Wei-min Wang

List of Publications by Year
in descending order

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125	2,648	172457	214800
papers	citations	29 h-index	47 g-index

127	127	127	1801
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quasimonoenergetic Proton Acceleration via Quantum Radiative Compression. Physical Review Applied, 2022, 17, .	3.8	5
2	Theoretical Study of the Efficient Ion Acceleration Driven by Petawatt-Class Lasers via Stable Radiation Pressure Acceleration. Applied Sciences (Switzerland), 2022, 12, 2924.	2.5	0
3	Water-Based Coherent Detection of Broadband Terahertz Pulses. Physical Review Letters, 2022, 128, 093902.	7.8	17
4	Ultrafast probing of plasma ion temperature in protonâ€“boron fusion by nuclear resonance fluorescence emission spectroscopy. Matter and Radiation at Extremes, 2022, 7, 035901.	3.9	0
5	Enhanced hot electron generation via laser interference. Physics of Plasmas, 2022, 29, .	1.9	1
6	Dense Polarized Positrons from Laser-Irradiated Foil Targets in the QED Regime. Physical Review Letters, 2022, 129, .	7.8	12
7	Enhanced ion acceleration in the relativistic transparent regime due to the laser rising edge. Plasma Physics and Controlled Fusion, 2021, 63, 035016.	2.1	1
8	Research progress of ultrabright Î³-ray radiation and electron-positron pair production driven by extremely intense laser fields. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 085202-085202.	0.5	1
9	Spin and polarization effects on the nonlinear Breitâ€“Wheeler pair production in laser-plasma interaction. New Journal of Physics, 2021, 23, 075005.	2.9	7
10	Generation of polarized positron beams via collisions of ultrarelativistic electron beams. Physical Review Research, 2021, 3, .	3.6	4
11	Production of Highly Polarized Positron Beams via Helicity Transfer from Polarized Electrons in a Strong Laser Field. Physical Review Letters, 2020, 125, 044802.	7.8	45
12	Quantum-stochasticity-induced asymmetry in the angular distribution of electrons in a quasiclassical regime. Physical Review A, 2020, 102, .	2.5	4
13	Generation of highly-polarized high-energy brilliant Î³-rays via laser-plasma interaction. Matter and Radiation at Extremes, 2020, 5, .	3.9	29
14	Double-cone ignition scheme for inertial confinement fusion. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20200015.	3.4	70
15	Towards Terawatt-Scale Spectrally Tunable Terahertz Pulses via Relativistic Laser-Foil Interactions. Physical Review X, 2020, 10, .	8.9	25
16	Low-frequency whistler waves excited by relativistic laser pulses. Physical Review E, 2020, 102, 053204.	2.1	2
17	Extremely brilliant GeV Î³-rays from a two-stage laser-plasma accelerator. Science Advances, 2020, 6, eaaz7240.	10.3	53
18	Guided propagation of extremely intense lasers in plasma via ion motion. Physical Review E, 2020, 101, 011201.	2.1	3

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19	Terahertz radiation enhanced by target ablation during the interaction of high intensity laser pulse and micron-thickness metal foil. Physics of Plasmas, 2020, 27, .	1.9	16
20	Strong Terahertz Radiation from a Liquid-Water Line. Physical Review Applied, 2019, 12, .	3.8	57
21	Spin-polarization effects of an ultrarelativistic electron beam in an ultraintense two-color laser pulse. Physical Review A, 2019, 100, .	2.5	25
22	Effects of internal target structures on laser-driven neutron production. Nuclear Fusion, 2019, 59, 076032.	3.5	1
23	Gamma-ray emission from wakefield-accelerated electrons wiggling in a laser field. Scientific Reports, 2019, 9, 2531.	3.3	7
24	Multimillijoule coherent terahertz bursts from picosecond laser-irradiated metal foils. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3994-3999.	7.1	87
25	Bremsstrahlung emission profile from intense laser-solid interactions as a function of laser focal spot size. Plasma Physics and Controlled Fusion, 2019, 61, 034001.	2.1	17
26	Laboratory Study on Disconnection Events in Comets. Scientific Reports, 2018, 8, 463.	3.3	1
27	Collimated ultrabright gamma rays from electron wiggling along a petawatt laser-irradiated wire in the QED regime. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9911-9916.	7.1	36
28	Energy enhancement of the target surface electron by using a 200 TW sub-picosecond laser. Optics Letters, 2018, 43, 3909.	3.3	1
29	Theoretical and experimental studies on terahertz radiation from laser-driven air plasma. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 124202.	0.5	2
30	Terahertz emission driven by two-color laser pulses at various frequency ratios. Physical Review A, 2017, 96, .	2.5	24
31	Intense Î³ ray generated by refocusing laser pulse on wakefield accelerated electrons. Physics of Plasmas, 2017, 24, .	1.9	7
32	Observation of Terahertz Radiation via the Two-Color Laser Scheme with Uncommon Frequency Ratios. Physical Review Letters, 2017, 119, 235001.	7.8	82
33	Laser opacity in underdense preplasma of solid targets due to quantum electrodynamics effects. Physical Review E, 2017, 96, 013201.	2.1	21
34	Intense terahertz radiation from relativistic laserâ€“plasma interactions. Plasma Physics and Controlled Fusion, 2017, 59, 014039.	2.1	22
35	Bursts of terahertz radiation from relativistic laser-plasma interactions. EPJ Web of Conferences, 2017, 149, 05010.	0.3	0
36	Optical imaging module for astigmatic detection system. Review of Scientific Instruments, 2016, 87, 053706.	1.3	9

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37	Terahertz emission from two-plasmon-decay induced transient currents in laser-solid interactions. Physics of Plasmas, 2016, 23, .	1.9	21
38	Demonstration of Coherent Terahertz Transition Radiation from Relativistic Laser-Solid Interactions. Physical Review Letters, 2016, 116, 205003.	7.8	96
39	Backward terahertz radiation from intense laser-solid interactions. Optics Express, 2016, 24, 4010.	3.4	15
40	Tunable Circularly Polarized Terahertz Radiation from Magnetized Gas Plasma. Physical Review Letters, 2015, 114, 253901.	7.8	82
41	Bursts of Terahertz Radiation from Large-Scale Plasmas Irradiated by Relativistic Picosecond Laser Pulses. Physical Review Letters, 2015, 114, 255001.	7.8	60
42	Strong magnetic fields generated with a simple open-ended coil irradiated by high power laser pulses. Applied Physics Letters, 2015, 107, .	3.3	36
43	Production of intense attosecond vector beam pulse trains based on harmonics. Chinese Physics B, 2015, 24, 115203.	1.4	0
44	Studies of powerful terahertz radiation from laser-produced plasmas. , 2015, , .		2
45	Absorption of ultrashort intense lasers in laserâ€“solid interactions. Chinese Physics B, 2015, 24, 015201.	1.4	22
46	Magnetically Assisted Fast Ignition. Physical Review Letters, 2015, 114, 015001.	7.8	74
47	Integrated simulation approach for laser-driven fast ignition. Physical Review E, 2015, 91, 013101.	2.1	39
48	Preferential enhancement of laser-driven carbon ion acceleration from optimized nanostructured surfaces. Scientific Reports, 2015, 5, 11930.	3.3	18
49	High-order optical vortex harmonics generated by relativistic femtosecond laser pulse. Chinese Physics B, 2015, 24, 065202.	1.4	3
50	Ultrahigh-energy electron beam generated by ultra-intense circularly polarized laser pulses. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 144102.	0.5	1
51	Role of resonance absorption in terahertz radiation generation from solid targets. Optics Express, 2014, 22, 11797.	3.4	20
52	Angle-dependent modulated spectral peaks of proton beams generated in ultrashort intense laser-solid interactions. Physics of Plasmas, 2014, 21, 093111.	1.9	2
53	High-speed atomic force microscope based on an astigmatic detection system. Review of Scientific Instruments, 2014, 85, 103710.	1.3	11
54	Generation of quasi-monoenergetic electron beams with small normalized divergences angle from a 2 TW laser facility. Optics Express, 2014, 22, 12836.	3.4	5

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55	Strong, tunable terahertz emission by two-color picosecond laser irradiation. Physical Review A, 2014, 90, .	2.5	14
56	Proton angular distribution research by a new angle-resolved proton energy spectrometer. Science China: Physics, Mechanics and Astronomy, 2014, 57, 844-848.	5.1	2
57	Controllability of intense-laser ion acceleration. High Power Laser Science and Engineering, 2014, 2, .	4.6	7
58	Electromagnetic radiation from laser wakefields in underdense plasma. High Power Laser Science and Engineering, 2014, 2, .	4.6	1
59	Terahertz radiation by two-color lasers due to the field ionization of gases. Physical Review E, 2013, 87, .	2.1	30
60	Quasimonoenergetic proton bunches generation from doped foil targets irradiated by intense lasers. Physics of Plasmas, 2013, 20, 024502.	1.9	11
61	Particle simulation of filamentary structure formation in dielectric barrier discharge. Applied Physics Letters, 2013, 102, .	3.3	14
62	Collimated quasi-monoenergetic electron beam generation from intense laser solid interaction. High Energy Density Physics, 2013, 9, 578-582.	1.5	7
63	The influence of target material and thickness on proton energy and angular distribution. Science China: Physics, Mechanics and Astronomy, 2013, 56, 457-461.	5.1	2
64	Laser absorption and hot electron temperature scalings in laserâ€“plasma interactions. Plasma Physics and Controlled Fusion, 2013, 55, 085008.	2.1	46
65	Direct observation of ultrafast surface transport of laser-driven fast electrons in a solid target. Physics of Plasmas, 2013, 20, .	1.9	18
66	Note: A new angle-resolved proton energy spectrometer. Review of Scientific Instruments, 2013, 84, 096103.	1.3	7
67	Particle simulation of mode transition in dielectric barrier discharges at different gas pressures. Journal Physics D: Applied Physics, 2013, 46, 475208.	2.8	7
68	Studies of the mechanisms of powerful Terahertz radiation from laser plasmas. , 2013, , .		0
69	Low-voltage and high-performance buzzer-scanner based streamlined atomic force microscope system. Nanotechnology, 2013, 24, 455503.	2.6	11
70	Bright betatron X-ray radiation from a laser-driven-clustering gas target. Scientific Reports, 2013, 3, 1912.	3.3	70
71	Probing the laser wakefield in underdense plasmas by induced terahertz emission. Physics of Plasmas, 2013, 20, 080702.	1.9	10
72	Upper-limit power for self-guided propagation of intense lasers in underdense plasma. High Power Laser Science and Engineering, 2013, 1, 74-79.	4.6	5

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73	Upper-limit power for self-guided propagation of intense lasers in underdense plasma â€“ CORRIGENDUM. High Power Laser Science and Engineering, 2013, 1, 148-148.	4.6	0
74	Origin of energetic carbon ions with different charge states in ultrashort laser-thin foil interactions. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 165201.	0.5	2
75	Micro focusing of fast electrons with opened cone targets. Physics of Plasmas, 2012, 19, 013103.	1.9	5
76	THz emission control by tuning density profiles of neutral gas targets during intense laser-gas interaction. Applied Physics Letters, 2012, 101, .	3.3	8
77	Upper limit power for self-guided propagation of intense lasers in plasma. Applied Physics Letters, 2012, 101, .	3.3	9
78	Strong terahertz radiation from relativistic laser interaction with solid density plasmas. Applied Physics Letters, 2012, 100, .	3.3	70
79	Electromagnetic Emission from Laser Wakefields in Magnetized Underdense Plasmas. Plasma Science and Technology, 2012, 14, 874-879.	1.5	12
80	Long lifetime air plasma channel generated by femtosecond laser pulse sequence. Optics Express, 2012, 20, 5968.	3.4	29
81	Single-Shot Measurement of Broad Bandwidth Terahertz Pulses. Chinese Physics Letters, 2012, 29, 015202.	3.3	1
82	Single-Shot Broad Bandwidth Terahertz Pulse Measurement. Plasma Science and Technology, 2012, 14, 20-23.	1.5	2
83	Towards Sub-TeV electron beams driven by ultra-short, ultra-intense laser pulses. Journal of Plasma Physics, 2012, 78, 461-468.	2.1	4
84	Direct observation of turbulent magnetic fields in hot, dense laser produced plasmas. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8011-8015.	7.1	142
85	Directional transport of fast electrons at the front target surface irradiated by intense femtosecond laser pulses with preformed plasma. Laser and Particle Beams, 2012, 30, 39-43.	1.0	13
86	Surface-plasmon-enhanced MeV ions from femtosecond laser irradiated, periodically modulated surfaces. Physics of Plasmas, 2012, 19, 030703.	1.9	15
87	Electron acceleration via high contrast laser interacting with submicron clusters. Applied Physics Letters, 2012, 100, .	3.3	32
88	Two-stage acceleration of protons from relativistic laser-solid interaction. Physical Review Special Topics: Accelerators and Beams, 2012, 15, .	1.8	6
89	High power terahertz pulses generated in intense laserâ€”plasma interactions. Chinese Physics B, 2012, 21, 095203.	1.4	27
90	Electromagnetic emission from laser wakefields in underdense magnetized plasmas. Journal of Plasma Physics, 2012, 78, 421-427.	2.1	6

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91	Numerical studies of third-harmonic generation in laser filament in air perturbed by plasma spot. Physics of Plasmas, 2012, 19, 072305.	1.9	8
92	Polarization of terahertz emission out of incident plane from laser interactions with solid targets. Science China: Physics, Mechanics and Astronomy, 2012, 55, 589-592.	5.1	2
93	Angular distribution of terahertz emission from laser interactions with solid targets. Science China Information Sciences, 2012, 55, 43-48.	4.3	3
94	Effects of laser-plasma interactions on terahertz radiation from solid targets irradiated by ultrashort intense laser pulses. Physical Review E, 2011, 84, 036405.	2.1	61
95	Studies on the mechanisms of powerful terahertz radiations from laser plasmas (Invited Paper). Chinese Optics Letters, 2011, 9, 110002-110008.	2.9	4
96	Enhanced K_Î± output of Ar and Kr using size optimized cluster target irradiated by high-contrast laser pulses. Optics Express, 2011, 19, 25812.	3.4	32
97	Efficient terahertz emission by mid-infrared laser pulses from gas targets. Optics Letters, 2011, 36, 2608.	3.3	50
98	Broadband supercontinuum generation in air using tightly focused femtosecond laser pulses. Optics Letters, 2011, 36, 3900.	3.3	32
99	Collisionless shockwaves formed by counter-streaming laser-produced plasmas. New Journal of Physics, 2011, 13, 093001.	2.9	30
100	Towards gigawatt terahertz emission by few-cycle laser pulses. Physics of Plasmas, 2011, 18, .	1.9	43
101	Electron energy deposition to the fusion target core for fast ignition. Journal of Physics: Conference Series, 2010, 244, 022070.	0.4	6
102	Efficient high-quality ion beam generation in laser-foil interaction. Proceedings of SPIE, 2010, , .	0.8	0
103	High contrast femtosecond laser-driven intense hard X-ray source for imaging application. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 619, 128-132.	1.6	8
104	Optimization for deuterium ion acceleration in foam targets by ultra-intense lasers. Laser and Particle Beams, 2010, 28, 333-341.	1.0	5
105	Acceleration of Protons from a Double-Layer or Multi-Ion-Mixed Foil Irradiated by Ultraintense Lasers. Plasma Science and Technology, 2010, 12, 277-283.	1.5	2
106	Four-dimensional imaging of the initial stage of fast evolving plasmas. Applied Physics Letters, 2010, 97, .	3.3	24
107	Monoenergetic electron bunches generated from thin solid foils irradiated by ultrashort, ultraintense circularly polarized lasers. Physical Review Special Topics: Accelerators and Beams, 2010, 13, .	1.8	13
108	Generation of tens of GeV quasi-monoenergetic proton beams from a moving double layer formed by ultraintense lasers at intensity 10²¹â€“10²³â€‰Wâ€‰cm^{â^'2}. New Journal of Physics, 2010, 12, 045021.	2.9	29

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109	Controllable far-infrared electromagnetic radiation from plasmas applied by dc or ac bias electric fields. Journal of Applied Physics, 2010, 107, 023113.	2.5	18
110	Intense High-Contrast Femtosecond<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>K</mml:mi></mml:math>-Shell X-Ray Source from Laser-Driven Ar Clusters. Physical Review Letters, 2010, 104, 215004.	7.8	59
111	Single-cycle strong terahertz pulse generation from a vacuum-plasma interface driven by intense laser pulses. Physical Review E, 2009, 79, 046411.	2.1	27
112	Strong terahertz radiation from air plasmas generated by an aperture-limited Gaussian pump laser beam. Applied Physics Letters, 2009, 94, .	3.3	27
113	Terahertz radiation from electrically-biased tenuous plasmas. , 2009, , .		0
114	Terahertz emission in tenuous gases irradiated by ultrashort laser pulses. Chinese Physics C, 2009, 33, 142-145.	3.7	1
115	Electron injection into laser wakefields by colliding circularly-polarized laser pulses. Laser and Particle Beams, 2009, 27, 3-7.	1.0	8
116	Mechanisms of electron injection into laser wakefields by a weak counter-propagating pulse. European Physical Journal: Special Topics, 2009, 175, 49-55.	2.6	5
117	Strong terahertz pulse generation by chirped laser pulses in tenuous gases. Optics Express, 2008, 16, 16999.	3.4	97
118	Effect of laser parameters on electron injection into laser wakefields in plasma with a counterpropagating additional laser pulse. Physics of Plasmas, 2008, 15, 013101.	1.9	13
119	Ion acceleration in the interaction of an intense laser pulse with structured plasma. Physica Scripta, 2008, 77, 065502.	2.5	1
120	Near-Complete Absorption of Intense, Ultrashort Laser Light by Sub-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î»</mml:mi></mml:math>Gratings. Physical Review Letters, 2008, 101, 145001.	7.8	117
121	Controlled electron injection into laser wakefields with a perpendicular injection laser pulse. Applied Physics Letters, 2008, 93, 201502.	3.3	19
122	A model for the efficient coupling between intense lasers and subwavelength grating targets. Physics of Plasmas, 2008, 15, .	1.9	45
123	Effect of target shape on fast electron emission in femtosecond laser-plasma interactions. Physical Review E, 2008, 77, 016406.	2.1	5
124	Theoretical investigation on novel particle beams and radiation sources in relativistic laser-solid interactions. Journal of Physics: Conference Series, 2008, 112, 042030.	0.4	1
125	The evolution of the transverse centroid of asymmetric laser field in plasmas with various density distributions. Physics of Plasmas, 2006, 13, 053112.	1.9	7