Liang Jie Wong

List of Publications by Year
in descending order

62 papers	1,372 citations	361413 20 h-index	330143 37 g-index
63 all docs	63 docs citations	63 times ranked	1320 citing authors

#	Article	IF	Citations
1	Surface Dyakonovâ€“Cherenkov radiation. ELight, 2022, 2, .	23.9	29
2	Enhanced Versatility of Tableâ€Top Xâ€Rays from Van der Waals Structures. Advanced Science, 2022, 9, e2105401.	11.2	12
3	Self-adaptive deep reinforcement learning for THz beamforming with silicon metasurfaces in 6G communications. Optics Express, 2022, 30, 27763.	3.4	13
4	Propagation-induced radiation limits in 3D Dirac semimetal high harmonic generation. , 2021, , .		0
5	Dilated convolutional neural networks for fiber Bragg grating signal demodulation. Optics Express, 2021, 29, 7110.	3.4	19
6	High Mobility 3D Dirac Semimetal (Cd₃As₂) for Ultrafast Photoactive Terahertz Photonics. Advanced Functional Materials, 2021, 31, 2011011.	14.9	46
7	Control of quantum electrodynamical processes by shaping electron wavepackets. Nature Communications, 2021, 12, 1700.	12.8	34
8	Propagation-invariant space-time caustics of light. Optics Express, 2021, 29, 30682.	3.4	15
9	Prospects in x-ray science emerging from quantum optics and nanomaterials. Applied Physics Letters, 2021, 119, .	3.3	18
10	Enhanced photon emission from free electron excitation of a nanowell. APL Photonics, 2021, 6, .	5.7	3
11	Spaceâ€Time Wave Packets from Smithâ€Purcell Radiation. Advanced Science, 2021, 8, e2100925.	11.2	10
12	Maximal terahertz emission in high harmonic generation from 3D Dirac semimetals. Communications Physics, 2021, 4, .	5.3	4
13	Graphene Metamaterials for Intense, Tunable, and Compact Extreme Ultraviolet and Xâ€Ray Sources. Advanced Science, 2020, 7, 1901609.	11.2	21
14	The Complex Charge Paradigm: A New Approach for Designing Electromagnetic Wavepackets. Advanced Science, 2020, 7, 1903377.	11.2	17
15	Tunable free-electron X-ray radiation from van der Waals materials. Nature Photonics, 2020, 14, 686-692.	31.4	48
16	Monochromatic X-ray Source Based on Scattering from a Magnetic Nanoundulator. ACS Photonics, 2020, 7, 1096-1103.	6.6	4
17	Efficient generation of extreme terahertz harmonics in three-dimensional Dirac semimetals. Physical Review Research, 2020, 2, .	3.6	29
18	Tunable Free-electron X-ray Radiation From van der Waals Materials. , 2020, , .		0

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19	Quantum Electron Wave-Shaping for Coherent Enhancement of Radiation. , 2020, , .		0
20	Anomalous Suppression of Higher-Order Nonlinearities in 3D Dirac Semimetals. , 2020, , .		0
21	Light emission based on nanophotonic vacuum forces. Nature Physics, 2019, 15, 1284-1289.	16.7	21
22	Terahertz-optical intensity grating for creating high-charge, attosecond electron bunches. New Journal of Physics, 2019, 21, 033020.	2.9	12
23	Ultrafast Multiharmonic Plasmon Generation by Optically Dressed Electrons. Physical Review Letters, 2019, 122, 053901.	7.8	8
24	Editorial: Lasers in Accelerator Science and Secondary Emission Light Source Technology. Frontiers in Physics, 2019, 7, .	2.1	2
25	Abruptly focusing X-waves: Nondiffracting waves with localized disruptions. , 2019, , .		0
26	Controlling the Near-Field of Metasurfaces for Free-Electron Multi-Harmonic Hard X-Ray Generation. , 2018, , .		0
27	Metasurface-based multi-harmonic free-electron light source. Light: Science and Applications, 2018, 7, 64.	16.6	40
28	Linear-Field Particle Acceleration in Free Space by Spatiotemporally Structured Laser Pulses. , 2018, , .		0
29	Graphene metamaterials for intense, tunable and compact EUV and X-sources. , 2018, , .		2
30	Few-Cycle-Pulse-Driven Metasurface-Based Multi-Color X-ray Source. , 2018, , .		0
31	Engineering Infrared Quantum Fluctuations to Generate Light from UV through Gamma Rays. , 2018, , .		0
32	High harmonic plasmon generation by dressed electrons. , 2018, , .		0
33	Bloch oscillations of a free electron in a strong field. , 2018, , .		0
34	Abruptly Focusing and Defocusing Needles of Light and Closed-Form Electromagnetic Wavepackets. ACS Photonics, 2017, 4, 1131-1137.	6.6	35
35	Ultrashort Tilted-Pulse-Front Pulses and NonparaxialÂTilted-Phase-Front Beams. ACS Photonics, 2017, 4, 2257-2264.	6.6	54
36	Laser-Induced Linear-Field Particle Acceleration in Free Space. Scientific Reports, 2017, 7, 11159.	3.3	39

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37	Accelerating Beam-Driven Generation of Isolated Few-cycle EUV and X-ray Pulses. , 2017, , .		0
38	Abruptly Focusing and Defocusing Needles of Light. , 2017, , .		0
39	Controlling electromagnetic fields at boundaries of arbitrary geometries. Physical Review A, 2016, 94, .	2.5	36
40	Efficient plasmonic emission by the quantum ÄŒerenkov effect from hot carriers in graphene. Nature Communications, 2016, 7, ncomms11880.	12.8	78
41	Towards graphene plasmon-based free-electron infrared to X-ray sources. Nature Photonics, 2016, 10, 46-52.	31.4	112
42	Direct longitudinal laser acceleration of electrons in free space. Physical Review Accelerators and Beams, 2016, 19, .	1.6	73
43	Towards On-Chip, Tunable X-ray Sources based on Graphene Plasmons. , 2016, , .		0
44	Ultrafast Non-Paraxial Abruptly Autofocusing Pulses for High-Gradient Electron Acceleration. , 2016, , .		0
45	Monoenergetic Relativistic Electron Pulses by Laser-Driven Linear Acceleration in Free Space. , 2016, , .		0
46	Toward a terahertz-driven electron gun. Scientific Reports, 2015, 5, 14899.	3.3	40
47	All-optical three-dimensional electron pulse compression. New Journal of Physics, 2015, 17, 013051.	2.9	20
48	Relativistic Few-cycle Cylindrical Vector Beams for Table-top Particle Accelerators. , 2015, , .		0
49	Ultrafast Non-Paraxial Autofocusing Pulses for High-Gradient Electron Acceleration. , 2015, , .		0
50	Temporal Lenses for Three-Dimensional Electron Pulse Compression. , 2015, , .		0
51	All-Optical, Three-Dimensional Electron Pulse Compression. , 2015, , .		0
52	Electron acceleration in a single-cycle terahertz field. , 2014, , .		0
53	First Observation of Direct Laser On-axis Acceleration of Electrons in Vacuum. , 2014, , .		0
54	Improved beam waist formula for ultrashort, tightly focused linearly, radially, and azimuthally polarized laser pulses in free space. Optics Letters, 2014, 39, 1258.	3.3	18

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55	Compact electron acceleration and bunch compression in THz waveguides. Optics Express, 2013, 21, 9792.	3.4	98
56	A General Threshold for Laser-Driven Linear Particle Acceleration in Infinite Vacuum. , 2012, , .		0
57	Two-color-laser-driven direct electron acceleration in infinite vacuum. Optics Letters, 2011, 36, 957.	3.3	12
58	A threshold for laser-driven linear particle acceleration in unbounded vacuum. Applied Physics Letters, 2011, 99, 211101.	3.3	7
59	Two-Color-Laser-Driven Direct Electron Acceleration in Infinite Vacuum. , 2011, , .		0
60	Direct acceleration of an electron in infinite vacuum by a pulsed radially-polarized laser beam. Optics Express, 2010, 18, 25035.	3.4	80
61	Enhanced Modulation Characteristics of Optical Injection-Locked Lasers: A Tutorial. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 618-633.	2.9	225
62	Bandwidth Enhancement by Master Modulation of Optical Injection-Locked Lasers. Journal of Lightwave Technology, 2008, 26, 2584-2593.	4.6	38