

# A E Dangor

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

120  
papers

11,735  
citations

52  
h-index

108  
g-index

133  
ext. papers

12,594  
ext. citations

5.7  
avg, IF

4.87  
L-index

#	Paper	IF	Citations
120	Observation of Laser Power Amplification in a Self-Injecting Laser Wakefield Accelerator. <i>Physical Review Letters</i> , <b>2018</b> , 120, 254801	7.4	9
119	Observation of anomalous side-scattering in laser wakefield accelerators. <i>Laser and Particle Beams</i> , <b>2018</b> , 36, 391-395	0.9	0
118	Characterization of laser-driven proton beams from near-critical density targets using copper activation. <i>Journal of Plasma Physics</i> , <b>2015</b> , 81,	2.7	2
117	Compact laser accelerators for X-ray phase-contrast imaging. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2014</b> , 372, 20130032	3	25
116	Low energy spread electron beams from ionization injection in a weakly relativistic laser wakefield accelerator. <i>Plasma Physics and Controlled Fusion</i> , <b>2014</b> , 56, 084007	2	12
115	Measurements of magnetic field generation at ionization fronts from laser wakefield acceleration experiments. <i>New Journal of Physics</i> , <b>2013</b> , 15, 025034	2.9	5
114	Proton probe measurement of fast advection of magnetic fields by hot electrons. <i>Plasma Physics and Controlled Fusion</i> , <b>2011</b> , 53, 124026	2	2
113	Observation of impurity free monoenergetic proton beams from the interaction of a CO2 laser with a gaseous target a). <i>Physics of Plasmas</i> , <b>2011</b> , 18, 056705	2.1	13
112	Fast advection of magnetic fields by hot electrons. <i>Physical Review Letters</i> , <b>2010</b> , 105, 095001	7.4	42
111	Measurement of magnetic-field structures in a laser-wakefield accelerator. <i>Physical Review Letters</i> , <b>2010</b> , 105, 115002	7.4	41
110	Observation of a long-wavelength hosing modulation of a high-intensity laser pulse in underdense plasma. <i>Physical Review Letters</i> , <b>2010</b> , 105, 095003	7.4	19
109	Plasma cavitation in ultraintense laser interactions with underdense helium plasmas. <i>New Journal of Physics</i> , <b>2010</b> , 12, 045014	2.9	18
108	Proton deflectometry of a magnetic reconnection geometry. <i>Physics of Plasmas</i> , <b>2010</b> , 17, 043104	2.1	51
107	Generation of ultrahigh-velocity ionizing shocks with petawatt-class laser pulses. <i>Physical Review Letters</i> , <b>2009</b> , 103, 255001	7.4	16
106	Ultrashort pulse filamentation and monoenergetic electron beam production in LWFA's. <i>Plasma Physics and Controlled Fusion</i> , <b>2009</b> , 51, 024010	2	8
105	Characterization of high-intensity laser propagation in the relativistic transparent regime through measurements of energetic proton beams. <i>Physical Review Letters</i> , <b>2009</b> , 102, 125002	7.4	82
104	Observation of synchrotron radiation from electrons accelerated in a petawatt-laser-generated plasma cavity. <i>Physical Review Letters</i> , <b>2008</b> , 100, 105006	7.4	146

103	Self-Guided Wakefield Experiments Driven by Petawatt-Class Ultrashort Laser Pulses. <i>IEEE Transactions on Plasma Science</i> , <b>2008</b> , 36, 1715-1721	1.3	18
102	Monoenergetic electronic beam production using dual collinear laser pulses. <i>Physical Review Letters</i> , <b>2008</b> , 100, 255002	7.4	22
101	Dynamics of Multiple-Wire X-Pinches. <i>IEEE Transactions on Plasma Science</i> , <b>2008</b> , 36, 1288-1289	1.3	
100	Temporally and spatially resolved measurements of multi-megagauss magnetic fields in high intensity laser-produced plasmas. <i>Physics of Plasmas</i> , <b>2008</b> , 15, 122701	2.1	15
99	Bidirectional jet formation during driven magnetic reconnection in two-beam laser-plasma interactions. <i>Physics of Plasmas</i> , <b>2008</b> , 15, 092701	2.1	49
98	Effect of relativistic plasma on extreme-ultraviolet harmonic emission from intense laser-matter interactions. <i>Physical Review Letters</i> , <b>2008</b> , 100, 125005	7.4	16
97	Comment on "Plasma modulation of harmonic emission spectra from laser-plasma interactions". <i>Physical Review Letters</i> , <b>2008</b> , 100, 199501; discussion 199502	7.4	1
96	Effect of laser-focusing conditions on propagation and monoenergetic electron production in laser-wakefield accelerators. <i>Physical Review Letters</i> , <b>2007</b> , 98, 095004	7.4	77
95	Particle acceleration using intense laser produced plasmas. <i>Laser Physics Letters</i> , <b>2007</b> , 4, 847-862	1.5	12
94	Willingale et al. Reply.. <i>Physical Review Letters</i> , <b>2007</b> , 98,	7.4	19
93	Measurements of forward scattered spectra from intense laser interactions in the forced laser wake-field regime. <i>Plasma Physics and Controlled Fusion</i> , <b>2006</b> , 48, 29-37	2	4
92	Clark et al. Reply.. <i>Physical Review Letters</i> , <b>2006</b> , 96,	7.4	4
91	Reduction of proton acceleration in high-intensity laser interaction with solid two-layer targets. <i>Physics of Plasmas</i> , <b>2006</b> , 13, 123101	2.1	10
90	Effect of wire number on x-pinch discharges. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 261501	3.4	13
89	Measurements of forward scattered laser radiation from intense sub-ps laser interactions with underdense plasmas. <i>Physics of Plasmas</i> , <b>2006</b> , 13, 113103	2.1	14
88	Magnetic reconnection and plasma dynamics in two-beam laser-solid interactions. <i>Physical Review Letters</i> , <b>2006</b> , 97, 255001	7.4	181
87	Collimated multi-MeV ion beams from high-intensity laser interactions with underdense plasma. <i>Physical Review Letters</i> , <b>2006</b> , 96, 245002	7.4	140
86	Observation of annular electron beam transport in multi-TeraWatt laser-solid interactions. <i>Plasma Physics and Controlled Fusion</i> , <b>2006</b> , 48, L11-L22	2	35

85	The generation of mono-energetic electron beams from ultrashort pulse laser-plasma interactions. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2006</b> , 364, 663-77	3	8
84	High intensity laser-plasma sources of ions physics and future applications. <i>Plasma Physics and Controlled Fusion</i> , <b>2005</b> , 47, B451-B463	2	18
83	Electron Acceleration in Cavitated Channels Formed by a Petawatt Laser in Low-Density Plasma. <i>Physical Review Letters</i> , <b>2005</b> , 94,	7.4	129
82	Laser plasma acceleration of electrons: Towards the production of monoenergetic beams. <i>Physics of Plasmas</i> , <b>2005</b> , 12, 056711	2.1	17
81	Plasma dynamics during the evolution of two wire Z-pinch. <i>Plasma Physics and Controlled Fusion</i> , <b>2004</b> , 46, 1-10	2	17
80	Observations of the filamentation of high-intensity laser-produced electron beams. <i>Physical Review E</i> , <b>2004</b> , 70, 056412	2.4	54
79	High-intensity-laser-driven Z pinches. <i>Physical Review Letters</i> , <b>2004</b> , 92, 095001	7.4	21
78	Emittance measurements of a laser-wakefield-accelerated electron beam. <i>Physical Review Letters</i> , <b>2004</b> , 92, 165006	7.4	79
77	Target charging effects on proton acceleration during high-intensity short-pulse laser-solid interactions. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 2766-2768	3.4	17
76	Return current and proton emission from short pulse laser interactions with wire targets. <i>Physics of Plasmas</i> , <b>2004</b> , 11, 2806-2813	2.1	12
75	Monoenergetic beams of relativistic electrons from intense laser-plasma interactions. <i>Nature</i> , <b>2004</b> , 431, 535-8	50.4	1444
74	Laboratory measurements of 0.7 GG magnetic fields generated during high-intensity laser interactions with dense plasmas. <i>Physical Review E</i> , <b>2004</b> , 70, 026401	2.4	156
73	Ion acceleration by collisionless shocks in high-intensity-laser-underdense-plasma interaction. <i>Physical Review Letters</i> , <b>2004</b> , 93, 155003	7.4	121
72	Self-modulated wakefield and forced laser wakefield acceleration of electrons. <i>Physics of Plasmas</i> , <b>2003</b> , 10, 2071-2077	2.1	41
71	Propagation instabilities of high-intensity laser-produced electron beams. <i>Physical Review Letters</i> , <b>2003</b> , 90, 175001	7.4	118
70	The production of high-energy electrons from the interaction of an intense laser pulse with an underdense plasma. <i>Journal of Modern Optics</i> , <b>2003</b> , 50, 673-681	1.1	1
69	The effect of high intensity laser propagation instabilities on channel formation in underdense plasmas. <i>Physics of Plasmas</i> , <b>2003</b> , 10, 438-442	2.1	58
68	Proton acceleration from high-intensity laser interactions with thin foil targets. <i>Physical Review Letters</i> , <b>2003</b> , 90, 064801	7.4	144

67	Table-top X-pinch for x-ray radiography. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 4602-4604	3.4	49
66	Measuring huge magnetic fields. <i>Nature</i> , <b>2002</b> , 415, 280	50.4	158
65	Characterization of a gamma-ray source based on a laser-plasma accelerator with applications to radiography. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 2129-2131	3.4	112
64	Ion heating and thermonuclear neutron production from high-intensity subpicosecond laser pulses interacting with underdense plasmas. <i>Physical Review Letters</i> , <b>2002</b> , 89, 165004	7.4	55
63	Measurements of relativistic self-phase-modulation in plasma. <i>Physical Review E</i> , <b>2002</b> , 66, 036409	2.4	49
62	Snowplow-like behavior in the implosion phase of wire array Z pinches. <i>Physics of Plasmas</i> , <b>2002</b> , 9, 2293-2301	23.0	100
61	A nearly real-time high temperature laser plasma diagnostic using photonuclear reactions in tantalum. <i>Review of Scientific Instruments</i> , <b>2002</b> , 73, 3801-3805	1.7	28
60	Dynamics of the critical surface in high-intensity laser-solid interactions: modulation of the XUV harmonic spectra. <i>Physical Review Letters</i> , <b>2002</b> , 88, 155001	7.4	51
59	Table-top neutron source for characterization and calibration of dark matter detectors. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 3009-3011	3.4	39
58	Using self-generated harmonics as a diagnostic of high intensity laser-produced plasmas. <i>Plasma Physics and Controlled Fusion</i> , <b>2002</b> , 44, B233-B245	2	7
57	Measurements of ultrastrong magnetic fields during relativistic laser-plasma interactions. <i>Physics of Plasmas</i> , <b>2002</b> , 9, 2244-2250	2.1	108
56	Electron acceleration by a wake field forced by an intense ultrashort laser pulse. <i>Science</i> , <b>2002</b> , 298, 1596-1599	39.0	489
55	The effect of current prepulse on wire array Z-pinch implosions. <i>Physics of Plasmas</i> , <b>2002</b> , 9, 375-377	2.1	30
54	Effect of discrete wires on the implosion dynamics of wire array Z pinches. <i>Physics of Plasmas</i> , <b>2001</b> , 8, 3734-3747	2.1	270
53	X-ray backlighting of wire array Z-pinch implosions using X pinch. <i>Review of Scientific Instruments</i> , <b>2001</b> , 72, 671-673	1.7	78
52	Fast heating of ultrahigh-density plasma as a step towards laser fusion ignition. <i>Nature</i> , <b>2001</b> , 412, 798-802	32.4	780
51	Observation of a hot high-current electron beam from a self-modulated laser wakefield accelerator. <i>Physical Review Letters</i> , <b>2001</b> , 86, 1227-30	7.4	88
50	Production of radioactive nuclides by energetic protons generated from intense laser-plasma interactions. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 19-21	3.4	121

49	Fast particle generation and energy transport in laser-solid interactions. <i>Physics of Plasmas</i> , <b>2001</b> , 8, 2323-2330	85	
48	Measurements of the inverse Faraday effect from relativistic laser interactions with an underdense plasma. <i>Physical Review Letters</i> , <b>2001</b> , 87, 215004	7.4	101
47	Interaction of an ultra-intense laser pulse with a nonuniform preformed plasma. <i>Physics of Plasmas</i> , <b>2000</b> , 7, 3009-3016	2.1	25
46	Characterization of wire x pinches driven by a microsecond-long capacitive discharge. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 8295-8303	2.5	28
45	Experimental studies of the advanced fast ignitor scheme. <i>Physics of Plasmas</i> , <b>2000</b> , 7, 3721-3726	2.1	97
44	Effect of the plasma density scale length on the direction of fast electrons in relativistic laser-solid interactions. <i>Physical Review Letters</i> , <b>2000</b> , 84, 1459-62	7.4	185
43	Two different modes of nested wire array Z-pinch implosions. <i>Physical Review Letters</i> , <b>2000</b> , 84, 1708-11	7.4	56
42	Effect of core-corona plasma structure on seeding of instabilities in wire array Z pinches. <i>Physical Review Letters</i> , <b>2000</b> , 85, 98-101	7.4	131
41	The past, present, and future of Z pinches. <i>Physics of Plasmas</i> , <b>2000</b> , 7, 1672-1680	2.1	63
40	Photonuclear physics when a multiterawatt laser pulse interacts with solid targets. <i>Physical Review Letters</i> , <b>2000</b> , 84, 899-902	7.4	200
39	Energetic proton production from relativistic laser interaction with high density plasmas. <i>Physics of Plasmas</i> , <b>2000</b> , 7, 2055-2061	2.1	105
38	Energetic heavy-ion and proton generation from ultraintense laser-plasma interactions with solids. <i>Physical Review Letters</i> , <b>2000</b> , 85, 1654-7	7.4	407
37	Study of x-ray emission from a table top plasma focus and its application as an x-ray backlighter. <i>Journal of Applied Physics</i> , <b>2000</b> , 88, 3225-3230	2.5	93
36	Measurements of energetic proton transport through magnetized plasma from intense laser interactions with solids. <i>Physical Review Letters</i> , <b>2000</b> , 84, 670-3	7.4	595
35	Observation of a highly directional $\beta$ -ray beam from ultrashort, ultraintense laser pulse interactions with solids. <i>Physics of Plasmas</i> , <b>1999</b> , 6, 2150-2156	2.1	175
34	Z-pinch discharges in aluminum and tungsten wires. <i>Physics of Plasmas</i> , <b>1999</b> , 6, 2579-2587	2.1	26
33	The dynamics of wire array Z-pinch implosions. <i>Physics of Plasmas</i> , <b>1999</b> , 6, 2016-2022	2.1	95
32	Multi-MeV Ion Production from High-Intensity Laser Interactions with Underdense Plasmas. <i>Physical Review Letters</i> , <b>1999</b> , 83, 737-740	7.4	133

31	Optical probing of fiber z-pinch plasmas. <i>Physics of Plasmas</i> , <b>1998</b> , 5, 682-691	2.1	24
30	Role of the plasma scale length in the harmonic generation from solid targets. <i>Physical Review E</i> , <b>1998</b> , 58, R5253-R5256	2.4	117
29	X-ray emission from plasmas formed using an excimer laser with various pulse lengths. <i>Journal Physics D: Applied Physics</i> , <b>1998</b> , 31, 2777-2782	3	6
28	Neutron production from picosecond laser irradiation of deuterated targets at intensities of. <i>Plasma Physics and Controlled Fusion</i> , <b>1998</b> , 40, 175-182	2	125
27	Influence of a Prepulse Current on a Fiber Z Pinch. <i>Physical Review Letters</i> , <b>1998</b> , 81, 361-364	7.4	8
26	Plasma Formation on the Front and Rear of Plastic Targets due to High-Intensity Laser-Generated Fast Electrons. <i>Physical Review Letters</i> , <b>1998</b> , 81, 999-1002	7.4	121
25	Coronal plasma behavior of the Z pinch produced from carbon and cryogenic deuterium fibers. <i>Physics of Plasmas</i> , <b>1998</b> , 5, 3366-3372	2.1	28
24	Azimuthal Structure and Global Instability in the Implosion Phase of Wire Array Z-Pinch Experiments. <i>Physical Review Letters</i> , <b>1998</b> , 81, 4152-4155	7.4	91
23	Plasma Wave Generation in a Self-Focused Channel of a Relativistically Intense Laser Pulse. <i>Physical Review Letters</i> , <b>1998</b> , 81, 100-103	7.4	70
22	Observation of Electron Energies Beyond the Linear Dephasing Limit from a Laser-Excited Relativistic Plasma Wave. <i>Physical Review Letters</i> , <b>1998</b> , 80, 2133-2136	7.4	181
21	Hard X-Ray Diagnostic of Z-Pinch Discharges <b>1998</b> , 491-497		
20	Optical and x-ray observations of carbon and aluminium fibre Z-pinch plasmas. <i>Plasma Physics and Controlled Fusion</i> , <b>1997</b> , 39, 1-25	2	51
19	Second harmonic generation and its interaction with relativistic plasma waves driven by forward Raman instability in underdense plasmas. <i>Physics of Plasmas</i> , <b>1997</b> , 4, 1127-1131	2.1	51
18	Imaging of high harmonic radiation emitted during the interaction of a 20 TW laser with a solid target. <i>Journal of Applied Physics</i> , <b>1997</b> , 81, 2055-2058	2.5	9
17	Time-resolved energy measurement of electron beams in fiber Z-pinch discharges. <i>Physics of Plasmas</i> , <b>1997</b> , 4, 490-492	2.1	17
16	A study of picosecond laser-solid interactions up to $10^{19}$ W cm <sup>-2</sup> . <i>Physics of Plasmas</i> , <b>1997</b> , 4, 447-457	2.1	537
15	A high impedance mega-ampere generator for fiber z-pinch experiments. <i>Review of Scientific Instruments</i> , <b>1996</b> , 67, 1533-1541	1.7	137
14	Efficient extreme UV harmonics generated from picosecond laser pulse interactions with solid targets. <i>Physical Review Letters</i> , <b>1996</b> , 76, 1832-1835	7.4	269

13	Measurements of the hole boring velocity from Doppler shifted harmonic emission from solid targets. <i>Physics of Plasmas</i> , <b>1996</b> , 3, 3242-3244	2.1	58
12	Development of XUV lasers at the RAL Central Laser Facility. <i>Optical and Quantum Electronics</i> , <b>1996</b> , 28, 201-208	2.4	3
11	Coherence and bandwidth measurements of harmonics generated from solid surfaces irradiated by intense picosecond laser pulses. <i>Physical Review A</i> , <b>1996</b> , 54, 1597-1603	2.6	34
10	Electron acceleration from the breaking of relativistic plasma waves. <i>Nature</i> , <b>1995</b> , 377, 606-608	50.4	656
9	Plasma Temperature in Optical Field Ionization of Gases by Intense Ultrashort Pulses of Ultraviolet Radiation. <i>Physical Review Letters</i> , <b>1995</b> , 74, 554-557	7.4	47
8	Plasma ion emission from high intensity picosecond laser pulse interactions with solid targets. <i>Physical Review Letters</i> , <b>1994</b> , 73, 1801-1804	7.4	171
7	Observation of plasma confinement in picosecond laser-plasma interactions. <i>Physical Review E</i> , <b>1993</b> , 48, 2087-2093	2.4	30
6	Characteristics of a Z-pinch produced from a glass optical fiber. <i>Physics of Fluids B</i> , <b>1991</b> , 3, 2835-2843		18
5	Soft x-ray spectra from a gas-puff z pinch. <i>Journal of Applied Physics</i> , <b>1989</b> , 65, 3385-3390	2.5	7
4	High density Z-pinches. <i>Plasma Physics and Controlled Fusion</i> , <b>1986</b> , 28, 1931-1942	2	8
3	Temporal development of hard and soft x-ray emission from a gas-puff Z pinch. <i>Review of Scientific Instruments</i> , <b>1986</b> , 57, 2162-2164	1.7	40
2	Direct observations of the geometry of defects in germanium. <i>Philosophical Magazine and Journal</i> , <b>1963</b> , 8, 1921-1936		20
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