

# Matthew C Thompson

## List of Publications by Year in descending order

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52  
papers

1,091  
citations

516710

16  
h-index

395702

33  
g-index

52  
all docs

52  
docs citations

52  
times ranked

761  
citing authors

#	ARTICLE	IF	CITATIONS
1	Presentation Countsâ€”Just Ask Galileo. Physics Magazine, 2020, 13, .	0.1	0
2	Formation of hot, stable, long-lived field-reversed configuration plasmas on the C-2W device. Nuclear Fusion, 2019, 59, 112009.	3.5	53
3	Direct observation of ion acceleration from a beam-driven wave in a magnetic fusion experiment. Nature Physics, 2019, 15, 281-286.	16.7	21
4	Characterization and calibration of the Thomson scattering diagnostic suite for the C-2W field-reversed configuration experiment. Review of Scientific Instruments, 2018, 89, 10C120.	1.3	9
5	Integrated diagnostic and data analysis system of the C-2W advanced beam-driven field-reversed configuration plasma experiment. Review of Scientific Instruments, 2018, 89, 10K114.	1.3	11
6	Development of a Zeff diagnostic using visible and near-infrared bremsstrahlung light for the C-2W field-reversed configuration plasma. Review of Scientific Instruments, 2018, 89, 10D130.	1.3	8
7	Jet outflow and open field line measurements on the C-2W advanced beam-driven field-reversed configuration plasma experiment. Review of Scientific Instruments, 2018, 89, 10D120.	1.3	3
8	Development of a three-wave far-infrared laser interferometry and polarimetry diagnostic system for the C-2W field-reversed configuration plasmas. Review of Scientific Instruments, 2018, 89, 10B109.	1.3	13
9	Thomson scattering systems on C-2W field-reversed configuration plasma experiment. Review of Scientific Instruments, 2018, 89, 10C118.	1.3	14
10	Combination Doppler backscattering/cross-polarization scattering diagnostic for the C-2W field-reversed configuration. Review of Scientific Instruments, 2018, 89, 10H116.	1.3	3
11	Magnetic diagnostic suite of the C-2W field-reversed configuration experiment. Review of Scientific Instruments, 2018, 89, 10J107.	1.3	10
12	Calibration and applications of visible imaging cameras on the C-2U advanced beam-driven field-reversed configuration device. Review of Scientific Instruments, 2018, 89, 10E103.	1.3	4
13	Particle and heat flux diagnostics on the C-2W divertor electrodes. Review of Scientific Instruments, 2018, 89, 10J110.	1.3	7
14	Design of a custom insertable probe platform for measurements of C-2W inner divertor plasma parameters. Review of Scientific Instruments, 2018, 89, 10J115.	1.3	3
15	End loss analyzer system for measurements of plasma flux at the C-2U divertor electrode. Review of Scientific Instruments, 2016, 87, 11D428.	1.3	2
16	Recent breakthroughs on C-2U: Normanâ€™s legacy. AIP Conference Proceedings, 2016, , .	0.4	46
17	Transport studies in high-performance field reversed configuration plasmas. Physics of Plasmas, 2016, 23, 052307.	1.9	9
18	Enhanced magnetic field probe array for improved excluded flux calculations on the C-2U advanced beam-driven field-reversed configuration plasma experiment. Review of Scientific Instruments, 2016, 87, 11D409.	1.3	10

#	ARTICLE	IF	CITATIONS
19	The upgrade of the Thomson scattering system for measurement on the C-2/C-2U devices. Review of Scientific Instruments, 2016, 87, 11D602.	1.3	7
20	Diagnostic suite of the C-2U advanced beam-driven field-reversed configuration plasma experiment. Review of Scientific Instruments, 2016, 87, 11D435.	1.3	11
21	High sensitivity far infrared laser diagnostics for the C-2U advanced beam-driven field-reversed configuration plasmas. Review of Scientific Instruments, 2016, 87, 11E125.	1.3	11
22	Jet outflow and open field line measurements on the C-2U advanced beam-driven field-reversed configuration plasma experiment. Review of Scientific Instruments, 2016, 87, 11D432.	1.3	3
23	Improved Confinement of C-2 Field-Reversed Configuration Plasmas. Fusion Science and Technology, 2015, 68, 44-49.	1.1	7
24		1.9	112
25	Overview of C-2 field-reversed configuration experiment plasma diagnostics. Review of Scientific Instruments, 2014, 85, 11D836.	1.3	8
26	A High Performance Field-Reversed Configuration Regime in the C-2 Device. Fusion Science and Technology, 2013, 63, 139-142.	1.1	3
27	Measurements of neutral density profiles using a deuterium Balmer-alpha diagnostic in the C-2 FRC plasma. Review of Scientific Instruments, 2012, 83, 10D534.	1.3	4
28	A new high performance field reversed configuration operating regime in the C-2 device. Physics of Plasmas, 2012, 19, .	1.9	42
29	Field Reversed Configuration Confinement Enhancement through Edge Biasing and Neutral Beam Injection. Physical Review Letters, 2012, 108, 255008.	7.8	61
30	Magnetic diagnostic suite of the C-2 field-reversed configuration experiment confinement vessel. Review of Scientific Instruments, 2012, 83, 10D709.	1.3	13
31	Internal magnetic field measurement on C-2 field-reversed configuration plasmas. Review of Scientific Instruments, 2012, 83, 10D706.	1.3	17
32	Formation of a long-lived hot field reversed configuration by dynamically merging two colliding high- $I^2$ compact toroids. Physics of Plasmas, 2011, 18, .	1.9	56
33	Combined FRC and Mirror Plasma Studies in the C-2 Device. Fusion Science and Technology, 2011, 59, 23-26.	1.1	1
34	Observations of low-aberration plasma lens focusing of relativistic electron beams at the underdense threshold. Physics of Plasmas, 2010, 17, 073105.	1.9	13
35	Dynamic Formation of a Hot Field Reversed Configuration with Improved Confinement by Supersonic Merging of Two Colliding High- $I^2$ Compact Toroids. Physical Review Letters, 2010, 105, 045003.	7.8	103
36	Breakdown Limits on Gigavolt-per-Meter Electron-Beam-Driven Wakefields in Dielectric Structures. Physical Review Letters, 2008, 100, 214801.	7.8	123

#	ARTICLE	IF	CITATIONS
37	RESULTS FROM THE UCLA/FNPL UNDERDENSE PLASMA LENS EXPERIMENT. International Journal of Modern Physics A, 2007, 22, 3979-3987.	1.5	1
38	Dielectric Wakefield Accelerating Structure as a Source of Terahertz Coherent Cerenkov Radiation. AIP Conference Proceedings, 2006, , .	0.4	2
39	UCLA/FNPL Underdense Plasma Lens Experiment: Results and Analysis. AIP Conference Proceedings, 2006, , .	0.4	2
40	Ultra-High Gradient Dielectric Wakefield Accelerator Experiments. AIP Conference Proceedings, 2006, , .	0.4	8
41	Creation of plasma density transitions short compared to the plasma skin depth. Review of Scientific Instruments, 2005, 76, 013303.	1.3	4
42	Effects of Ion Motion in Intense Beam-Driven Plasma Wakefield Accelerators. Physical Review Letters, 2005, 95, 195002.	7.8	79
43	Velocity bunching of high-brightness electron beams. Physical Review Special Topics: Accelerators and Beams, 2005, 8, .	1.8	65
44	Status of the UCLA/NICADD Plasma Density Transition Trapping Experiment. AIP Conference Proceedings, 2004, , .	0.4	0
45	Energy loss of a high-charge bunched electron beam in plasma: Analysis. Physical Review Special Topics: Accelerators and Beams, 2004, 7, .	1.8	30
46	Plasma density transition trapping as a possible high-brightness electron beam source. Physical Review Special Topics: Accelerators and Beams, 2004, 7, .	1.8	30
47	Energy loss of a high charge bunched electron beam in plasma: Simulations, scaling, and accelerating wakefields. Physical Review Special Topics: Accelerators and Beams, 2004, 7, .	1.8	26
48	Horizontal Phase-Space Distortions Arising from Magnetic Pulse Compression of an Intense, Relativistic Electron Beam. Physical Review Letters, 2003, 91, 074803.	7.8	17
49	Longitudinal Beam Shaping and Compression Scheme for the UCLA Neptune Laboratory. AIP Conference Proceedings, 2002, , .	0.4	1
50	Plasma Density Transition Trapping as a Possible High-Brightness Electron Beam Source. AIP Conference Proceedings, 2002, , .	0.4	1
51	Production and synchronization of electron beams from RF photoinjector/compressor systems for ultra-fast applications. AIP Conference Proceedings, 2001, , .	0.4	0
52	Commissioning and measurements of the Neptune photo-injector. AIP Conference Proceedings, 2001, , .	0.4	4