

Liang Jie Wong

List of Publications by Year in descending order

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62
papers

1,372
citations

361045

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329751

37
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63
all docs

63
docs citations

63
times ranked

1320
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced Modulation Characteristics of Optical Injection-Locked Lasers: A Tutorial. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 618-633.	1.9	225
2	Towards graphene plasmon-based free-electron infrared to X-ray sources. Nature Photonics, 2016, 10, 46-52.	15.6	112
3	Compact electron acceleration and bunch compression in THz waveguides. Optics Express, 2013, 21, 9792.	1.7	98
4	Direct acceleration of an electron in infinite vacuum by a pulsed radially-polarized laser beam. Optics Express, 2010, 18, 25035.	1.7	80
5	Efficient plasmonic emission by the quantum Čerenkov effect from hot carriers in graphene. Nature Communications, 2016, 7, ncomms11880.	5.8	78
6	Direct longitudinal laser acceleration of electrons in free space. Physical Review Accelerators and Beams, 2016, 19, .	0.6	73
7	Ultrashort Tilted-Pulse-Front Pulses and Nonparaxial Tilted-Phase-Front Beams. ACS Photonics, 2017, 4, 2257-2264.	3.2	54
8	Tunable free-electron X-ray radiation from van der Waals materials. Nature Photonics, 2020, 14, 686-692.	15.6	48
9	High Mobility 3D Dirac Semimetal (Cd ₃ As ₂) for Ultrafast Photoactive Terahertz Photonics. Advanced Functional Materials, 2021, 31, 2011011.	7.8	46
10	Toward a terahertz-driven electron gun. Scientific Reports, 2015, 5, 14899.	1.6	40
11	Metasurface-based multi-harmonic free-electron light source. Light: Science and Applications, 2018, 7, 64.	7.7	40
12	Laser-Induced Linear-Field Particle Acceleration in Free Space. Scientific Reports, 2017, 7, 11159.	1.6	39
13	Bandwidth Enhancement by Master Modulation of Optical Injection-Locked Lasers. Journal of Lightwave Technology, 2008, 26, 2584-2593.	2.7	38
14	Controlling electromagnetic fields at boundaries of arbitrary geometries. Physical Review A, 2016, 94, .	1.0	36
15	Abruptly Focusing and Defocusing Needles of Light and Closed-Form Electromagnetic Wavepackets. ACS Photonics, 2017, 4, 1131-1137.	3.2	35
16	Control of quantum electrodynamical processes by shaping electron wavepackets. Nature Communications, 2021, 12, 1700.	5.8	34
17	Efficient generation of extreme terahertz harmonics in three-dimensional Dirac semimetals. Physical Review Research, 2020, 2, .	1.3	29
18	Surface Dyakonov-Cherenkov radiation. ELight, 2022, 2, .	11.9	29

#	ARTICLE	IF	CITATIONS
19	Light emission based on nanophotonic vacuum forces. <i>Nature Physics</i> , 2019, 15, 1284-1289.	6.5	21
20	Graphene Metamaterials for Intense, Tunable, and Compact Extreme Ultraviolet and X-Ray Sources. <i>Advanced Science</i> , 2020, 7, 1901609.	5.6	21
21	All-optical three-dimensional electron pulse compression. <i>New Journal of Physics</i> , 2015, 17, 013051.	1.2	20
22	Dilated convolutional neural networks for fiber Bragg grating signal demodulation. <i>Optics Express</i> , 2021, 29, 7110.	1.7	19
23	Improved beam waist formula for ultrashort, tightly focused linearly, radially, and azimuthally polarized laser pulses in free space. <i>Optics Letters</i> , 2014, 39, 1258.	1.7	18
24	Prospects in x-ray science emerging from quantum optics and nanomaterials. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	18
25	The Complex Charge Paradigm: A New Approach for Designing Electromagnetic Wavepackets. <i>Advanced Science</i> , 2020, 7, 1903377.	5.6	17
26	Propagation-invariant space-time caustics of light. <i>Optics Express</i> , 2021, 29, 30682.	1.7	15
27	Self-adaptive deep reinforcement learning for THz beamforming with silicon metasurfaces in 6G communications. <i>Optics Express</i> , 2022, 30, 27763.	1.7	13
28	Two-color-laser-driven direct electron acceleration in infinite vacuum. <i>Optics Letters</i> , 2011, 36, 957.	1.7	12
29	Terahertz-optical intensity grating for creating high-charge, attosecond electron bunches. <i>New Journal of Physics</i> , 2019, 21, 033020.	1.2	12
30	Enhanced Versatility of Top X-Rays from Van der Waals Structures. <i>Advanced Science</i> , 2022, 9, e2105401.	5.6	12
31	Space-Time Wave Packets from Smith-Purcell Radiation. <i>Advanced Science</i> , 2021, 8, e2100925.	5.6	10
32	Ultrafast Multiharmonic Plasmon Generation by Optically Dressed Electrons. <i>Physical Review Letters</i> , 2019, 122, 053901.	2.9	8
33	A threshold for laser-driven linear particle acceleration in unbounded vacuum. <i>Applied Physics Letters</i> , 2011, 99, 211101.	1.5	7
34	Monochromatic X-ray Source Based on Scattering from a Magnetic Nanoundulator. <i>ACS Photonics</i> , 2020, 7, 1096-1103.	3.2	4
35	Maximal terahertz emission in high harmonic generation from 3D Dirac semimetals. <i>Communications Physics</i> , 2021, 4, .	2.0	4
36	Enhanced photon emission from free electron excitation of a nanowell. <i>APL Photonics</i> , 2021, 6, .	3.0	3

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37	Editorial: Lasers in Accelerator Science and Secondary Emission Light Source Technology. <i>Frontiers in Physics</i> , 2019, 7, .	1.0	2
38	Graphene metamaterials for intense, tunable and compact EUV and X-sources. , 2018, , .		2
39	Electron acceleration in a single-cycle terahertz field. , 2014, , .		0
40	First Observation of Direct Laser On-axis Acceleration of Electrons in Vacuum. , 2014, , .		0
41	Relativistic Few-cycle Cylindrical Vector Beams for Table-top Particle Accelerators. , 2015, , .		0
42	Controlling the Near-Field of Metasurfaces for Free-Electron Multi-Harmonic Hard X-Ray Generation. , 2018, , .		0
43	Linear-Field Particle Acceleration in Free Space by Spatiotemporally Structured Laser Pulses. , 2018, , .		0
44	Propagation-induced radiation limits in 3D Dirac semimetal high harmonic generation. , 2021, , .		0
45	Two-Color-Laser-Driven Direct Electron Acceleration in Infinite Vacuum. , 2011, , .		0
46	A General Threshold for Laser-Driven Linear Particle Acceleration in Infinite Vacuum. , 2012, , .		0
47	Ultrafast Non-Paraxial Autofocusing Pulses for High-Gradient Electron Acceleration. , 2015, , .		0
48	Temporal Lenses for Three-Dimensional Electron Pulse Compression. , 2015, , .		0
49	All-Optical, Three-Dimensional Electron Pulse Compression. , 2015, , .		0
50	Towards On-Chip, Tunable X-ray Sources based on Graphene Plasmons. , 2016, , .		0
51	Ultrafast Non-Paraxial Abruptly Autofocusing Pulses for High-Gradient Electron Acceleration. , 2016, , .		0
52	Monoenergetic Relativistic Electron Pulses by Laser-Driven Linear Acceleration in Free Space. , 2016, , .		0
53	Accelerating Beam-Driven Generation of Isolated Few-cycle EUV and X-ray Pulses. , 2017, , .		0
54	Abruptly Focusing and Defocusing Needles of Light. , 2017, , .		0

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55	Few-Cycle-Pulse-Driven Metasurface-Based Multi-Color X-ray Source. , 2018, , .		0
56	Engineering Infrared Quantum Fluctuations to Generate Light from UV through Gamma Rays. , 2018, , .		0
57	High harmonic plasmon generation by dressed electrons. , 2018, , .		0
58	Bloch oscillations of a free electron in a strong field. , 2018, , .		0
59	Abruptly focusing X-waves: Nondiffracting waves with localized disruptions. , 2019, , .		0
60	Tunable Free-electron X-ray Radiation From van der Waals Materials. , 2020, , .		0
61	Quantum Electron Wave-Shaping for Coherent Enhancement of Radiation. , 2020, , .		0
62	Anomalous Suppression of Higher-Order Nonlinearities in 3D Dirac Semimetals. , 2020, , .		0