Wei Chu

List of Publications by Year in descending order

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77 papers	2,358 citations	27 h-index	223800 46 g-index
79	79	79	1326
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	High-brightness switchable multiwavelength remote laser in air. Physical Review A, 2011, 84, .	2.5	233
2	Broadband Quasi-Phase-Matched Harmonic Generation in an On-Chip Monocrystalline Lithium Niobate Microdisk Resonator. Physical Review Letters, 2019, 122, 173903.	7.8	141
3	Population Redistribution Among Multiple Electronic States of Molecular Nitrogen Ions in Strong Laser Fields. Physical Review Letters, 2016, 116, 143007.	7.8	132
4	Long Low-Loss-Litium Niobate on Insulator Waveguides with Sub-Nanometer Surface Roughness. Nanomaterials, 2018, 8, 910.	4.1	113
5	Remote creation of coherent emissions in air with two-color ultrafast laser pulses. New Journal of Physics, 2013, 15, 023046.	2.9	91
6	On-chip tunable microdisk laser fabricated on Er ³⁺ -doped lithium niobate on insulator. Optics Letters, 2021, 46, 380.	3.3	82
7	Onâ€Chip Integrated Waveguide Amplifiers on Erbiumâ€Doped Thinâ€Film Lithium Niobate on Insulator. Laser and Photonics Reviews, 2021, 15, 2100030.	8.7	79
8	Rotational Coherence Encoded in an "Air-Laser―Spectrum of Nitrogen Molecular Ions in an Intense Laser Field. Physical Review X, 2013, 3, .	8.9	75
9	Centimeterâ∈Height 3D Printing with Femtosecond Laser Twoâ∈Photon Polymerization. Advanced Materials Technologies, 2018, 3, 1700396.	5.8	64
10	Signature of superradiance from a nitrogen-gas plasma channel produced by strong-field ionization. Physical Review A, 2014, 89, .	2.5	63
11	Identification of the physical mechanism of generation of coherent N_2 ^+ emissions in air by femtosecond laser excitation. Optics Express, 2013, 21, 8746.	3.4	61
12	Electro-Optically Switchable Optical True Delay Lines of Meter-Scale Lengths Fabricated on Lithium Niobate on Insulator Using Photolithography Assisted Chemo-Mechanical Etching. Chinese Physics Letters, 2020, 37, 084201.	3.3	60
13	Terahertz imaging with sub-wavelength resolution by femtosecond laser filament in air. Scientific Reports, 2014, 4, 3880.	3.3	58
14	Tailoring femtosecond 1.5- \hat{l} /4m Bessel beams for manufacturing high-aspect-ratio through-silicon vias. Scientific Reports, 2017, 7, 40785.	3.3	58
15	Ionization Suppression of Diatomic Molecules in an Intense Midinfrared Laser Field. Physical Review Letters, 2012, 108, 223001.	7.8	51
16	On-chip electro-optic tuning of a lithium niobate microresonator with integrated in-plane microelectrodes. Optics Express, 2017, 25, 124.	3.4	44
17	Polarization-insensitive space-selective etching in fused silica induced by picosecond laser irradiation. Applied Surface Science, 2019, 485, 188-193.	6.1	43
18	Electro-optically tunable microring laser monolithically integrated on lithium niobate on insulator. Optics Letters, 2021, 46, 2127.	3.3	39

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19	Enhancement of peak intensity in a filament core with spatiotemporally focused femtosecond laser pulses. Physical Review A, 2011, 84, .	2.5	38
20	Real-time observation of dynamics in rotational molecular wave packets by use of air-laser spectroscopy. Physical Review A, 2014, 89, .	2.5	37
21	Coupling of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msubsup><mml:mi mathvariant="normal">N</mml:mi><mml:mn>2</mml:mn><mml:mo>+</mml:mo></mml:msubsup><td>v>²/5mml:n</td><td>nath>rotatio</td></mml:mrow></mml:math>	v> ² /5mml:n	nath>rotatio
22	Near-Resonant Raman Amplification in the Rotational Quantum Wave Packets of Nitrogen Molecular lons Generated by Strong Field Ionization. Physical Review Letters, 2018, 120, 083205.	7.8	35
23	Impulsive rotational Raman scattering of N_2 by a remote "air laser―in femtosecond laser filament. Optics Letters, 2014, 39, 2250.	3.3	32
24	Strong Spatial Confinement of Terahertz Wave inside Femtosecond Laser Filament. ACS Photonics, 2016, 3, 2338-2343.	6.6	31
25	Fabrication of a multifunctional photonic integrated chip on lithium niobate on insulator using femtosecond laser-assisted chemomechanical polish. Optics Letters, 2019, 44, 4698.	3.3	31
26	An anatomy of strong-field ionization-induced air lasing. Applied Physics B: Lasers and Optics, 2018, 124, 1.	2.2	30
27	Freeform Microfluidic Networks Encapsulated in Laserâ€Printed 3D Macroscale Glass Objects. Advanced Materials Technologies, 2020, 5, 1900989.	5.8	29
28	Electronic-coherence-mediated molecular nitrogen-ion lasing in a strong laser field. Physical Review A, 2019, 100 , .	2.5	28
29	Comparative investigation of third- and fifth-harmonic generation in atomic and molecular gases driven by midinfrared ultrafast laser pulses. Physical Review A, 2011, 84, .	2.5	26
30	Second harmonic generation in centrosymmetric gas with spatiotemporally focused intense femtosecond laser pulses. Optics Letters, 2014, 39, 961.	3.3	24
31	Phase-matched high-order harmonic generation in a gas cell with midinfrared femtosecond pulses. Physical Review A, 2009, 79, .	2.5	23
32	Efficient electro-optical tuning of an optical frequency microcomb on a monolithically integrated high-Q lithium niobate microdisk. Optics Letters, 2019, 44, 5953.	3.3	23
33	Three-Dimensional Laser Printing of Macro-Scale Glass Objects at a Micro-Scale Resolution. Micromachines, 2019, 10, 565.	2.9	22
34	Enhancement of third harmonic generation in femtosecond laser induced filamentation – comparison of results obtained with plasma and a pair of glass plates. Journal of Modern Optics, 2012, 59, 245-249.	1.3	20
35	Simultaneous identification of multi-combustion-intermediates of alkanol-air flames by femtosecond filament excitation for combustion sensing. Scientific Reports, 2016, 6, 27340.	3.3	19
36	Generation of Raman lasers from nitrogen molecular ions driven by ultraintense laser fields. New Journal of Physics, 2018, 20, 033035.	2.9	19

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37	Water-assisted laser drilling of high-aspect-ratio 3D microchannels in glass with spatiotemporally focused femtosecond laser pulses. Optical Materials Express, 2019, 9, 1971.	3.0	19
38	Single attosecond pulse generation from aligned molecules using two-color polarization gating. Physical Review A, 2009, 80, .	2.5	16
39	Extremely nonlinear Raman interaction of an ultrashort nitrogen ion laser with an impulsively excited molecular wave packet. Physical Review A, 2020, 101, .	2.5	16
40	Size-controlled flow synthesis of metal-organic frameworks crystals monitored by in-situ ultraviolet–visible absorption spectroscopy. Chinese Chemical Letters, 2021, 32, 1131-1134.	9.0	16
41	High-Precision Propagation-Loss Measurement of Single-Mode Optical Waveguides on Lithium Niobate on Insulator. Micromachines, 2019, 10, 612.	2.9	15
42	A Microfluidic Mixer of High Throughput Fabricated in Glass Using Femtosecond Laser Micromachining Combined with Glass Bonding. Micromachines, 2020, 11, 213.	2.9	15
43	Abnormal dependence of strong-field-ionization-induced nitrogen lasing on polarization ellipticity of the driving field. Physical Review A, 2013, 88, .	2.5	14
44	High-throughput in-volume processing in glass with isotropic spatial resolutions in three dimensions. Optical Materials Express, 2016, 6, 3787.	3.0	14
45	Direct generation of intense extreme-ultraviolet supercontinuum with 35-fs, 11-mJ pulses from a femtosecond laser amplifier. Physical Review A, 2012, 85, .	2.5	12
46	Wavelength-dependent nonsequential double ionization of magnesium by intense femtosecond laser pulses. Physical Review A, 2019, 100, .	2.5	12
47	A three-dimensional microfluidic mixer of a homogeneous mixing efficiency fabricated by ultrafast laser internal processing of glass. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	12
48	Generation of an XUV supercontinuum by optimization of the angle between polarization planes of two linearly polarized pulses in a multicycle two-color laser field. Physical Review A, 2010, 82, .	2.5	11
49	Generation of narrow-bandwidth, tunable, coherent xuv radiation using high-order harmonic generation. Physical Review A, 2011, 83, .	2.5	11
50	Unexpected breakdown of the simple man's model for strong-field photoionization in the high-energy recollision region. Physical Review A, 2012, 85, .	2.5	11
51	Wavelength-dependent ionization suppression of diatomic molecules in intense circularly polarized laser fields. Physical Review A, 2014, 90, .	2.5	11
52	Transverse writing of three-dimensional tubular optical waveguides in glass with a slit-shaped femtosecond laser beam. Scientific Reports, 2016, 6, 28790.	3.3	11
53	Fabrication of polarization-independent waveguides deeply buried in lithium niobate crystal using aberration-corrected femtosecond laser direct writing. Scientific Reports, 2017, 7, 41211.	3.3	11
54	Suppression of bend loss in writing of three-dimensional optical waveguides with femtosecond laser pulses. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	11

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55	High-throughput multi-resolution three dimensional laser printing. Physica Scripta, 2019, 94, 015501.	2.5	11
56	Automated and remote synthesis of poly(ethylene glycol)-mineralized ZIF-8 composite particles via a synthesizer assisted by femtosecond laser micromachining. Chinese Chemical Letters, 2022, 33, 497-500.	9.0	11
57	Free-space $\hat{i}2+$ lasers generated in strong laser fields: the role of molecular vibration. Optics Express, 2018, 26, 13331.	3.4	10
58	Vibrational Raman scattering from coherently excited molecular ions in a strong laser field. Optics Express, 2019, 27, 18262.	3.4	10
59	Backward nitrogen lasing actions induced by femtosecond laser filamentation: influence of duration of gain. New Journal of Physics, 2015, 17, 073009.	2.9	9
60	Onset of nonlinear self-focusing of femtosecond laser pulses in air: Conventional vs spatiotemporal focusing. Physical Review A, 2015, 92, .	2.5	7
61	Mid-infrared ultrafast laser pulses induced third harmonic generation in nitrogen molecules on an excited state. Scientific Reports, 2015, 5, 16006.	3.3	7
62	Metal surface structuring with spatiotemporally focused femtosecond laser pulses. Journal of Optics (United Kingdom), 2018, 20, 014010.	2.2	7
63	Polarization ellipticity dependence of ${m N}_{2}^{+}$ air lasing: the role of coupling between the ground state and a photo-excited intermediate state. Journal of the Optical Society of America B: Optical Physics, 2019, 36, G57.	2.1	7
64	A systematic investigation of high harmonic generation using mid-infrared driving laser pulses. Science China: Physics, Mechanics and Astronomy, 2010, 53, 1054-1059.	5.1	6
65	Influence of ionization suppression on high-harmonic generation in molecules: Dependence of cutoff energy on driver wavelength. Physical Review A, 2013, 88, .	2.5	6
66	Generation of elliptically polarized nitrogen ion laser fields using two-color femtosecond laser pulses. Scientific Reports, 2016, 6, 21504.	3.3	5
67	Range extension in laser-induced breakdown spectroscopy using femtosecond–nanosecond dual-beam laser system. Applied Physics B: Lasers and Optics, 2017, 123, 1.	2.2	5
68	Nonsequential double ionization of alkaline-earth metal atoms by intense mid-infrared femtosecond pulses. Optics Express, 2020, 28, 19325.	3.4	5
69	Comparative study of strong-field ionization of alkaline-earth-metal atoms. Physical Review A, 2020, 101, .	2.5	5
70	High-quality-factor optical microresonators fabricated on lithium niobate thin film with an electro-optical tuning range spanning over one free spectral range [Invited]. Chinese Optics Letters, 2021, 19, 060002.	2.9	4
71	Dramatic Spectral Broadening of Ultrafast Laser Pulses in Molecular Nitrogen Ions*. Chinese Physics Letters, 2019, 36, 104204.	3.3	3
72	Electronic quantum coherence encoded in temporal structures of N2+ lasing. Physical Review A, 2021, 103, .	2.5	3

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73	Automated synthesis of gadopentetate dimeglumine through solid-liquid reaction in femtosecond laser fabricated microfluidic chips. Chinese Chemical Letters, 2022, 33, 1077-1080.	9.0	3
74	Nonperturbative generation of above-threshold harmonics from pre-excited argon atoms in intense mid-infrared laser fields. High Power Laser Science and Engineering, 2017, 5, .	4.6	2
75	Nonlinear interaction of femtosecond laser pulses with a CO2-laser-induced air spark. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 155601.	1.5	2
76	Spectrum- and time-resolved investigation of pre-excited argon atoms. Physical Review A, 2019, 100 , .	2.5	2
77	An Ultra-High-Q Lithium Niobate Microresonator Integrated with a Silicon Nitride Waveguide in the Vertical Configuration for Evanescent Light Coupling. Micromachines, 2021, 12, 235.	2.9	0