

Valentin J Wittwer

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8082815/publications.pdf>

Version: 2024-02-01

62
papers

1,411
citations

304743

22
h-index

345221

36
g-index

62
all docs

62
docs citations

62
times ranked

1101
citing authors

#	ARTICLE	IF	CITATIONS
1	High-power MIXSEL: an integrated ultrafast semiconductor laser with 64 W average power. Optics Express, 2010, 18, 27582.	3.4	114
2	Ultrafast and widely tuneable vertical-external-cavity surface-emitting laser, mode-locked by a graphene-integrated distributed Bragg reflector. Optics Express, 2013, 21, 31548.	3.4	111
3	Femtosecond high-power quantum dot vertical external cavity surface emitting laser. Optics Express, 2011, 19, 8108.	3.4	98
4	Green-diode-pumped femtosecond Ti:Sapphire laser with up to 450 mW average power. Optics Express, 2015, 23, 30043.	3.4	79
5	Generation of 35-fs pulses from a Kerr lens mode-locked Yb:Lu ₂ O ₃ thin-disk laser. Optics Express, 2017, 25, 14918.	3.4	65
6	Experimentally verified pulse formation model for high-power femtosecond VECSELS. Applied Physics B: Lasers and Optics, 2013, 113, 133-145.	2.2	61
7	Femtosecond pulses from a modelocked integrated external-cavity surface emitting laser (MIXSEL). Optics Express, 2013, 21, 24904.	3.4	51
8	Experimental verification of soliton-like pulse-shaping mechanisms in passively mode-locked VECSELS. Optics Express, 2010, 18, 10143.	3.4	50
9	Few-cycle pulses from a graphene mode-locked all-fiber laser. Applied Physics Letters, 2015, 106, .	3.3	50
10	VECSEL gain characterization. Optics Express, 2012, 20, 4136.	3.4	47
11	Extreme ultraviolet light source at a megahertz repetition rate based on high-harmonic generation inside a mode-locked thin-disk laser oscillator. Optics Letters, 2017, 42, 5170.	3.3	39
12	Kerr lens mode-locked Yb:CALGO thin-disk laser. Optics Letters, 2018, 43, 879.	3.3	37
13	Femtosecond VECSEL with tunable multi-gigahertz repetition rate. Optics Express, 2011, 19, 23538.	3.4	36
14	Full stabilization and characterization of an optical frequency comb from a diode-pumped solid-state laser with GHz repetition rate. Optics Express, 2017, 25, 20437.	3.4	33
15	Timing Jitter Characterization of a Free-Running SESAM Mode-locked VECSEL. IEEE Photonics Journal, 2011, 3, 658-664.	2.0	31
16	Sub-100-fs Kerr lens mode-locked Yb:Lu ₂ O ₃ thin-disk laser oscillator operating at 21 W average power. Optics Express, 2019, 27, 16111.	3.4	29
17	Fiber grating compression of giant-chirped nanosecond pulses from an ultra-long nanotube mode-locked fiber laser. Optics Letters, 2015, 40, 387.	3.3	28
18	Highly efficient Q-switched Yb:YAG channel waveguide laser with 56 W of average output power. Optics Letters, 2016, 41, 4715.	3.3	26

#	ARTICLE	IF	CITATIONS
19	Carrier envelope offset frequency detection and stabilization of a diode-pumped mode-locked Ti:sapphire laser. Optics Letters, 2017, 42, 1035.	3.3	25
20	Carrier-envelope offset frequency stabilization of a gigahertz semiconductor disk laser. Optica, 2017, 4, 1482.	9.3	25
21	High-power dual-comb thin-disk laser oscillator for fast high-resolution spectroscopy. Optics Express, 2021, 29, 15104.	3.4	25
22	Broadband terahertz pulse generation driven by an ultrafast thin-disk laser oscillator. Optics Express, 2018, 26, 26377.	3.4	24
23	Sub-30-fs Yb:YAG thin-disk laser oscillator operating in the strongly self-phase modulation broadened regime. Optics Express, 2021, 29, 35929.	3.4	24
24	A Kerr polarization controller. Nature Communications, 2022, 13, 398.	12.8	23
25	Low repetition rate SESAM modelocked VECSEL using an extendable active multipass-cavity approach. Optics Express, 2012, 20, 27915.	3.4	21
26	Intra-oscillator high harmonic generation in a thin-disk laser operating in the 100-fs regime. Optics Express, 2021, 29, 5833.	3.4	21
27	Efficient 100-MW, 100-W, 50-fs-class Yb:YAG thin-disk laser oscillator. Optics Express, 2021, 29, 42075.	3.4	21
28	Performance scaling of a 10-GHz solid-state laser enabling self-referenced CEO frequency detection without amplification. Optics Express, 2020, 28, 12755.	3.4	19
29	Efficient few-cycle Yb-doped laser oscillator with Watt-level average power. Optics Express, 2022, 30, 2528.	3.4	16
30	Characterizing the carrier-envelope offset in an optical frequency comb without traditional f-to-2f interferometry. Optics Letters, 2015, 40, 5522.	3.3	15
31	First investigation of the noise and modulation properties of the carrier-envelope offset in a modelocked semiconductor laser. Optics Letters, 2016, 41, 3165.	3.3	15
32	Carrier-envelope offset stabilization of a GHz repetition rate femtosecond laser using opto-optical modulation of a SESAM. Optics Letters, 2017, 42, 4651.	3.3	15
33	All-fiber nonlinearity- and dispersion-managed dissipative soliton nanotube mode-locked laser. Applied Physics Letters, 2015, 107, .	3.3	14
34	Optical rectification of ultrafast Yb lasers: pushing power and bandwidth of terahertz generation in GaP. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 3039.	2.1	14
35	XUV Sources Based on Intra-Oscillator High Harmonic Generation With Thin-Disk Lasers: Current Status and Prospects. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-19.	2.9	12
36	Gain characterization and passive modelocking of electrically pumped VECSELS. Optics Express, 2012, 20, 24791.	3.4	11

#	ARTICLE	IF	CITATIONS
37	Absolute frequency referencing in the long wave infrared using a quantum cascade laser frequency comb. Optics Express, 2022, 30, 12891.	3.4	11
38	Coherently-averaged dual comb spectrometer at 7.7 μm with master and follower quantum cascade lasers. Optics Express, 2021, 29, 19126.	3.4	10
39	Frequency comb metrology with an optical parametric oscillator. Optics Express, 2016, 24, 8370.	3.4	9
40	High-power amplification of a femtosecond vertical external-cavity surface-emitting laser in an Yb:YAG waveguide. Optics Express, 2017, 25, 16527.	3.4	9
41	Carrier-envelope offset frequency stabilization of a thin-disk laser oscillator operating in the strongly self-phase modulation broadened regime. Optics Express, 2018, 26, 28461.	3.4	8
42	Diode-pumped Tm:KY(WO ₄) ₂ laser passively modelocked with a GaSb-SESAM. Optics Express, 2017, 25, 25760.	3.4	7
43	Intra-oscillator broadband THz generation in a compact ultrafast diode-pumped solid-state laser. Optics Express, 2021, 29, 23729.	3.4	7
44	Power-scaling of nonlinear-mirror modelocked thin-disk lasers. Optics Express, 2019, 27, 37349.	3.4	7
45	Frequency axis for swept dual-comb spectroscopy with quantum cascade lasers. Optics Letters, 2022, 47, 625.	3.3	7
46	Frequency Comb Stabilization of Ultrafast Lasers by Opto-Optical Modulation of Semiconductors. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-9.	2.9	6
47	69 W average power sub-100-fs Yb:YAG thin-disk laser. , 2021, , .		1
48	69-W Sub-100-fs Yb:YAG Thin-Disk Laser Oscillator. , 2021, , .		1
49	Yb:CALGO Oscillator Generates 31-fs Pulses with 389 mW at 29% Efficiency by Cross-Polarized Optical Pumping. , 2020, , .		1
50	Compact megahertz coherent XUV generation by HHG inside an ultrafast thin-disk laser. , 2017, , .		1
51	Frequency Comb Stabilization of a 50-fs Thin-Disk Laser Oscillator Operating in a Strongly SPM-broadened Regime. , 2018, , .		1
52	Ultrafast optical parametric oscillator pumped by a vertical external-cavity surface-emitting laser (VECSEL). Optics Express, 2017, 25, 28983.	3.4	0
53	Thin-Disk Laser Oscillator Driving THz Generation Up To 6 THz. , 2018, , .		0
54	Intra-Cavity Broadband THz Generation Inside a Diode-Pumped Solid-State Laser Oscillator. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
55	New horizons for high power broadband THz sources driven by ultrafast Yb-based thin-disk laser oscillators. , 2019, , .		0
56	Yb:CALGO bulk oscillator generating ultrashort pulses at high efficiency by cross-polarized optical pumping. EPJ Web of Conferences, 2020, 243, 10001.	0.3	0
57	Self-Referenced CEO Frequency Detection of a 10-GHz Laser Enabled by Highly Efficient Nonlinear Waveguides. , 2020, , .		0
58	Intra-Oscillator High Harmonic Generation in a ~100-fs Kerr-Lens Mode-Locked Yb:YAG Thin-Disk Laser. , 2020, , .		0
59	10-ÅμW, 30-eV High Harmonic Generation inside an Yb:YAG Thin-Disk Laser Oscillator. , 2021, , .		0
60	Powerful Sub-40-fs Yb:YAG Thin-Disk Laser Oscillator Operating in the Regime of Strong Self-Phase Modulation. , 2021, , .		0
61	High-Resolution Quantum Cascade Laser Dual-Comb Spectroscopy with Accurate Absolute Frequency Scale. , 2022, , .		0
62	High Harmonic Generation Inside Thin-Disk Laser Oscillators â€“ An Efficient and Single-Stage XUV Source. , 2022, , .		0