations on Alcator C-Mod. Nuclear Fusion, 2018, 58, 076010.	3.5	17
23	High-resolution heat flux width measurements at reactor-level magnetic fields and observation of a unified width scaling across confinement regimes in the Alcator C-Mod tokamak. Nuclear Fusion, 2018, 58, 094002.	3.5	41
24	Invited Review Article: Gas puff imaging diagnostics of edge plasma turbulence in magnetic fusion devices. Review of Scientific Instruments, 2017, 88, 041101.	1.3	73
25	Chaotic edge density fluctuations in the Alcator C-Mod tokamak. Physics of Plasmas, 2017, 24, .	1.9	9
26	Fast imaging of filaments in the X-point region of Alcator C-Mod. Nuclear Materials and Energy, 2017, 12, 989-993.	1.3	14
27	Expanding the role of impurity spectroscopy for investigating the physics of high-Z dissipative divertors. Nuclear Materials and Energy, 2017, 12, 91-99.	1.3	7
28	Turbulence Nonlinearities Shed Light on Geometric Asymmetry in Tokamak Confinement Transitions. Physical Review Letters, 2017, 118, 105003.	7.8	29
29	Diagnostic tools for studying divertor detachment: bolometry, spectroscopy, and thermography for surface heat-flux. Plasma Physics and Controlled Fusion, 2017, 59, 044004.	2.1	3
30	Gyrokinetic projection of the divertor heat-flux width from present tokamaks to ITER. Nuclear Fusion, 2017, 57, 116023.	3.5	125
31	Attainment of a stable, fully detached plasma state in innovative divertor configurations. Physics of Plasmas, 2017, 24, .	1.9	16
32	Relationship between frequency power spectra and intermittent, large-amplitude bursts in the Alcator C-Mod scrape-off layer. Nuclear Fusion, 2017, 57, 114004.	3.5	18
33	Outer midplane scrape-off layer profiles and turbulence in simulations of Alcator C-Mod inner-wall limited discharges. Physics of Plasmas, 2017, 24, 072502.	1.9	7
34	Edge turbulence and divertor heat flux width simulations of Alcator C-Mod discharges using an electromagnetic two-fluid model. Nuclear Fusion, 2017, 57, 116025.	3.5	27
35	Assessment of X-point target divertor configuration for power handling and detachment front control. Nuclear Materials and Energy, 2017, 12, 918-923.	1.3	14
36	Impurity screening behavior of the high-field side scrape-off layer in near-double-null configurations: prospect for mitigating plasma-material interactions on RF actuators and first-wall components. Nuclear Fusion, 2017, 57, 076021.	3.5	12

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37	Surface heat flux feedback controlled impurity seeding experiments with Alcator C-Mod's high- $Z$ vertical target plate divertor: performance, limitations and implications for fusion power reactors. Nuclear Fusion, 2017, 57, 086030.	3.5	16
38	Radial localization of edge modes in Alcator C-Mod pedestals using optical diagnostics. Plasma Physics and Controlled Fusion, 2017, 59, 025016.	2.1	18
39	Physics and performance of the I-mode regime over an expanded operating space on Alcator C-Mod. Nuclear Fusion, 2017, 57, 126039.	3.5	36
40	Impact of perturbative, non-axisymmetric impurity fueling on Alcator C-Mod H-modes. Plasma Physics and Controlled Fusion, 2017, 59, 122002.	2.1	3
41	Characterization of SOL plasma flows and potentials in ICRF-heated plasmas in Alcator C-mod. Plasma Physics and Controlled Fusion, 2017, 59, 105008.	2.1	11
42	Fluctuation statistics in the scrape-off layer of Alcator C-Mod. Plasma Physics and Controlled Fusion, 2016, 58, 054001.	2.1	29
43	Mean flows and blob velocities in scrape-off layer (SOLT) simulations of an L-mode discharge on Alcator C-Mod. Physics of Plasmas, 2016, 23, 062305.	1.9	8
44	Lower hybrid wave edge power loss quantification on the Alcator C-Mod tokamak. Physics of Plasmas, 2016, 23, 056115.	1.9	14
45	Comparison of velocimetry techniques for turbulent structures in gas-puff imaging data. Review of Scientific Instruments, 2016, 87, 023502.	1.3	13
46	The effects of dilution on turbulence and transport in C-Mod ohmic plasmas and comparisons with gyrokinetic simulations. Physics of Plasmas, 2015, 22, 072507.	1.9	31
47	Kinetic modeling of divertor heat load fluxes in the Alcator C-Mod and DIII-D tokamaks. Physics of Plasmas, 2015, 22, .	1.9	9
48	Core impurity transport in Alcator C-Mod L-, I- and H-mode plasmas. Nuclear Fusion, 2015, 55, 033014.	3.5	35
49	Comparison of 3D flux-driven scrape-off layer turbulence simulations with gas-puff imaging of Alcator C-Mod inner-wall limited discharges. Plasma Physics and Controlled Fusion, 2015, 57, 054005.	2.1	20
50	Alcator C-Mod: research in support of ITER and steps beyond. Nuclear Fusion, 2015, 55, 104020.	3.5	14
51	Improved confinement in high-density H-modes via modification of the plasma boundary with lower	1.9	7
52	Three-dimensional simulation of H-mode plasmas with localized divertor impurity injection on	1.9	12
53	Impact of a narrow limiter SOL heat flux channel on the ITER first wall panel shaping. Nuclear Fusion, 2015, 55, 033019.	3.5	54
54	ADX: a high field, high power density, advanced divertor and RF tokamak. Nuclear Fusion, 2015, 55, 053020.	3.5	82

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55	Nonlinear transfer in heated L-modes approaching the L-H transition threshold in Alcator C-Mod. Nuclear Fusion, 2015, 55, 083007.	3.5	21
56	Experimental investigation of the parallel structure of fluctuations in the scrape-off layer of Alcator C-Mod. Nuclear Fusion, 2014, 54, 043012.	3.5	39
57	ICRF-enhanced plasma potentials in the SOL of Alcator C-Mod. Plasma Physics and Controlled Fusion, 2014, 56, 015004.	2.1	40
58	20 years of research on the Alcator C-Mod tokamak. Physics of Plasmas, 2014, 21, .	1.9	88
59	External excitation of a short-wavelength fluctuation in the Alcator C-Mod edge plasma and its relationship to the quasi-coherent mode. Physics of Plasmas, 2014, 21, 056111.	1.9	9
60	Edge-localized mode avoidance and pedestal structure in I-mode plasmas. Physics of Plasmas, 2014, 21, 056103.	1.9	35
61	New insights on boundary plasma turbulence and the quasi-coherent mode in Alcator C-Mod using a Mirror Langmuir Probe. Physics of Plasmas, 2014, 21, .	1.9	61
62	Zonal flow production in the L-H transition in Alcator C-Mod. Plasma Physics and Controlled Fusion, 2014, 56, 075013.	2.1	49
63	Blob sizes and velocities in the Alcator C-Mod scrape-off layer. Journal of Nuclear Materials, 2013, 438, S505-S508.	2.7	29
64	Burst statistics in Alcator C-Mod SOL turbulence. Journal of Nuclear Materials, 2013, 438, S180-S183.	2.7	29
65	Heat-flux footprints for I-mode and EDA H-mode plasmas on Alcator C-Mod. Journal of Nuclear Materials, 2013, 438, S212-S215.	2.7	13
66	Investigation of RF-enhanced plasma potentials on Alcator C-Mod. Journal of Nuclear Materials, 2013, 438, S875-S878.	2.7	12
67	Fluctuating zonal flows in the I-mode regime in Alcator C-Mod. Physics of Plasmas, 2013, 20, .	1.9	79
68	Comparison of edge turbulence imaging at two different poloidal locations in the scrape-off layer of Alcator C-Mod. Physics of Plasmas, 2013, 20, .	1.9	19
69	Characterization and performance of a field aligned ion cyclotron range of frequency antenna in Alcator C-Mod. Physics of Plasmas, 2013, 20, .	1.9	57
70	Intermittent fluctuations in the Alcator C-Mod scrape-off layer. Physics of Plasmas, 2013, 20, 055901.	1.9	54
71	Edge sheared flows and the dynamics of blob-filaments. Nuclear Fusion, 2013, 53, 073013.	3.5	34
72	Scaling of the tokamak near the scrape-off layer H-mode power width and implications for ITER. Nuclear Fusion, 2013, 53, 093031.	3.5	448

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73	Pedestal structure and stability in H-mode and I-mode: a comparative study on Alcator C-Mod. Nuclear Fusion, 2013, 53, 043016.	3.5	41
74	Overview of experimental results and code validation activities at Alcator C-Mod. Nuclear Fusion, 2013, 53, 104004.	3.5	13
75	Lower hybrid current drive at high density in the multi-pass regime. Physics of Plasmas, 2012, 19, 062505.	1.9	31
76	Ion-cyclotron range of frequencies in the scrape-off-layer: fine structure radial electric fields. Plasma Physics and Controlled Fusion, 2012, 54, 105019.	2.1	42
77	Analysis of a multi-machine database on divertor heat fluxes. Physics of Plasmas, 2012, 19, .	1.9	109
78	Search for zonal flows in the edge turbulence of Alcator C-Mod. Plasma Physics and Controlled Fusion, 2012, 54, 025008.	2.1	10
79	Numerical investigation of edge plasma phenomena in an enhanced D-alpha discharge at Alcator C-Mod: Parallel heat flux and quasi-coherent edge oscillations. Physics of Plasmas, 2012, 19, .	1.9	10
80	Edge energy transport barrier and turbulence in the I-mode regime on Alcator C-Mod. Physics of Plasmas, 2011, 18, .	1.9	87
81	Divertor heat flux footprints in EDA H-mode discharges on Alcator C-Mod. Journal of Nuclear Materials, 2011, 415, S349-S352.	2.7	14
82	Comparison of heat flux measurements by IR thermography and probes in the Alcator C-Mod divertor. Journal of Nuclear Materials, 2011, 415, S375-S378.	2.7	15
83	Effect of N2, Ne and Ar seeding on Alcator C-Mod H-mode confinement. Journal of Nuclear Materials, 2011, 415, S340-S344.	2.7	73
84	Electron temperature fluctuations associated with the weakly coherent mode in the edge of I-mode plasmas. Nuclear Fusion, 2011, 51, 113005.	3.5	39
85	Power requirements for superior H-mode confinement on Alcator C-Mod: experiments in support of ITER. Nuclear Fusion, 2011, 51, 083007.	3.5	40
86	Edge turbulence in different density regimes in Alcator C-Mod experiment. Nuclear Fusion, 2011, 51, 053020.	3.5	25
87	High confinement/high radiated power H-mode experiments in Alcator C-Mod and consequences for International Thermonuclear Experimental Reactor (ITER) QDTâ€™s=â€™10 operation. Physics of Plasmas, 2011, 18, .	1.9	84
88	Scaling of the power exhaust channel in Alcator C-Mod. Physics of Plasmas, 2011, 18, 056104.	1.9	69
89	Vacuum ultraviolet impurity spectroscopy on the Alcator C-Mod tokamak. Review of Scientific Instruments, 2010, 81, 10D736.	1.3	52
90	Divertor IR thermography on Alcator C-Mod. Review of Scientific Instruments, 2010, 81, 10E513.	1.3	37

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91	Experimental studies of edge turbulence and confinement in Alcator C-Mod. Physics of Plasmas, 2010, 17, .	1.9	56
92	I-mode: an H-mode energy confinement regime with L-mode particle transport in Alcator C-Mod. Nuclear Fusion, 2010, 50, 105005.	3.5	246
93	Comparison of scrape-off layer turbulence in Alcator C-Mod with three dimensional gyrofluid computations. Physics of Plasmas, 2009, 16, .	1.9	48
94	Overview of the Alcator C-Mod Research Program. Nuclear Fusion, 2009, 49, 104014.	3.5	29
95	Spatial structure of scrape-off-layer filaments near the midplane and X-point regions of Alcator-C-Mod. Journal of Nuclear Materials, 2009, 390-391, 339-342.	2.7	38
96	Critical gradients and plasma flows in the edge plasma of Alcator C-Mod. Physics of Plasmas, 2008, 15, .	1.9	67
97	Edge profile stiffness and insensitivity of the density pedestal to neutral fuelling in Alcator C-Mod edge transport barriers. Nuclear Fusion, 2007, 47, 1057-1063.	3.5	48
98	H-Mode Pedestal and L-H Transition Studies on Alcator C-Mod. Fusion Science and Technology, 2007, 51, 317-341.	1.1	36
99	Divertor Physics Research on Alcator C-Mod. Fusion Science and Technology, 2007, 51, 369-389.	1.1	92
100	Confinement and Transport Research in Alcator C-Mod. Fusion Science and Technology, 2007, 51, 266-287.	1.1	40
101	Wave-Particle Studies in the Ion Cyclotron and Lower Hybrid Ranges of Frequencies in Alcator C-Mod. Fusion Science and Technology, 2007, 51, 401-436.	1.1	72
102	Diagnostic Systems on Alcator C-Mod. Fusion Science and Technology, 2007, 51, 476-507.	1.1	62
103	Chapter 4: Power and particle control. Nuclear Fusion, 2007, 47, S203-S263.	3.5	891
104	Edge turbulence measurements in toroidal fusion devices. Plasma Physics and Controlled Fusion, 2007, 49, S1-S23.	2.1	283
105	Plasma-surface interaction, scrape-off layer and divertor physics: implications for ITER. Nuclear Fusion, 2007, 47, 1189-1205.	3.5	156
106	The dynamics and structure of edge-localized-modes in Alcator C-Mod. Journal of Nuclear Materials, 2007, 363-365, 994-999.	2.7	40
107	Structure and motion of edge turbulence in the National Spherical Torus Experiment and Alcator C-Mod. Physics of Plasmas, 2006, 13, 056114.	1.9	63
108	Radially propagating fluctuation structures in the scrape-off layer of Alcator C-Mod. Physics of Plasmas, 2006, 13, 012306.	1.9	124

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109	OSM-EIRENE modeling of neutral pressures in the Alcator C-Mod divertor. Journal of Nuclear Materials, 2005, 337-339, 139-145.	2.7	46
110	Velocity fields of edge/Scrape-Off-Layer turbulence in Alcator C-Mod. Journal of Nuclear Materials, 2005, 337-339, 322-326.	2.7	38
111	Evidence for electromagnetic fluid drift turbulence controlling the edge plasma state in the Alcator C-Mod tokamak. Nuclear Fusion, 2005, 45, 1658-1675.	3.5	121
112	Transport phenomena in the edge of Alcator C-Mod plasmas. Nuclear Fusion, 2005, 45, 1321-1327.	3.5	79
113	Overview of the Alcator C-Mod program. Nuclear Fusion, 2005, 45, S109-S117.	3.5	28
114	Characterization of core and edge turbulence in L- and enhanced D $\alpha$ H-mode Alcator C-Mod plasmas. Physics of Plasmas, 2005, 12, 052512.	1.9	13
115	Neutral transport simulations of gas puff imaging experiments. Journal of Nuclear Materials, 2003, 313-316, 1066-1070.	2.7	56
116	Observations of the turbulence in the scrape-off-layer of Alcator C-Mod and comparisons with simulation. Physics of Plasmas, 2003, 10, 1739-1747.	1.9	203
117	Gas puff imaging of edge turbulence (invited). Review of Scientific Instruments, 2003, 74, 2020-2026.	1.3	108
118	Edge turbulence imaging in the Alcator C-Mod tokamak. Physics of Plasmas, 2002, 9, 1981-1989.	1.9	238
119	Visible imaging of turbulence in the SOL of the Alcator C-Mod tokamak. Journal of Nuclear Materials, 2001, 290-293, 757-762.	2.7	71
120	Observations of cold, high density plasma in the private flux region of the Alcator C-Mod divertor. Journal of Nuclear Materials, 2001, 290-293, 556-560.	2.7	14
121	Application of magnetically-broadened hydrogenic line profiles to computational modeling of a plasma experiment. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 71, 117-128.	2.3	17
122	Pedestal profiles and fluctuations in C-Mod enhanced D-alpha H-modes. Physics of Plasmas, 2001, 8, 2033-2040.	1.9	85
123	Particle transport in the scrape-off layer and its relationship to discharge density limit in Alcator C-Mod. Physics of Plasmas, 2001, 8, 2107-2117.	1.9	220
124	Cross-field plasma transport and main-chamber recycling in diverted plasmas on Alcator C-Mod. Nuclear Fusion, 2000, 40, 2041-2060.	3.5	163
125	Studies of EDA H-mode in Alcator C-Mod. Plasma Physics and Controlled Fusion, 2000, 42, A263-A269.	2.1	72
126	High confinement dissipative divertor operation on Alcator C-Mod. Physics of Plasmas, 1999, 6, 1899-1906.	1.9	44



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127	High resolution bolometry on the Alcator C-Mod tokamak (invited). Review of Scientific Instruments, 1999, 70, 260-264.	1.3	62
128	Characterization of enhanced $D_{\alpha}$ high-confinement modes in Alcator C-Mod. Physics of Plasmas, 1999, 6, 1943-1949.	1.9	178
129	The role of particle sinks and sources in Alcator C-Mod detached divertor discharges. Physics of Plasmas, 1999, 6, 1907-1916.	1.9	42
130	Modeling of particle and energy transport in the edge plasma of Alcator C-Mod. Physics of Plasmas, 1999, 6, 2791-2796.	1.9	35
131	A novel tracer-gas injection system for scrape-off layer impurity transport and screening experiments. Journal of Nuclear Materials, 1999, 266-269, 571-576.	2.7	15
132	Impurity compression and enrichment studies on Alcator C-Mod. Journal of Nuclear Materials, 1999, 266-269, 354-359.	2.7	34
133	Comments on particle and energy balance in the edge plasma of Alcator C-Mod. Physics of Plasmas, 1998, 5, 3373-3376.	1.9	107
134	Volume recombination and opacity in Alcator C-Mod divertor plasmas. Physics of Plasmas, 1998, 5, 1759-1766.	1.9	151
135	H mode confinement in Alcator C-Mod. Nuclear Fusion, 1997, 37, 793-807.	3.5	189
136	Radiative and three-body recombination in the Alcator C-Mod divertor. Physics of Plasmas, 1997, 4, 2555-2566.	1.9	116
137	Experimental investigation of transport phenomena in the scrape-off layer and divertor. Journal of Nuclear Materials, 1997, 241-243, 149-166.	2.7	114
138	Comparison of detached and radiative divertor operation in Alcator C-Mod. Physics of Plasmas, 1996, 3, 1908-1915.	1.9	45
139	Enhancement of Tokamak Fusion Test Reactor performance by lithium conditioning. Physics of Plasmas, 1996, 3, 1892-1897.	1.9	181
140	Enhanced performance of deuterium-tritium fueled supershots using extensive lithium conditioning in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1995, 2, 4252-4256.	1.9	36
141	Power balance and scaling of the radiated power in the divertor and main plasma of Alcator C-Mod. Journal of Nuclear Materials, 1995, 220-222, 971-975.	2.7	27
142	The effects of field reversal on the Alcator C-Mod divertor. Plasma Physics and Controlled Fusion, 1995, 37, 1389-1406.	2.1	62
143	First results from Alcator C-Mod*. Physics of Plasmas, 1994, 1, 1511-1518.	1.9	359
144	Lithium pellet deposition and penetration in TFTR. Review of Scientific Instruments, 1992, 63, 4984-4986.	1.3	10

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145	Alpha particle diagnostics using impurity pellet injection (invited). Review of Scientific Instruments, 1992, 63, 4499-4504.	1.3	24
146	Ion cyclotron range of frequencies stabilization of sawteeth on Tokamak Fusion Test Reactor. Physics of Fluids B, 1992, 4, 2155-2164.	1.7	41
147	Imaging of lithium pellet ablation trails and measurement of q profiles in TFTR. Review of Scientific Instruments, 1992, 63, 5191-5194.	1.3	15
148	Zeff behavior following Li and C pellet injection into TFTR. Review of Scientific Instruments, 1990, 61, 3087-3089.	1.3	1
149	A new look at density limits in tokamaks. Nuclear Fusion, 1988, 28, 2199-2207.	3.5	679
150	Energy Confinement of High-Density Pellet-Fueled Plasmas in the AlcatorCTokamak. Physical Review Letters, 1984, 53, 352-355.	7.8	252
151	Marfe: an edge plasma phenomenon. Nuclear Fusion, 1984, 24, 977-988.	3.5	284
152	Dependence of the boundary heat flux width on core and edge profiles in Alcator C-Mod. Nuclear Fusion, 0, , .	3.5	0