Jungwon Kim

List of Publications by Year
in descending order

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150 papers	3,549 citations	147801 31 h-index	138484 58 g-index
151 all docs	151 docs citations	151 times ranked	1942 citing authors

#	Article	IF	Citations
1	Drift-free femtosecond timing synchronization of remote optical and microwave sources. Nature Photonics, 2008, 2, 733-736.	31.4	349
2	Ultralow-noise mode-locked fiber lasers and frequency combs: principles, status, and applications. Advances in Optics and Photonics, 2016, 8, 465.	25.5	326
3	Attosecond active synchronization of passively mode-locked lasers by balanced cross correlation. Optics Letters, 2003, 28, 947.	3.3	236
4	Subfemtosecond synchronization of microwave oscillators with mode-locked Er-fiber lasers. Optics Letters, 2012, 37, 2958.	3.3	136
5	Attosecond-resolution timing jitter characterization of free-running mode-locked lasers. Optics Letters, 2007, 32, 3519.	3.3	132
6	Photonic subsampling analog-to-digital conversion of microwave signals at 40-GHz with higher than 7-ENOB resolution. Optics Express, 2008, 16, 16509.	3.4	116
7	Timing jitter optimization of mode-locked Yb-fiber lasers toward the attosecond regime. Optics Express, 2011, 19, 14518.	3.4	115
8	Sub-100-as timing jitter optical pulse trains from mode-locked Er-fiber lasers. Optics Letters, 2011, 36, 4443.	3.3	109
9	Long-term femtosecond timing link stabilization using a single-crystal balanced cross correlator. Optics Letters, 2007, 32, 1044.	3.3	107
10	Direct frequency comb generation from an octave-spanning, prismless Ti:sapphire laser. Optics Letters, 2004, 29, 1683.	3.3	97
11	Attosecondâ€precision ultrafast photonics. Laser and Photonics Reviews, 2010, 4, 432-456.	8.7	69
12	Ultrafast, sub-nanometre-precision and multifunctional time-of-flight detection. Nature Photonics, 2020, 14, 355-360.	31.4	67
13	Balanced optical-microwave phase detectors for optoelectronic phase-locked loops. Optics Letters, 2006, 31, 3659.	3.3	62
14	Controlled waveforms on the single-cycle scale from a femtosecond oscillator. Optics Express, 2008, 16, 9739.	3.4	60
15	All-fibre photonic signal generator for attosecond timing and ultralow-noise microwave. Scientific Reports, 2015, 5, 16250.	3.3	59
16	Toward single-cycle laser systems. IEEE Journal of Selected Topics in Quantum Electronics, 2003, 9, 990-1001.	2.9	58
17	Reference-free, high-resolution measurement method of timing jitter spectra of optical frequency combs. Scientific Reports, 2017, 7, 40917.	3.3	58
18	Femtosecond synchronization of radio frequency signals with optical pulse trains. Optics Letters, 2004, 29, 2076.	3.3	55

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19	Impact of pulse dynamics on timing jitter in mode-locked fiber lasers. Optics Letters, 2011, 36, 1761.	3.3	55
20	Towards jitter-free ultrafast electron diffraction technology. Nature Photonics, 2020, 14, 245-249.	31.4	55
21	Frequency comb-based microwave transfer over fiber with 7Ã—10^â^'19 instability using fiber-loop optical-microwave phase detectors. Optics Letters, 2014, 39, 1577.	3.3	53
22	Self-Referenced 200 MHz Octave-Spanning Ti:Sapphire Laser with 50 Attosecond Carrier-Envelope Phase Jitter. Optics Express, 2005, 13, 5163.	3.4	52
23	Photonic Flywheel in a Monolithic Fiber Resonator. Physical Review Letters, 2020, 125, 143902.	7.8	52
24	Reduction of timing jitter and intensity noise in normal-dispersion passively mode-locked fiber lasers by narrow band-pass filtering. Optics Express, 2014, 22, 28276.	3.4	51
25	Bidirectional mode-locked all-normal dispersion fiber laser. Optica, 2020, 7, 961.	9.3	50
26	Microwave signal extraction from femtosecond mode-locked lasers with attosecond relative timing drift. Optics Letters, 2010, 35, 2022.	3.3	48
27	Ultralow Phase Noise Microwave Generation From Mode-Locked Er-Fiber Lasers With Subfemtosecond Integrated Timing Jitter. IEEE Photonics Journal, 2013, 5, 5500906-5500906.	2.0	44
28	Degradation of optical properties of a film-type single-wall carbon nanotubes saturable absorber (SWNT-SA) with an Er-doped all-fiber laser. Optics Express, 2012, 20, 12966.	3.4	42
29	5-Femtosecond Laser-Electron Synchronization for Pump-Probe Crystallography and Diffraction. Physical Review Applied, 2015, 4, .	3.8	42
30	Complete characterization of quantum-limited timing jitter in passively mode-locked fiber lasers. Optics Letters, 2010, 35, 3522.	3.3	40
31	Few-femtosecond timing jitter from a picosecond all-polarization-maintaining Yb-fiber laser. Optics Express, 2016, 24, 1347.	3.4	38
32	Polarization-maintaining nonlinear-amplifying-loop-mirror mode-locked fiber laser based on a 3â€‰â€‰Ã—â€‰â€‰3 coupler. Optics Letters, 2019, 44, 1068.	3.3	32
33	Ultrabroadband beam splitter with matched group-delay dispersion. Optics Letters, 2005, 30, 1569.	3.3	31
34	Sub-femtosecond timing jitter, all-fiber, CNT-mode-locked Er-laser at telecom wavelength. Optics Express, 2013, 21, 26533.	3.4	30
35	Ultralow jitter silica microcomb. Optica, 2020, 7, 1108.	9.3	30
36	Characterization of timing jitter spectra in free-running mode-locked lasers with 340â€‰â€‰dB dynamic range over 10 decades of Fourier frequency. Optics Letters, 2015, 40, 316.	3.3	29

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37	Simple-structured, subfemtosecond-resolution optical-microwave phase detector. Optics Letters, 2018, 43, 3997.	3.3	29
38	Low timing jitter and intensity noise from a soliton Er-fiber laser mode-locked by a fiber taper carbon nanotube saturable absorber. Optics Express, 2012, 20, 29524.	3.4	28
39	10-fs-level synchronization of photocathode laser with RF-oscillator for ultrafast electron and X-ray sources. Scientific Reports, 2017, 7, 39966.	3.3	27
40	Ultrastable microwave and soliton-pulse generation from fibre-photonic-stabilized microcombs. Nature Communications, 2022, 13, 381.	12.8	27
41	12-GHz repetition rate, diode-pumped femtosecond Yb:KYW laser mode-locked by a carbon nanotube saturable absorber mirror. Optics Express, 2012, 20, 29518.	3.4	25
42	Sub-20-Attosecond Timing Jitter Mode-Locked Fiber Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 260-267.	2.9	25
43	Intensity noise suppression in mode-locked fiber lasers by double optical bandpass filtering. Optics Letters, 2017, 42, 4095.	3.3	24
44	Characterization and analysis of timing jitter in normal-dispersion mode-locked Er-fiber lasers with intra-cavity filtering. Optics Express, 2015, 23, 22898.	3.4	23
45	Few-femtosecond-resolution characterization and suppression of excess timing jitter and drift in indoor atmospheric frequency comb transfer. Optics Express, 2014, 22, 26023.	3.4	22
46	Time-of-flight detection of femtosecond laser pulses for precise measurement of large microelectronic step height. Optics Letters, 2018, 43, 1447.	3.3	21
47	Highly tunable repetition-rate multiplication of mode-locked lasers using all-fibre harmonic injection locking. Scientific Reports, 2018, 8, 13875.	3.3	18
48	Self-stabilized soliton generation in a microresonator through mode-pulled Brillouin lasing. Optics Letters, 2021, 46, 1772.	3.3	18
49	Gigahertz repetition rate, sub-femtosecond timing jitter optical pulse train directly generated from a mode-locked Yb:KYW laser. Optics Letters, 2014, 39, 56.	3.3	17
50	Generation of multiple ultrastable optical frequency combs from an all-fiber photonic platform. Science Advances, 2020, 6, eaax4457.	10.3	17
51	Long-term stable microwave signal extraction from mode-locked lasers. Optics Express, 2007, 15, 8951.	3.4	16
52	Ultrasensitive, high-dynamic-range and broadband strain sensing by time-of-flight detection with femtosecond-laser frequency combs. Scientific Reports, 2017, 7, 13305.	3.3	16
53	All-fiber interferometer-based repetition-rate stabilization of mode-locked lasers to 10^â”14-level frequency instability and 1-fs-level jitter over 1â€‰â€‰s. Optics Letters, 2017, 42, 5186.	3.3	16
54	Graphene-based saturable absorber and mode-locked laser behaviors under gamma-ray radiation. Photonics Research, 2019, 7, 742.	7.0	15

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55	All-fiber-photonics-based ultralow-noise agile frequency synthesizer for X-band radars. Photonics Research, 2018, 6, 12.	7.0	14
56	Optical frequency comb noise spectra analysis using an asymmetric fiber delay line interferometer. Optics Express, 2020, 28, 9232.	3.4	14
57	300-MHz-repetition-rate, all-fiber, femtosecond laser mode-locked by planar lightwave circuit-based saturable absorber. Optics Express, 2015, 23, 26234.	3.4	13
58	Attosecond electronic timing with rising edges of photocurrent pulses. Nature Communications, 2020, 11, 3667.	12.8	13
59	Non-destructive thickness characterisation of 3D multilayer semiconductor devices using optical spectral measurements and machine learning. Light Advanced Manufacturing, 2021, 2, 9.	5.1	13
60	Synchronization of an optical frequency comb and a microwave oscillator with 53â€‰â€‰zs/Hz^{1/2} resolution and 10⁻²⁰-level stability. Photonics Research, 2022, 10, 365.	7.0	13
61	Compact Phase Detector for Optical-Microwave Synchronization Using Polarization Modulation. Journal of Lightwave Technology, 2018, 36, 4267-4272.	4.6	11
62	Remote Laser-Microwave Synchronization Over Kilometer-Scale Fiber Link With Few-Femtosecond Drift. Journal of Lightwave Technology, 2014, 32, 3742-3748.	4.6	9
63	Ultralow-noise microwave extraction from optical frequency combs using photocurrent pulse shaping with balanced photodetection. Scientific Reports, 2021, 11, 17809.	3.3	9
64	Robust, low-noise, polarization-maintaining mode-locked Er-fiber laser with a planar lightwave circuit (PLC) device as a multi-functional element. Optics Letters, 2017, 42, 1472.	3.3	9
65	A 360-fs-Time-Resolution 7-bit Stochastic Time-to-Digital Converter With Linearity Calibration Using Dual Time Offset Arbiters in 65-nm CMOS. IEEE Journal of Solid-State Circuits, 2021, 56, 940-949.	5.4	8
66	Photonic Analog-to-Digital Conversion with Femtosecond Lasers. Frequenz, 2008, 62, .	0.9	5
67	Subâ€10â€fs Timing for Ultrafast Electron Diffraction with THzâ€Driven Streak Camera. Laser and Photonics Reviews, 2021, 15, 2000326.	8.7	5
68	Long-Term Femtosecond Timing Link Stabilization Using a Single-Crystal Balanced Cross-Correlator. , 2007, , .		4
69	Femtosecond Laser-Based Microwave Signal Generation and Distribution. Journal of Lightwave Technology, 2016, 34, 4631-4638.	4.6	4
70	Long-Term Stable Timing Distribution of an Ultrafast Optical Pulse Train over Multiple Fiber Links with Polarization Maintaining Output. , 2009, , .		4
71	Attosecond-resolution timing jitter characterization of free-running mode-locked lasers. , 2008, , .		3
72	Long-term stable sub-femtosecond synchronization of microwave signals with mode-locked Er-fiber lasers. , 2012, , .		3

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73	High Precision Synchronization of a Large-scale Microwave Network over Stabilized Fiber Links. , 2016, , .		3
74	Reduction of timing jitter to the sub-20-attosecond regime in free-running femtosecond mode-locked fiber lasers. , 2013, , .		3
75	Femtosecond precision timing distribution for accelerators and Light Sources. , 2010, , .		2
76	Low-Noise Repetition-Rate Multiplication by Injection Locking and Gain- Saturated Amplification. IEEE Photonics Technology Letters, 2019, 31, 997-1000.	2.5	2
77	Femtosecond synchronization of multiple mode-locked lasers and a microwave oscillator by multicolor electro-optic sampling. Optics Letters, 2020, 45, 3155.	3.3	2
78	Optical and microwave timing transfer and synchronization using optical pulse trains. , 2008, , .		1
79	Low-drift and low-jitter microwave signal synthesis from mode-locked lasers. , 2008, , .		1
80	Sub-femtosecond timing distribution of an ultrafast optical pulse train over multiple fiber links. , 2008, , .		1
81	Long-term, Long-distance, All-optical Synchronization of Ultrafast Fiber Lasers at the Quantum Limit. , 2010, , .		1
82	Femtosecond lasers for attosecond timing control. , 2010, , .		1
83	Integrated optical phase locked loop. , 2011, , .		1
84	Microwave synthesis and remote transfer using attosecond-jitter mode-locked fiber lasers. , 2014, , .		1
85	Ultrahigh-precision measurement and optimization of timing jitter in mode-locked lasers. , 2015, , .		1
86	Low-noise optical frequency combs and their applications in microwave photonics. , 2016, , .		1
87	A compact optical-microwave phase detector based on a polarization modulator. , 2017, , .		1
88	Sub-femtosecond timing jitter optical pulse trains from mode-locked Er-fiber lasers. , 2011, , .		1
89	Microwave signal synchronized with a mode-locked Er-fiber laser with ultralow residual phase noise and drift. , 2012, , .		1
90	All-fiber repetition-rate stabilization of mode-locked lasers for ultralow-noise microwave generation. , 2016, , .		1

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91	Chip-scale power booster for light. Science, 2022, 376, 1269-1269.	12.6	1
92	Long-Term Stable Microwave Signal Extraction from Mode-Locked Lasers. , 2007, , .		0
93	Large Scale, Femtosecond Timing Distribution. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
94	Large-Scale, Long-Term Stable Femtosecond Timing Distribution and Synchronization Systems. LEOS Summer Topical Meeting, 2007, , .	0.0	0
95	Microwave signal regeneration from mode-locked lasers with 1.9×10^{−19} stability. , 2008, , .		0
96	Ultra-low timing and intensity noise from mode-locked Yb-fiber lasers at close-to-zero intra-cavity dispersion. , 2011, , .		0
97	Progress in ultrafast fiber lasers for ultralow-jitter signal sources. Proceedings of SPIE, 2012, , .	0.8	0
98	Fiber optic cable-based high-resolution, long-distance VGA extenders. Proceedings of SPIE, 2013, , .	0.8	0
99	Microwave transfer through optical frequency comb toward 10^{−19} instability using fiber-loop optical-microwave phase detectors. , 2014, , .		0
100	Attosecond-jitter fiber and waveguide lasers and their ultrahigh-precision microwave photonic applications. , 2014, , .		0
101	All-fiber soliton Er-laser mode-locked by a planar lightwave circuit (PLC)-based CNT saturable absorber. , 2015, , .		0
102	Attosecond-precision microwave photonics based on ultralow-jitter mode-locked lasers. , 2015, , .		0
103	Timing Jitter of Normal-Dispersion Mode-Locked Er- and Yb-Fiber Lasers. , 2015, , .		0
104	Ultralow-Jitter Mode-Locked Fiber Lasers and Their Applications. , 2015, , .		0
105	Introduction to the Issue on Reports From the Invited and Postdeadline Speakers of CLEO 2016. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 3-5.	2.9	0
106	Simple and high-resolution timing jitter measurement method of optical frequency combs. , 2017, , .		0
107	Ultra-low phase noise synchronization of microwave sources with fiber-optic timing system. , 2017, , .		0
108	Simple all-fiber optical-microwave phase detector for subfemtosecond synchronization. , 2018, , .		0

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109	Low-Noise Ultrafast Fiber Lasers. , 2018, , .		0
110	High-precision and large-dynamic-range three-dimensional surface profilometry by comb-based time-of-flight detection. , 2021, , .		0
111	151-as jitter, 22-GHz pulse train from a silica microcomb. , 2021, , .		0
112	Synchronization of an optical frequency comb and a microwave oscillator with -174 dBc/Hz noise floor. , 2021, , .		0
113	Femtosecond synchronization of three mode-locked lasers and a microwave oscillator with multi-color timing detection. , 2021, , .		0
114	7-ENOB resolution photonic analog-to-digital conversion of narrowband microwave signals at 40 GHz. , 2008, , .		0
115	10-femtosecond Precision, Long-term Stable Timing Distribution Over Multiple Fiber Links. Springer Series in Chemical Physics, 2009, , 947-949.	0.2	0
116	Subfemtosecond-Drift Microwave Signal Synthesis from Femtosecond Mode-Locked Lasers. , 2010, , .		0
117	Phase noise measurement of mode locked lasers using guided wave PPKTP balanced cross correlators. , 2010, , .		0
118	Attosecond resolution timing jitter characterization of diode pumped femtosecond Cr:LiSAF lasers. , 2010, , .		0
119	Attosecond-resolution timing jitter characterization of Yb-fiber lasers in stretched-pulse and self-similar regimes. , 2011, , .		0
120	Attosecond-level timing jitter mode-locked fiber lasers. , 2012, , .		0
121	Femtosecond timing jitter from soliton fiber lasers mode-locked by carbon nanotube saturable absorbers. , 2012, , .		0
122	Characterization and suppression of excess timing noise in the indoor atmospheric transfer of optical pulse trains. , 2012, , .		0
123	Few-femtosecond jitter microwave signal generation from free-running mode-locked Er-fiber lasers. , 2013, , .		0
124	Attosecond Timing Jitter, CNT-Mode-Locked All-Fiber Laser at Telecom Wavelength. , 2013, , .		0
125	1.2-GHz repetition rate, diode-pumped femtosecond Yb:KYW laser mode-locked by a CNT saturable absorber. , 2013, , .		0
126	1.13-GHz Repetition Rate, Sub-Femtosecond Timing Jitter, CNT-Mode-Locked Ultrafast Yb:KYW Laser. , 2014, , .		0

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127	Timing jitter reduction in self-similar Yb-fiber lasers via narrow intra-cavity bandpass filtering. , 2014, , .		0
128	High-Precision Microwave Phase Transfer and Remote Synchronization Using Frequency Combs. , 2015, , .		0
129	Attosecond-Resolution Timing Jitter Spectrum Measurement of Free-Running Mode-Locked Lasers Over 10 Decades of Fourier Frequency. , 2015, , .		0
130	Attosecond-Resolution Time-of-Flight Stabilization of Optical Pulse Train in 76-m Indoor Atmospheric Link. , 2015, , .		0
131	200-MHz Repetition-Rate, All-Fiber Soliton Er-Laser Mode-Locked by a Planar Lightwave Circuit-Based Carbon Nanotube Saturable Absorber. , 2015, , .		0
132	Few-Femtosecond Synchronization Between a Few-MHz Ti:Sapphire Laser and a Multi-GHz Microwave Signal. , 2015, , .		0
133	All-fiber repetition-rate stabilization of mode-locked lasers to 1.7Ã—10â˜'13 instability with sub-fs integrated jitter. , 2016, , .		0
134	All-Fiber Mode-Locked Soliton Er-Lasers Employing Planar Lightwave Circuit (PLC) Devices. , 2016, , .		0
135	Optimized Spectral Filtering for Few-Femtosecond Timing Jitter from a Picosecond Fiber Laser. , 2016, , .		0
136	10-fs-level synchronization of a photocathode laser with an S-band RF oscillator for an RF photocathode gun. , 2016, , .		0
137	Noise reduction of nonlinear-amplifying-loop-mirror-based fiber lasers by combined intra- and extra-cavity filtering. , 2017, , .		0
138	Attosecond Relative Timing Jitter between Optical Pulses and Rising Edges of Photocurrent Pulses. , 2019, , .		0
139	Femtosecond Laser-Based Time-of-Flight (TOF) Sensors. , 2019, , .		0
140	Repetition-Rate Multiplication of Mode-locked Lasers Using Harmonic Injection Locking and Gain-Saturated SOA. , 2019, , .		0
141	Asymmetric fiber delay line interferometer based noise measurement platform for Er: fiber optical frequency combs. , 2019, , .		0
142	Rapid and Precise Displacement Measurement Using Time-of-Flight Detection of Femtosecond Optical Pulses. , 2019, , .		0
143	Frequency comb-based one-way RF frequency transfer across a 880-m-long outdoor atmospheric link with 10-16 instability. , 2019, , .		0
144	Precise and large-dynamic-range surface profilometry using time-of-flight detection of femtosecond optical pulses. , 2019, , .		0

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145	Polarization-maintaining (PM) nonlinear-amplifying-loop-mirror (NALM) mode-locked fiber laser utilizing a 3x3 coupler. , 2019, , .		0
146	Ultralow-jitter 22-GHz silica microcomb. , 2020, , .		0
147	All-fiber-photonic sub-10"14-level comb-line stabilization. , 2020, , .		0
148	Soliton Comb Generation from a Fabry-Perot Microresonator. , 2020, , .		0
149	Attosecond Timing in Photonic and Electronic Domains. , 2020, , .		0
150	Self-Stabilized Soliton Generation in a Microresonator Through Mode- Pulled Brillouin Lasing. , 2021, , .		0