

# Franklin Dollar

## List of Publications by Year in descending order

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75  
papers

2,752  
citations

257450

24  
h-index

175258

52  
g-index

79  
all docs

79  
docs citations

79  
times ranked

2811  
citing authors

#	ARTICLE	IF	CITATIONS
1	Millijoule few-cycle pulses from staged compression for strong and high field science. Optics Express, 2021, 29, 9123.	3.4	19
2	The effects of laser polarization and wavelength on injection dynamics of a laser wakefield accelerator. Physics of Plasmas, 2021, 28, .	1.9	5
3	Polarization-Dependent Self-Injection by Above Threshold Ionization Heating in a Laser Wakefield Accelerator. Physical Review Letters, 2020, 124, 114801.	7.8	11
4	X-ray Laser Wakefield Acceleration in a Nanotube. , 2020, , .		0
5	Demonstration of Thin Film Compression for Short-Pulse X-ray Generation. , 2020, , .		1
6	Relativistic short-pulse high harmonic generation at 1.3 and 2.1 $\mu\text{m}$ wavelengths. New Journal of Physics, 2019, 21, 043052.	2.9	2
7	Demonstration of thin film compression for short-pulse X-ray generation. International Journal of Modern Physics A, 2019, 34, 1943015.	1.5	7
8	X-ray laser wakefield acceleration in a nanotube. International Journal of Modern Physics A, 2019, 34, 1943011.	1.5	3
9	Focusability of laser pulses at petawatt transport intensities in thin-film compression. Journal of the Optical Society of America B: Optical Physics, 2019, 36, A28.	2.1	29
10	Wakefield in solid state plasma with the ionic lattice force. Physics of Plasmas, 2018, 25, .	1.9	16
11	On the properties of synchrotron-like X-ray emission from laser wakefield accelerated electron beams. Physics of Plasmas, 2018, 25, 043104.	1.9	3
12	The unexpected role of evolving longitudinal electric fields in generating energetic electrons in relativistically transparent plasmas. New Journal of Physics, 2018, 20, 093024.	2.9	33
13	Enhanced laser absorption from radiation pressure in intense laser plasma interactions. New Journal of Physics, 2017, 19, 063014.	2.9	6
14	Phase matching of noncollinear sum and difference frequency high harmonic generation above and below the critical ionization level. Optics Express, 2017, 25, 10126.	3.4	17
15	Phase Matching of Noncollinear Sum and Difference Frequency High Harmonic Generation. , 2017, , .		0
16	Controlling Nonsequential Double Ionization in Two-Color Circularly Polarized Femtosecond Laser Fields. Physical Review Letters, 2016, 117, 133201.	7.8	104
17	Controlling electron-ion rescattering in two-color circularly polarized femtosecond laser fields. Physical Review A, 2016, 93, .	2.5	100
18	Materials Properties and Solvated Electron Dynamics of Isolated Nanoparticles and Nanodroplets Probed with Ultrafast Extreme Ultraviolet Beams. Journal of Physical Chemistry Letters, 2016, 7, 609-615.	4.6	23

#	ARTICLE	IF	CITATIONS
19	Particle-in-cell simulation of x-ray wakefield acceleration and betatron radiation in nanotubes. <i>Physical Review Accelerators and Beams</i> , 2016, 19, .	1.6	38
20	Bright Circularly Polarized Soft X-ray Harmonics for Static and Dynamic X-ray Magnetic Circular Dichroism. , 2016, , .		0
21	Bright Isolated Attosecond Soft X-Ray Pulses. <i>Springer Proceedings in Physics</i> , 2015, , 95-98.	0.2	1
22	Bright circularly polarized soft X-ray high harmonics for X-ray magnetic circular dichroism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14206-14211.	7.1	235
23	Ultraviolet surprise: Efficient soft x-ray high-harmonic generation in multiply ionized plasmas. <i>Science</i> , 2015, 350, 1225-1231.	12.6	165
24	Time dependent Doppler shifts in high-order harmonic generation in intense laser interactions with solid density plasma and frequency chirped pulses. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	4
25	Strong-field ionization with two-color circularly polarized laser fields. <i>Physical Review A</i> , 2015, 91, .	2.5	124
26	Non-collinear generation of angularly isolated circularly polarized high harmonics. <i>Nature Photonics</i> , 2015, 9, 743-750.	31.4	216
27	Direct Observation of Rescattering from Strong Field Ionization by Two-Color Circularly Polarized Laser Fields. , 2015, , .		0
28	On electron betatron motion and electron injection in laser wakefield accelerators. <i>Plasma Physics and Controlled Fusion</i> , 2014, 56, 084009.	2.1	1
29	Generation of Bright Isolated Attosecond Soft X-Ray Pulses Driven by Multi-Cycle Mid-Infrared Lasers. , 2014, , .		0
30	Bright High Order Harmonic Generation in a Multiply Ionized Plasma up to the Water Window. , 2014, , .		0
31	Generation of bright isolated attosecond soft X-ray pulses driven by multicycle midinfrared lasers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E2361-7.	7.1	116
32	Mapping Nanoscale Absorption of Femtosecond Laser Pulses Using Plasma Explosion Imaging. <i>ACS Nano</i> , 2014, 8, 8810-8818.	14.6	30
33	Observation and Control of Shock Waves in Individual Nanoplasmas. <i>Physical Review Letters</i> , 2014, 112, 115004.	7.8	43
34	Theory of time-gated phase-matching for isolated attosecond soft x-ray pulse generation using mid-infrared lasers. , 2014, , .		0
35	Generation of Bright Isolated Attosecond Soft X-Ray Pulses Driven by Multi-Cycle Mid-Infrared Lasers. , 2014, , .		0
36	Generation of Bright Isolated Attosecond Soft X-Ray Pulses Driven by Multi-Cycle Mid-Infrared Lasers. , 2014, , .		0

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37	High-intensity laser-driven proton acceleration enhancement from hydrogen containing ultrathin targets. Applied Physics Letters, 2013, 103, 141117.	3.3	8
38	Ultrafast Electron Radiography of Magnetic Fields in High-Intensity Laser-Solid Interactions. Physical Review Letters, 2013, 110, 015003.	7.8	61
39	High-Intensity Laser Triggered Proton Acceleration from Ultrathin Foils. Contributions To Plasma Physics, 2013, 53, 161-164.	1.1	5
40	Energetic neutron beams generated from femtosecond laser plasma interactions. Applied Physics Letters, 2013, 102, .	3.3	44
41	Dominant deuteron acceleration with a high-intensity laser for isotope production and neutron generation. Applied Physics Letters, 2013, 102, 191117.	3.3	24
42	Scaling High-Order Harmonic Generation from Laser-Solid Interactions to Ultrahigh Intensity. Physical Review Letters, 2013, 110, 175002.	7.8	73
43	High contrast ion acceleration at intensities exceeding $10^{21} \text{ W cm}^{-2}$ . Physics of Plasmas, 2013, 20, .	1.9	21
44	Ultra-intense laser neutron generation through efficient deuteron acceleration. Proceedings of SPIE, 2013, , .	0.8	1
45	Ultrahigh-Efficiency High Harmonic Generation Driven by UV Lasers. , 2013, , .		4
46	High resolution bremsstrahlung and fast electron characterization in ultrafast intense laser-solids interactions. New Journal of Physics, 2013, 15, 123038.	2.9	17
47	Finite Spot Effects on Radiation Pressure Acceleration from Intense High-Contrast Laser Interactions with Thin Targets. Physical Review Letters, 2012, 108, 175005.	7.8	76
48	In-band and out-of-band reflectance calibrations of the EUV multilayer mirrors of the atmospheric imaging assembly instrument aboard the Solar Dynamics Observatory. Proceedings of SPIE, 2012, , .	0.8	8
49	Characterization of transverse beam emittance of electrons from a laser-plasma wakefield accelerator in the bubble regime using betatron x-ray radiation. Physical Review Special Topics: Accelerators and Beams, 2012, 15, .	1.8	63
50	Experimental laser wakefield acceleration scalings exceeding $100 \text{ TW}$ . Physics of Plasmas, 2012, 19, 063113.	1.9	9
51	High-aspect-ratio Plasma Target for Raman Backscattering in Exawatt Laser Development. , 2012, , .		0
52	K-shell spectroscopy of Au plasma generated with a short-pulse laser<sup>1</sup>This article is part of a Special Issue on the 10th International Colloquium on Atomic Spectra and Oscillator Strengths for Astrophysical and Laboratory Plasmas.. Canadian Journal of Physics, 2011, 89, 647-651.	1.1	4
53	Control of Energy Spread and Dark Current in Proton and Ion Beams Generated in High-Contrast Laser Solid Interactions. Physical Review Letters, 2011, 107, 065003.	7.8	33
54	X-ray phase contrast imaging of biological specimens with femtosecond pulses of betatron radiation from a compact laser plasma wakefield accelerator. Applied Physics Letters, 2011, 99, .	3.3	118

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55	X-ray phase contrast imaging of biological specimens with tabletop synchrotron radiation. Nature Precedings, 2011, , .	0.1	0
56	Towards laboratory produced relativistic electron-positron pair plasmas. High Energy Density Physics, 2011, 7, 225-229.	1.5	36
57	Synchrotron x-ray radiation from laser wakefield accelerated electron beams in a plasma channel. Journal of Physics: Conference Series, 2010, 244, 042026.	0.4	3
58	Control of proton energy in ultra-high intensity laser-matter interaction. Journal of Physics: Conference Series, 2010, 244, 042025.	0.4	0
59	Effects of Ionization in a Laser Wakefield Accelerator. , 2010, , .		0
60	Synchrotron Radiation from a Laser Plasma Accelerator in the Bubble Regime. , 2010, , .		1
61	Bright spatially coherent synchrotron X-rays from a table-top source. Nature Physics, 2010, 6, 980-983.	16.7	392
62	Narrow Energy Spread Protons and Ions from High-Intensity, High-Contrast Laser Solid Target Interactions. , 2010, , .		3
63	Energetic electron and ion generation from interactions of intense laser pulses with laser machined conical targets. Nuclear Fusion, 2010, 50, 055006.	3.5	6
64	Stimulated Raman Side Scattering in Laser Wakefield Acceleration. Physical Review Letters, 2010, 105, 034801.	7.8	24
65	SU-GG-T-462: Observation of Quasi-Monoenergetic Laser Accelerated Proton and Carbon Beams. Medical Physics, 2010, 37, 3293-3293.	3.0	0
66	Laser wakefield acceleration experiments at the University of Michigan. , 2009, , .		2
67	Laser Wakefield Acceleration Experiments Using HERCULES Laser. , 2009, , .		1
68	Comparative study of betatron radiation from laser-wakefield and direct-laser accelerated bunches of relativistic electrons. Proceedings of SPIE, 2009, , .	0.8	17
69	Non-coalescence of oppositely charged drops. Nature, 2009, 461, 377-380.	27.8	235
70	Coherent Betatron Radiation from Laser-Wakefield Accelerated Bunches of Monoenergetic Electrons. , 2009, , .		0
71	MO-EE-A2-05: Experimental Implementation of the Directed Coulomb Explosion Regime of Laser-Proton Acceleration. Medical Physics, 2009, 36, 2703-2703.	3.0	0
72	Multilayers for next-generation x-ray sources. , 2007, , .		7

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73	Developments in realistic design for aperiodic Mo/Si multilayer mirrors. Optics Express, 2006, 14, 10073.	3.4	61
74	Substrate smoothing for high-temperature condenser operation in EUVL source environments. , 2005, , .		1
75	Development and testing of EUV multilayer coatings for the atmospheric imaging assembly instrument aboard the Solar Dynamics Observatory. , 2005, , .		27