Brendan Dromey

List of Publications by Year
in descending order

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79 papers	3,800 citations	147801 31 h-index	123424 61 g-index
80 all docs	80 docs citations	80 times ranked	2207 citing authors

#	Article	IF	Citations
1	High harmonic generation in the relativistic limit. Nature Physics, 2006, 2, 456-459.	16.7	418
2	Bright Multi-keV Harmonic Generation from Relativistically Oscillating Plasma Surfaces. Physical Review Letters, 2007, 99, 085001.	7.8	201
3	The plasma mirrorâ€”A subpicosecond optical switch for ultrahigh power lasers. Review of Scientific Instruments, 2004, 75, 645-649.	1.3	200
4	Attosecond phase locking of harmonics emitted from laser-produced plasmas. Nature Physics, 2009, 5, 124-128.	16.7	179
5	Ion Acceleration Using Relativistic Pulse Shaping in Near-Critical-Density Plasmas. Physical Review Letters, 2015, 115, 064801.	7.8	168
6	Dynamics of relativistic transparency and optical shuttering in expanding overdense plasmas. Nature Physics, 2012, 8, 763-769.	16.7	155
7	Table-Top Laser-Based Source of Femtosecond, Collimated, Ultrarelativistic Positron Beams. Physical Review Letters, 2013, 110, 255002.	7.8	149
8	Diffraction-limited performance and focusing of high harmonics from relativistic plasmas. Nature Physics, 2009, 5, 146-152.	16.7	146
9	Coherent synchrotron emission from electron nanobunches formed in relativistic laserâ€“plasma interactions. Nature Physics, 2012, 8, 804-808.	16.7	132
10	Direct Observation of Density-Gradient Effects in Harmonic Generation from Plasma Mirrors. Physical Review Letters, 2013, 110, 175001.	7.8	120
11	Radiation-Pressure Acceleration of Ion Beams from Nanofoil Targets: The Leaky Light-Sail Regime. Physical Review Letters, 2010, 105, 155002.	7.8	111
12	Bright Quasi-Phase-Matched Soft-X-Ray Harmonic Radiation from Argon Ions. Physical Review Letters, 2007, 99, 143901.	7.8	109
13	Harmonic Generation from Relativistic Plasma Surfaces in Ultrasteep Plasma Density Gradients. Physical Review Letters, 2012, 109, 125002.	7.8	99
14	Dynamic Control of Laser-Produced Proton Beams. Physical Review Letters, 2008, 100, 105004.	7.8	80
15	Picosecond metrology of laser-driven proton bursts. Nature Communications, 2016, 7, 10642.	12.8	80
16	Relativistic electron mirrors from nanoscale foils for coherent frequency upshift to the extreme ultraviolet. Nature Communications, 2013, 4, 1763.	12.8	75
17	Coherent Control of High Harmonic Generation via Dual-Gas Multijet Arrays. Physical Review Letters, 2011, 107, 175002.	7.8	73
18	Generation of a train of ultrashort pulses from a compact birefringent crystal array. Applied Optics, 2007, 46, 5142.	2.1	67

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19	Soft-X-Ray Harmonic Comb from Relativistic Electron Spikes. Physical Review Letters, 2012, 108, 135004.	7.8	66
20	Efficient carbon ion beam generation from laser-driven volume acceleration. New Journal of Physics, 2013, 15, 023007.	2.9	66
21	Laser-driven 1â€‰GeV carbon ions from preheated diamond targets in the break-out afterburner regime. Physics of Plasmas, 2013, 20, 083103.	1.9	65
22	Experimental demonstration of particle energy, conversion efficiency and spectral shape required for ion-based fast ignition. Nuclear Fusion, 2011, 51, 083011.	3.5	57
23	Dependence of Laser-Driven Coherent Synchrotron Emission Efficiency on Pulse Ellipticity and Implications for Polarization Gating. Physical Review Letters, 2014, 112, 123902.	7.8	45
24	Experimental observation of attosecond control over relativistic electron bunches with two-colour fields. Nature Photonics, 2017, 11, 32-35.	31.4	44
25	Beam profiles of proton and carbon ions in the relativistic transparency regime. New Journal of Physics, 2013, 15, 123035.	2.9	43
26	High contrast plasma mirror: spatial filtering and second harmonic generation at 10¹⁹Wâ€‰cm^{â^’2}. New Journal of Physics, 2008, 10, 083002.	2.9	38
27	Noncollinear Polarization Gating of Attosecond Pulse Trains in the Relativistic Regime. Physical Review Letters, 2015, 115, 193903.	7.8	34
28	Diagnostic of laser contrast using target reflectivity. Applied Physics Letters, 2009, 94, .	3.3	33
29	Laser-driven generation of collimated ultra-relativistic positron beams. Plasma Physics and Controlled Fusion, 2013, 55, 124017.	2.1	33
30	Temporal Structure of Attosecond Pulses from Laser-Driven Coherent Synchrotron Emission. Physical Review Letters, 2016, 116, 083901.	7.8	32
31	The TARANIS laser: A multi-Terawatt system for laser-plasma investigations. Laser and Particle Beams, 2010, 28, 451-461.	1.0	31
32	Measurements of high-energy radiation generation from laser-wakefield accelerated electron beams. Physics of Plasmas, 2014, 21, .	1.9	31
33	Quasi-phasematching of harmonic generation via multimode beating in waveguides. Optics Express, 2007, 15, 7894.	3.4	29
34	Tunable Enhancement of High Harmonic Emission from Laser Solid Interactions. Physical Review Letters, 2009, 102, 225002.	7.8	29
35	Dependence of laser accelerated protons on laser energy following the interaction of defocused, intense laser pulses with ultra-thin targets. Laser and Particle Beams, 2011, 29, 345-351.	1.0	29
36	Coherent synchrotron emission in transmission from ultrathin relativistic laser plasmas. New Journal of Physics, 2013, 15, 015025.	2.9	29

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37	Relativistic plasma surfaces as an efficient second harmonic generator. New Journal of Physics, 2011, 13, 023041.	2.9	27
38	Conditions for efficient and stable ion acceleration by moderate circularly polarized laser pulses at intensities of 1020W/cm2. Physics of Plasmas, 2011, 18, 043102.	1.9	27
39	Nuclear activation as a high dynamic range diagnostic of laserâ€“plasma interactions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 585, 117-120.	1.6	26
40	High order harmonics from relativistic electron spikes. New Journal of Physics, 2014, 16, 093003.	2.9	26
41	Temporal characterization of attosecond pulses emitted from solid-density plasmas. New Journal of Physics, 2010, 12, 043020.	2.9	25
42	Older adults, falls and technologies for independent living: a life space approach. Ageing and Society, 2011, 31, 829-848.	1.7	24
43	Bright Subcycle Extreme Ultraviolet Bursts from a Single Dense Relativistic Electron Sheet. Physical Review Letters, 2014, 113, 235002.	7.8	22
44	Beaming of High-Order Harmonics Generated from Laser-Plasma Interactions. Physical Review Letters, 2013, 110, 165002.	7.8	21
45	Enhanced proton flux in the MeV range by defocused laser irradiation. New Journal of Physics, 2010, 12, 085012.	2.9	20
46	Generation of 10Î¼W relativistic surface high-harmonic radiation at a repetition rate of 10 Hz. New Journal of Physics, 2012, 14, 065005.	2.9	20
47	Third harmonic order imaging as a focal spot diagnostic for high intensity laser-solid interactions. Laser and Particle Beams, 2009, 27, 243-248.	1.0	19
48	Observation of ion temperatures exceeding background electron temperatures in petawatt laser-solid experiments. Plasma Physics and Controlled Fusion, 2005, 47, L49-L56.	2.1	17
49	Coherent x-ray production via pulse reflection from laser-driven dense electron sheets. New Journal of Physics, 2009, 11, 103042.	2.9	16
50	Experimental measurements of the collisional absorption of XUV radiation in warm dense aluminium. Physical Review E, 2016, 94, 023203.	2.1	16
51	Controlling the divergence of high harmonics from solid targets: a route toward coherent harmonic focusing. European Physical Journal D, 2009, 55, 475-481.	1.3	15
52	Scaling of ion energies in the relativistic-induced transparency regime. Laser and Particle Beams, 2015, 33, 695-703.	1.0	15
53	Efficient control of quantum paths via dual-gas high harmonic generation. New Journal of Physics, 2011, 13, 113001.	2.9	14
54	Simple technique for generating trains of ultrashort pulses. Optics Letters, 2007, 32, 2203.	3.3	13

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55	Spectral modification of laser-accelerated proton beams by self-generated magnetic fields. New Journal of Physics, 2009, 11, 083018.	2.9	13
56	Micron-scale fast electron filaments and recirculation determined from rear-side optical emission in high-intensity laserâ€“solid interactions. New Journal of Physics, 2010, 12, 073016.	2.9	13
57	Near-monochromatic high-harmonic radiation from relativistic laserâ€“plasma interactions with blazed grating surfaces. New Journal of Physics, 2013, 15, 025042.	2.9	13
58	Fast-electron refluxing effects on anisotropic hard-x-ray emission from intense laser-plasma interactions. Physical Review E, 2015, 91, 033107.	2.1	13
59	Fast electron propagation in Ti foils irradiated with sub-picosecond laser pulses at Iλ2>1018â€‰Wcmâ^'2λ¼m2. Physics of Plasmas, 2014, 21, 023113.	1.9	12
60	Experimental investigation of picosecond dynamics following interactions between laser accelerated protons and water. Applied Physics Letters, 2017, 110, 104102.	3.3	12
61	High harmonics from relativistically oscillating plasma surfacesâ€”a high brightness attosecond source at keV photon energies. Plasma Physics and Controlled Fusion, 2007, 49, B149-B162.	2.1	11
62	Comparison of parallel and perpendicular polarized counterpropagating light for suppressing high harmonic generation. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 2421.	2.1	11
63	Plasma surface dynamics and smoothing in the relativistic few-cycle regime. New Journal of Physics, 2011, 13, 023008.	2.9	11
64	First observation of SASE radiation using the compact wide-spectral-range XUV spectrometer at FLASH2. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 830, 170-175.	1.6	8
65	Fear of Falling and Older Adult Peer Production of Audio-Visual Discussion Material. Educational Gerontology, 2010, 36, 781-797.	1.3	4
66	On the analysis of inhomogeneous magnetic field spectrometer for laser-driven ion acceleration. Review of Scientific Instruments, 2015, 86, 033303.	1.3	4
67	Diagnostics for studies of novel laser ion acceleration mechanisms. Review of Scientific Instruments, 2014, 85, 113302.	1.3	3
68	Broadband XUV polarimetry of high harmonics from plasma surfaces using multiple Fresnel reflections. Applied Physics B: Lasers and Optics, 2015, 118, 241-245.	2.2	3
69	Strong coupling of light goes nuclear. Nature Photonics, 2016, 10, 436-438.	31.4	3
70	Real-Time Electron Solvation Induced by Bursts of Laser-Accelerated Protons in Liquid Water. Physical Review Letters, 2021, 127, 186001.	7.8	3
71	A table-top laser-based source of short, collimated, ultra-relativistic positron beams. Proceedings of SPIE, 2013, , .	0.8	2
72	The TARANIS laser : A multi-terawatt system for laser plasma physics. Journal of Physics: Conference Series, 2012, 388, 152036.	0.4	1

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73	Relativistic high harmonic generation in gas jet targets. , 2012, , .		1
74	High brightness keV harmonics from relativistically oscillating plasma surfaces. European Physical Journal: Special Topics, 2009, 175, 57-60.	2.6	0
75	Ultrabright attosecond sources from relativistically oscillating mirrors. Proceedings of SPIE, 2009, , .	0.8	0
76	A new XUV-source for seeding a FEL at high repetition rates. Proceedings of SPIE, 2011, , .	0.8	0
77	High-order harmonics from bow wave caustics driven by a high-intensity laser. , 2012, , .		0
78	Design and results of a dual-gas quasi-phase matching (QPM) foil target. , 2015, , .		0
79	Polarization Gating in Relativistic Laser-Solid Interactions. Springer Proceedings in Physics, 2016, , 127-132.	0.2	0