Brian LaBombard

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9578589/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Chapter 4: Power and particle control. Nuclear Fusion, 2007, 47, S203-S263.	3.5	891
2	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
3	First results from Alcator â€MOD*. Physics of Plasmas, 1994, 1, 1511-1518.	1.9	359
4	Marfe: an edge plasma phenomenon. Nuclear Fusion, 1984, 24, 977-988.	3.5	284
5	Edge turbulence measurements in toroidal fusion devices. Plasma Physics and Controlled Fusion, 2007, 49, S1-S23.	2.1	283
6	Poloidal asymmetries in the scrape-off layer plasma of the Alcator C tokamak. Nuclear Fusion, 1987, 27, 81-99.	3.5	278
7	Transport-driven Scrape-Off-Layer flows and the boundary conditions imposed at the magnetic separatrix in a tokamak plasma. Nuclear Fusion, 2004, 44, 1047-1066.	3.5	260
8	Energy Confinement of High-Density Pellet-Fueled Plasmas in the AlcatorCTokamak. Physical Review Letters, 1984, 53, 352-355.	7.8	252
9	Edge turbulence imaging in the Alcator C-Mod tokamak. Physics of Plasmas, 2002, 9, 1981-1989.	1.9	238
10	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
11	Universality of intermittent convective transport in the scrape-off layer of magnetically confined devices. Physics of Plasmas, 2003, 10, 419-428.	1.9	206
12	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
13	H mode confinement in Alcator C-Mod. Nuclear Fusion, 1997, 37, 793-807.	3.5	189
14	Overview of the SPARC tokamak. Journal of Plasma Physics, 2020, 86, .	2.1	181
15	Characterization of enhanced Dα high-confinement modes in Alcator C-Mod. Physics of Plasmas, 1999, 6, 1943-1949.	1.9	178
16	Cross-field plasma transport and main-chamber recycling in diverted plasmas on Alcator C-Mod. Nuclear Fusion, 2000, 40, 2041-2060.	3.5	163
17	Plasma–surface interaction, scrape-off layer and divertor physics: implications for ITER. Nuclear Fusion, 2007, 47, 1189-1205.	3.5	156
18	Volume recombination and opacity in Alcator C-Mod divertor plasmas. Physics of Plasmas, 1998, 5, 1759-1766.	1.9	151

#	Article	IF	CITATIONS
19	Edge radial electric field structure and its connections to H-mode confinement in Alcator C-Mod plasmas. Physics of Plasmas, 2009, 16, .	1.9	151
20	Gyrokinetic projection of the divertor heat-flux width from present tokamaks to ITER. Nuclear Fusion, 2017, 57, 116023.	3.5	125
21	Radially propagating fluctuation structures in the scrape-off layer of Alcator C-Mod. Physics of Plasmas, 2006, 13, 012306.	1.9	124
22	Plasma recombination and molecular effects in tokamak divertors and divertor simulators. Physics of Plasmas, 1997, 4, 1638-1646.	1.9	123
23	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
24	Disruptions and halo currents in Alcator C-Mod. Nuclear Fusion, 1996, 36, 545-556.	3.5	117
25	Experimental investigation of transport phenomena in the scrape-off layer and divertor. Journal of Nuclear Materials, 1997, 241-243, 149-166.	2.7	114
26	Analysis of a multi-machine database on divertor heat fluxes. Physics of Plasmas, 2012, 19, .	1.9	109
27	Gas puff imaging of edge turbulence (invited). Review of Scientific Instruments, 2003, 74, 2020-2026.	1.3	108
28	Comments on particle and energy balance in the edge plasma of Alcator C-Mod. Physics of Plasmas, 1998, 5, 3373-3376.	1.9	107
29	A study of molybdenum influxes and transport in Alcator C-Mod. Nuclear Fusion, 2001, 41, 585-596.	3.5	101
30	Divertor Physics Research on Alcator C-Mod. Fusion Science and Technology, 2007, 51, 369-389.	1.1	92
31	20 years of research on the Alcator C-Mod tokamak. Physics of Plasmas, 2014, 21, .	1.9	88
32	Transport-driven scrape-off layer flows and the x-point dependence of the L-H power threshold in Alcator C-Mod. Physics of Plasmas, 2005, 12, 056111.	1.9	87
33	Pedestal profiles and fluctuations in C-Mod enhanced D-alpha H-modes. Physics of Plasmas, 2001, 8, 2033-2040.	1.9	85
34	High confinement/high radiated power H-mode experiments in Alcator C-Mod and consequences for International Thermonuclear Experimental Reactor (ITER) QDT = 10 operation. Physics of Plasmas, 2011, 18, .	1.9	84
35	Scaling and transport analysis of divertor conditions on the Alcator Câ€Mod tokamak. Physics of Plasmas, 1995, 2, 2242-2248.	1.9	82
36	ADX: a high field, high power density, advanced divertor and RF tokamak. Nuclear Fusion, 2015, 55, 053020.	3.5	82

#	Article	IF	CITATIONS
37	Transport phenomena in the edge of Alcator C-Mod plasmas. Nuclear Fusion, 2005, 45, 1321-1327.	3.5	79
38	Observation of Edge Instability Limiting the Pedestal Growth in Tokamak Plasmas. Physical Review Letters, 2014, 112, 115001.	7.8	78
39	The quasi-coherent signature of enhanced DαH-mode in Alcator C-Mod. Plasma Physics and Controlled Fusion, 2001, 43, L23-L30.	2.1	77
40	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
41	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
42	Plasma flow measurements along the presheath of a magnetized plasma. Physics of Fluids B, 1989, 1, 2229-2238.	1.7	70
43	Radiofrequency-heated enhanced confinement modes in the Alcator C-Mod tokamak. Physics of Plasmas, 1997, 4, 1647-1653.	1.9	70
44	Comparison of tungsten nano-tendrils grown in Alcator C-Mod and linear plasma devices. Journal of Nuclear Materials, 2013, 438, S84-S89.	2.7	70
45	Scaling of the power exhaust channel in Alcator C-Mod. Physics of Plasmas, 2011, 18, 056104.	1.9	69
46	Critical gradients and plasma flows in the edge plasma of Alcator C-Mod. Physics of Plasmas, 2008, 15, .	1.9	67
47	Observations and empirical scalings of the high-confinement mode pedestal on Alcator C-Mod. Physics of Plasmas, 2002, 9, 3019-3030.	1.9	63
48	Smaller & Sooner: Exploiting High Magnetic Fields from New Superconductors for a More Attractive Fusion Energy Development Path. Journal of Fusion Energy, 2016, 35, 41-53.	1.2	63
49	The effects of field reversal on the Alcator C-Mod divertor. Plasma Physics and Controlled Fusion, 1995, 37, 1389-1406.	2.1	62
50	Effects of neutral particles on edge dynamics in Alcator C-Mod plasmas. Physics of Plasmas, 2000, 7, 1919-1926.	1.9	62
51	Comparison of particle transport in the scrape-off layer plasmas of Alcator C-Mod and DIII-D. Plasma Physics and Controlled Fusion, 2005, 47, 1559-1578.	2.1	62
52	Diagnostic Systems on Alcator C-Mod. Fusion Science and Technology, 2007, 51, 476-507.	1.1	62
53	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
54	The dependence of core rotation on magnetic configuration and the relation to the H-mode power threshold in Alcator C-Mod plasmas with no momentum input. Nuclear Fusion, 2005, 45, 251-257.	3.5	59

#	Article	IF	CITATIONS
55	Spontaneous core toroidal rotation in Alcator C-Mod L-mode, H-mode and ITB plasmas. Plasma Physics and Controlled Fusion, 2008, 50, 124042.	2.1	59
56	Improved understanding of physics processes in pedestal structure, leading to improved predictive capability for ITER. Nuclear Fusion, 2013, 53, 093024.	3.5	59
57	Erosion of graphite by high flux hydrogen plasma bombardment. Nuclear Fusion, 1988, 28, 1041-1052.	3.5	57
58	Comparison of theoretical models for scrape-off layer widths with data from COMPASS-D, JET and Alcator C-Mod. Nuclear Fusion, 1999, 39, 169-188.	3.5	57
59	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
60	Structure and properties of the electrostatic fluctuations in the far scrape-off layer region of Alcator C-Mod. Physics of Plasmas, 2001, 8, 3702-3707.	1.9	56
61	Neutral transport simulations of gas puff imaging experiments. Journal of Nuclear Materials, 2003, 313-316, 1066-1070.	2.7	56
62	Experimental studies of edge turbulence and confinement in Alcator C-Mod. Physics of Plasmas, 2010, 17, .	1.9	56
63	Conceptual design study for heat exhaust management in the ARC fusion pilot plant. Fusion Engineering and Design, 2018, 137, 221-242.	1.9	56
64	Ultrahigh Densities and Volume Recombination inside the Separatrix of the Alcator C-Mod Tokamak. Physical Review Letters, 1998, 81, 1007-1010.	7.8	54
65	Intermittent fluctuations in the Alcator C-Mod scrape-off layer. Physics of Plasmas, 2013, 20, 055901.	1.9	54
66	Transport and drift-driven plasma flow components in the Alcator C-Mod boundary plasma. Nuclear Fusion, 2013, 53, 023001.	3.5	54
67	Density measurements in the edge, divertor and Xâ€point regions of Alcator Câ€Mod from Balmer series emission. Physics of Plasmas, 1995, 2, 4246-4251.	1.9	52
68	Measurements of the high confinement mode pedestal region on Alcator C-Mod. Physics of Plasmas, 1998, 5, 1744-1751.	1.9	49
69	Theory-based scaling of the SOL width in circular limited tokamak plasmas. Nuclear Fusion, 2013, 53, 122001.	3.5	49
70	Janus, a bidirectional, multifunctional plasma diagnostic. Review of Scientific Instruments, 1986, 57, 1542-1551.	1.3	48
71	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
72	High fusion performance in Super H-mode experiments on Alcator C-Mod and DIII-D. Nuclear Fusion, 2019, 59, 086017.	3.5	48

5

Brian LaBombard

#	Article	IF	CITATIONS
73	Comparison of detached and radiative divertor operation in Alcator Câ€Mod. Physics of Plasmas, 1996, 3, 1908-1915.	1.9	45
74	High confinement dissipative divertor operation on Alcator C-Mod. Physics of Plasmas, 1999, 6, 1899-1906.	1.9	44
75	An interpretation of fluctuation induced transport derived from electrostatic probe measurements. Physics of Plasmas, 2002, 9, 1300-1311.	1.9	43
76	The role of particle sinks and sources in Alcator C-Mod detached divertor discharges. Physics of Plasmas, 1999, 6, 1907-1916.	1.9	42
77	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
78	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
79	Confinement and Transport Research in Alcator C-Mod. Fusion Science and Technology, 2007, 51, 266-287.	1.1	40
80	The dynamics and structure of edge-localized-modes in Alcator C-Mod. Journal of Nuclear Materials, 2007, 363-365, 994-999.	2.7	40
81	Power requirements for superior H-mode confinement on Alcator C-Mod: experiments in support of ITER. Nuclear Fusion, 2011, 51, 083007.	3.5	40
82	Divertor heat flux challenge and mitigation in SPARC. Journal of Plasma Physics, 2020, 86, .	2.1	40
83	Investigation of the origin of neutrals in the main chamber of Alcator C-Mod. Plasma Physics and Controlled Fusion, 2002, 44, 733-748.	2.1	39
84	High-confinement-mode edge stability of Alcator C-mod plasmas. Physics of Plasmas, 2003, 10, 1720-1726.	1.9	39
85	Mirror Langmuir probe: A technique for real-time measurement of magnetized plasma conditions using a single Langmuir electrode. Review of Scientific Instruments, 2007, 78, 073501.	1.3	39
86	Influence of boronization on operation with high-Z plasma facing components in Alcator C-Mod. Journal of Nuclear Materials, 2007, 363-365, 1110-1118.	2.7	39
87	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
88	Plasma profiles and flows in the high-field side scrape-off layer in Alcator C-Mod. Journal of Nuclear Materials, 2005, 337-339, 281-285.	2.7	38
89	Velocity fields of edge/Scrape-Off-Layer turbulence in Alcator C-Mod. Journal of Nuclear Materials, 2005, 337-339, 322-326.	2.7	38
90	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

#	Article	IF	CITATIONS
91	Divertor IR thermography on Alcator C-Mod. Review of Scientific Instruments, 2010, 81, 10E513.	1.3	37
92	Surface thermocouples for measurement of pulsed heat flux in the divertor of the Alcator C-Mod tokamak. Review of Scientific Instruments, 2012, 83, 033501.	1.3	37
93	H-Mode Pedestal and L-H Transition Studies on Alcator C-Mod. Fusion Science and Technology, 2007, 51, 317-341.	1.1	36
94	Multi-machine scaling of the main SOL parallel heat flux width in tokamak limiter plasmas. Plasma Physics and Controlled Fusion, 2016, 58, 074005.	2.1	36
95	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
96	Neutral particle dynamics in the Alcator C-Mod tokamak. Nuclear Fusion, 1997, 37, 151-163.	3.5	35
97	Impurity screening in Ohmic and high confinement (H-mode) plasmas in the Alcator C-Mod tokamak. Physics of Plasmas, 1997, 4, 1681-1689.	1.9	35
98	Modeling of particle and energy transport in the edge plasma of Alcator C-Mod. Physics of Plasmas, 1999, 6, 2791-2796.	1.9	35
99	Quasi-coherent fluctuations limiting the pedestal growth on Alcator C-Mod: experiment and modelling. Nuclear Fusion, 2015, 55, 053003.	3.5	35
100	Advances in measurement and modeling of the high-confinement-mode pedestal on the Alcator C-Mod tokamak. Physics of Plasmas, 2006, 13, 056103.	1.9	34
101	H-modes on Alcator C-Mod. Plasma Physics and Controlled Fusion, 1996, 38, 1127-1136.	2.1	32
102	Simple relations between scrape-off layer parameters of high recycling divertors Part I: The relation between `upstream' density and temperature. Nuclear Fusion, 2000, 40, 295-308.	3.5	32
103	Wall scanning probe for high-field side plasma measurements on Alcator C-Mod. Review of Scientific Instruments, 2009, 80, 023502.	1.3	29
104	Overview of the Alcator C-Mod Research Program. Nuclear Fusion, 2009, 49, 104014.	3.5	29
105	Blob sizes and velocities in the Alcator C-Mod scrape-off layer. Journal of Nuclear Materials, 2013, 438, S505-S508.	2.7	29
106	Burst statistics in Alcator C-Mod SOL turbulence. Journal of Nuclear Materials, 2013, 438, S180-S183.	2.7	29
107	Fluctuation statistics in the scrape-off layer of Alcator C-Mod. Plasma Physics and Controlled Fusion, 2016, 58, 054001.	2.1	29
108	Overview of the Alcator C-Mod program. Nuclear Fusion, 2005, 45, S109-S117.	3.5	28

#	Article	IF	CITATIONS
109	Progress towards steady-state regimes in Alcator C-Mod. Nuclear Fusion, 2013, 53, 113028.	3.5	28
110	Access to pedestal pressure relevant to burning plasmas on the high magnetic field tokamak Alcator C-Mod. Nuclear Fusion, 2018, 58, 112003.	3.5	28
111	Impurity generation during ICRF heating experiments on Alcator C. Nuclear Fusion, 1986, 26, 1665-1678.	3.5	27
112	Scaling of H-mode threshold power and L–H edge conditions with favourable ion grad-B drift in Alcator C-Mod tokamak. Nuclear Fusion, 2012, 52, 023010.	3.5	27
113	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
114	Scaling of L-mode heat flux for ITER and COMPASS-U divertors, based on five tokamaks. Nuclear Fusion, 2020, 60, 066016.	3.5	26
115	The effect of divertor baffling on Alcator C-Mod discharges. Physics of Plasmas, 2000, 7, 1894-1903.	1.9	25
116	Feedback system for divertor impurity seeding based on real-time measurements of surface heat flux in the Alcator C-Mod tokamak. Review of Scientific Instruments, 2016, 87, 023504.	1.3	24
117	An assessment of ion temperature measurements in the boundary of the Alcator C-Mod tokamak and implications for ion fluid heat flux limiters. Plasma Physics and Controlled Fusion, 2013, 55, 095010.	2.1	23
118	Electron heating via mode converted ion Bernstein waves in the Alcator C-Mod tokamak. Physics of Plasmas, 1997, 4, 1774-1782.	1.9	22
119	Theory and fluid simulations of boundary-plasma fluctuations. Nuclear Fusion, 2007, 47, 612-625.	3.5	22
120	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
121	Mode conversion electron heating in Alcator C-Mod: Theory and experiment. Physics of Plasmas, 2000, 7, 1886-1893.	1.9	21
122	Scanning retarding field analyzer for plasma profile measurements in the boundary of the Alcator C-Mod tokamak. Review of Scientific Instruments, 2013, 84, 033502.	1.3	21
123	Transport experiments in Alcator â€Mod. Physics of Plasmas, 1995, 2, 2308-2313.	1.9	20
124	Edge transport barrier phenomena in Alcator C-Mod. Plasma Physics and Controlled Fusion, 1999, 41, A609-A616.	2.1	20
125	An omegatron mass spectrometer for plasma ion species analysis. Review of Scientific Instruments, 1990, 61, 2155-2158.	1.3	19
126	Alcator C-Mod Design, Engineering, and Disruption Research. Fusion Science and Technology, 2007, 51, 460-475.	1.1	19

#	Article	IF	CITATIONS
127	SOLPS-ITER Modeling of the Alcator C-Mod Divertor Plasma. Plasma and Fusion Research, 2016, 11, 1403103-1403103.	0.7	19
128	SOLPS-ITER Study of neutral leakage and drift effects on the alcator C-Mod divertor plasma. Nuclear Materials and Energy, 2017, 12, 899-907.	1.3	19
129	The Rydberg series of helium-like Cl, Ar and S and their high-nsatellites in tokamak plasmas. New Journal of Physics, 1999, 1, 19-19.	2.9	18
130	High resolution measurements of neutral density and ionization rate in the Alcator C-Mod tokamak. Review of Scientific Instruments, 2001, 72, 961-964.	1.3	18
131	Measurements of ion and neutral atom flows and temperatures in the inner and outer midplane scrape-off layers of the Alcator C-Mod Tokamak. Physics of Plasmas, 2004, 11, 1033-1042.	1.9	18
132	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
133	Radial localization of edge modes in Alcator C-Mod pedestals using optical diagnostics. Plasma Physics and Controlled Fusion, 2017, 59, 025016.	2.1	18
134	High field side lower hybrid wave launch for steady state plasma sustainment. Nuclear Fusion, 2018, 58, 126032.	3.5	18
135	Characteristics of high onfinement modes in Alcator C Mod. Physics of Plasmas, 1996, 3, 1992-1998.	1.9	17
136	Omegatron ion mass spectrometer for the Alcator C-mod tokamak. Review of Scientific Instruments, 2000, 71, 4107.	1.3	17
137	Influence of high magnetic field on access to stationary H-modes and pedestal characteristics in Alcator C-Mod. Nuclear Fusion, 2018, 58, 046004.	3.5	17
138	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
139	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
140	First results of the SOL reflectometer on Alcator C-Mod. Review of Scientific Instruments, 2012, 83, 10E309.	1.3	16
141	Attainment of a stable, fully detached plasma state in innovative divertor configurations. Physics of Plasmas, 2017, 24, .	1.9	16
142	Surface heat flux feedback controlled impurity seeding experiments with Alcator C-Mod's high- <i>Z</i> vertical target plate divertor: performance, limitations and implications for fusion power reactors. Nuclear Fusion, 2017, 57, 086030.	3.5	16
143	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
144	Plasma fluctuations in the scrape-off layer and at the divertor target in Alcator C-Mod and their relationship to divertor collisionality and density shoulder formation. Nuclear Materials and Energy, 2019, 19, 295-299.	1.3	16

#	Article	IF	CITATIONS
145	Implementation of a 9-point stencil in SOLPS-ITER and implications for Alcator C-Mod divertor plasma simulations. Nuclear Materials and Energy, 2019, 18, 125-130.	1.3	16
146	DENSEPACK: An array of Langmuir probes in the limiter shadow plasma of the Alcator C tokamak fusion experiment. Review of Scientific Instruments, 1986, 57, 2415-2424.	1.3	15
147	First ohmic H modes in ALCATOR C-MOD. Nuclear Fusion, 1994, 34, 1039-1044.	3.5	15
148	A compact Thomson scattering system. Review of Scientific Instruments, 1997, 68, 700-703.	1.3	15
149	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
150	ICRF loading studies on Alcator C-Mod. Plasma Physics and Controlled Fusion, 2004, 46, 1781-1792.	2.1	15
151	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
152	Performance assessment of long-legged tightly-baffled divertor geometries in the ARC reactor concept. Nuclear Fusion, 2019, 59, 106052.	3.5	15
153	Impurity plume experiments in the edge plasma of the Alcator C-Mod tokamak. Plasma Physics and Controlled Fusion, 2004, 46, 1617-1646.	2.1	14
154	Divertor heat flux footprints in EDA H-mode discharges on Alcator C-Mod. Journal of Nuclear Materials, 2011, 415, S349-S352.	2.7	14
155	EMC3-EIRENE modeling of toroidally-localized divertor gas injection experiments on Alcator C-Mod. Journal of Nuclear Materials, 2015, 463, 515-518.	2.7	14
156	Alcator C-Mod: research in support of ITER and steps beyond. Nuclear Fusion, 2015, 55, 104020.	3.5	14
157	Lower hybrid wave edge power loss quantification on the Alcator C-Mod tokamak. Physics of Plasmas, 2016, 23, 056115.	1.9	14
158	Fast imaging of filaments in the X-point region of Alcator C-Mod. Nuclear Materials and Energy, 2017, 12, 989-993.	1.3	14
159	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
160	Radiative heat exhaust in Alcator C-Mod I-mode plasmas. Nuclear Fusion, 2019, 59, 046018.	3.5	14
161	An electrostatic barrier scrape-off layer for control of core plasma effluxes in tokamaks. Plasma Physics and Controlled Fusion, 1990, 32, 483-497.	2.1	13
162	Simple relations between scrape-off layer parameters of high recycling divertors Part II: Further relations. Nuclear Fusion, 2000, 40, 309-317.	3.5	13

#	Article	IF	CITATIONS
163	Overview of recent Alcator C-Mod results. Nuclear Fusion, 2001, 41, 1391-1400.	3.5	13
164	Imaging of molybdenum erosion and thermography at visible wavelengths in Alcator C-Mod ICRH and LHCD discharges. Plasma Physics and Controlled Fusion, 2013, 55, 125010.	2.1	13
165	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
166	Overview of experimental results and code validation activities at Alcator C-Mod. Nuclear Fusion, 2013, 53, 104004.	3.5	13
167	Large transport-induced operation limits of tokamak plasmas. Physics of Plasmas, 2007, 14, 020701.	1.9	12
168	Interpretation and implementation of an ion sensitive probe as a plasma potential diagnostic. Review of Scientific Instruments, 2010, 81, 10E111.	1.3	12
169	Investigation of RF-enhanced plasma potentials on Alcator C-Mod. Journal of Nuclear Materials, 2013, 438, S875-S878.	2.7	12
170	Three-dimensional simulation of H-mode plasmas with localized divertor impurity injection on	1.9	12
171	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
172	The flush-mounted rail Langmuir probe array designed for the Alcator C-Mod vertical target plate divertor. Review of Scientific Instruments, 2018, 89, 043512.	1.3	12
173	Universality of Poisson-driven plasma fluctuations in the Alcator C-Mod scrape-off layer. Physics of Plasmas, 2018, 25, 122309.	1.9	12
174	Impurity generation during intense lower hybrid heating experiments on the Alcator C tokamak. Journal of Nuclear Materials, 1984, 121, 69-74.	2.7	11
175	Use of an electrostatic barrier scrape-off layer as a technique to reduce impurity sources from bulk plasma bombardment of radiofrequency antenna structures. Nuclear Fusion, 1990, 30, 485-497.	3.5	11
176	Divertor bypass in the Alcator C-Mod tokamak. Review of Scientific Instruments, 2001, 72, 103-107.	1.3	11
177	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
178	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
179	Impurity sources during lower hybrid heating on Alcator. Nuclear Fusion, 1986, 26, 1463-1474.	3.5	10
180	Determination of Hα emissivities from line integrated brightness measurements on Alcator Câ€Mod. Review of Scientific Instruments, 1995, 66, 619-621.	1.3	10

#	Article	IF	CITATIONS
181	Estimate of convective radial transport due to SOL turbulence as measured by GPI in Alcator C-Mod. Journal of Nuclear Materials, 2011, 415, S463-S466.	2.7	10
182	Space-charge limits of ion sensitive probes. Plasma Physics and Controlled Fusion, 2013, 55, 125004.	2.1	10
183	Scanning ion sensitive probe for plasma profile measurements in the boundary of the Alcator C-Mod tokamak. Review of Scientific Instruments, 2013, 84, 053507.	1.3	10
184	Recent sheath physics studies on DIII-D. Journal of Nuclear Materials, 2015, 463, 436-439.	2.7	10
185	High-field side scrape-off layer investigation: Plasma profiles and impurity screening behavior in near-double-null configurations. Nuclear Materials and Energy, 2017, 12, 139-147.	1.3	10
186	Linear servomotor probe drive system with real-time self-adaptive position control for the Alcator C-Mod tokamak. Review of Scientific Instruments, 2017, 88, 073501.	1.3	10
187	Effect of boronization on plasma-facing graphite surfaces and its correlation with the plasma behavior in NSTX-U. Nuclear Materials and Energy, 2018, 17, 211-216.	1.3	10
188	Study of passively stable, fully detached divertor plasma regimes attained in innovative long-legged divertor configurations. Nuclear Fusion, 2020, 60, 016004.	3.5	10
189	Measurements of neutral density based on emissivity in the Alcator C-Mod divertor. Plasma Physics and Controlled Fusion, 1997, 39, 963-972.	2.1	9
190	Interpretation of the DÂemission from the high field side of Alcator C-Mod. Plasma Physics and Controlled Fusion, 2004, 46, 1247-1257.	2.1	9
191	Overview of the Alcator C-MOD research programme. Nuclear Fusion, 2007, 47, S598-S607.	3.5	9
192	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
193	Kinetic modeling of divertor heat load fluxes in the Alcator C-Mod and DIII-D tokamaks. Physics of Plasmas, 2015, 22, .	1.9	9
194	Confinement and divertor studies in Alcator C-Mod. Plasma Physics and Controlled Fusion, 1994, 36, B143-B152.	2.1	8
195	Measurements and scalings of the H-mode pedestal on Alcator C-Mod. Plasma Physics and Controlled Fusion, 2000, 42, A255-A262.	2.1	8
196	Helium-3 transport experiments in the scrape-off layer with the Alcator C-Mod omegatron ion mass spectrometer. Physics of Plasmas, 2000, 7, 4573-4578.	1.9	8
197	The effect of baffling on divertor leakage in Alcator C-Mod. Journal of Nuclear Materials, 2001, 290-293, 812-819.	2.7	8
198	Study and optimization of boronization in Alcator C-Mod using the Surface Science Station (S3). Fusion Engineering and Design, 2012, 87, 1700-1707.	1.9	8

#	Article	IF	CITATIONS
199	Modeling of Local Edge Plasma Perturbations Induced by a Biased Probe. Contributions To Plasma Physics, 2012, 52, 417-423.	1.1	8
200	Divertor â€~death-ray' explained: An artifact of a Langmuir probe operating at negative bias in a high-recycling divertor. Journal of Nuclear Materials, 2013, 438, S1196-S1199.	2.7	8
201	High-resolution disruption halo current measurements using Langmuir probes in Alcator C-Mod. Nuclear Fusion, 2018, 58, 016005.	3.5	8
202	Cross-code comparison of the edge codes SOLPS-ITER, SOLEDGE2D and UEDGE in modelling a low-power scenario in the DTT. Nuclear Fusion, 2022, 62, 056009.	3.5	8
203	The relation between impurity neutral and impurity ion compression in the Alcator C-Mod divertor. Nuclear Fusion, 2001, 41, 1751-1754.	3.5	7
204	Overview of recent Alcator C-Mod research. Nuclear Fusion, 2003, 43, 1610-1618.	3.5	7
205	Dimensionless pedestal identity plasmas on Alcator C-Mod and JET. Nuclear Fusion, 2009, 49, 125004.	3.5	7
206	Improved confinement in high-density H-modes via modification of the plasma boundary with lower	1.9	7
207	Design and operation of a high-heat flux, flush-mounted â€~rail' Langmuir probe array on Alcator C-Mod. Nuclear Materials and Energy, 2017, 12, 1231-1235.	1.3	7
208	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
209	Interpretation and implementation of an ion sensitive probe as a plasma potential diagnostic on Alcator C-Mod. Journal of Nuclear Materials, 2011, 415, S1143-S1146.	2.7	6
210	Constraining the divertor heat width in ITER. Journal of Nuclear Materials, 2013, 438, S435-S439.	2.7	6
211	Cross machine investigation of magnetic tokamak dust: Morphological and elemental analysis. Fusion Engineering and Design, 2021, 166, 112315.	1.9	6
212	Simulation of the SPARC plasma boundary with the UEDGE code. Nuclear Fusion, 2021, 61, 086014.	3.5	6
213	Cross machine investigation of magnetic tokamak dust; structural and magnetic analysis. Nuclear Materials and Energy, 2021, 28, 101045.	1.3	6
214	Magnetic topology effects on Alcator C-Mod scrape-off layer flow. Plasma Physics and Controlled Fusion, 2008, 50, 105010.	2.1	5
215	Wide-frequency range, dynamic matching network and power system for the "Shoelace―radio frequency antenna on the Alcator C-Mod tokamak. Review of Scientific Instruments, 2014, 85, 043510.	1.3	5
216	UEDGE modelling of detached divertor operation for longâ€leg divertor geometries in ARC. Contributions To Plasma Physics, 2018, 58, 791-797.	1.1	5

#	Article	IF	CITATIONS
217	An experimental assessment of methods used to compute secondary electron emission yield for tungsten and molybdenum electrodes based on exposure to Alcator C-Mod scrape-off layer plasmas. Plasma Physics and Controlled Fusion, 2018, 60, 035011.	2.1	5
218	The digital mirror Langmuir probe: Field programmable gate array implementation of real-time Langmuir probe biasing. Review of Scientific Instruments, 2019, 90, 083504.	1.3	5
219	Role of the edge and scrape-off layer plasma in lower hybrid current drive experiment on Alcator C-Mod. AIP Conference Proceedings, 2020, , .	0.4	5
220	MHD effects on liquid metal film flow. Nuclear Engineering and Design, 1994, 146, 325-335.	1.7	4
221	In situ neutral pressure measurements in a compact highâ€field tokamak, Alcator Câ€Mod. Review of Scientific Instruments, 1995, 66, 360-362.	1.3	4
222	Deep modeling of plasma and neutral fluctuations from gas puff turbulence imaging. Review of Scientific Instruments, 2022, 93, 063504.	1.3	4
223	Impact of perturbative, non-axisymmetric impurity fueling on Alcator C-Mod H-modes. Plasma Physics and Controlled Fusion, 2017, 59, 122002.	2.1	3
224	Outlier classification using autoencoders: Application for fluctuation driven flows in fusion plasmas. Review of Scientific Instruments, 2019, 90, 013505.	1.3	3
225	Impurity transport studies in tokamak edge plasmas using visible imaging. IEEE Transactions on Plasma Science, 2002, 30, 76-77.	1.3	2
226	The operational phase-space of the edge plasma and its sensitivity to magnetic topology in Alcator C-Mod. Journal of Nuclear Materials, 2007, 363-365, 517-521.	2.7	2
227	An optical timing verification system for Alcator C-Mod. Fusion Engineering and Design, 2010, 85, 367-369.	1.9	2
228	Taming the Heat Flux Problem: Advanced Divertors Towards Fusion Power. Journal of Fusion Energy, 2016, 35, 27-30.	1.2	2
229	Structural Analysis of High-Field-Side RF Antennas During a Disruption on the Advanced Divertor eXperiment (ADX). IEEE Transactions on Plasma Science, 2016, 44, 2470-2475.	1.3	2
230	Edge transport and mode structure of a QCM-like fluctuation driven by the Shoelace antenna. Nuclear Fusion, 2018, 58, 056018.	3.5	2
231	First application of a digital mirror Langmuir probe for real-time plasma diagnosis. Review of Scientific Instruments, 2021, 92, 103502.	1.3	2
232	Floating Potentials in the Vicinity of Biased Flush-Mounted Probes. Contributions To Plasma Physics, 2001, 41, 504-509.	1.1	1
233	ICRF-edge plasma interaction studies at MIT. Fusion Engineering and Design, 1990, 12, 273-278.	1.9	0
234	Dependence of the boundary heat flux width on core and edge profiles in Alcator C-Mod. Nuclear Fusion, 0, , .	3.5	0