Marc Hanna

List of Publications by Year
in descending order

179	2,569	186265	233421
papers	citations	28 h-index	45 g-index

182	182	182	1697
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhanced intrapulse difference frequency generation in the mid-infrared by a spectrally dependent polarization state. Optics Letters, 2022, 47, 261.	3.3	13
2	Enhanced-efficiency of a mid-IR intrapulse difference-frequency generation. , 2022, , .		0
3	Ultra-broadband THz pulses with electric field amplitude exceeding 100 kV/cm at a 200 kHz repetition rate. Optics Express, 2022, 30, 15556.	3.4	13
4	Tunable, Broadband Mid-Infrared Source Based on Amplified Intrapulse Difference Frequency Generation. , 2022, , .		0
5	Nonlinear beam matching to gas-filled multipass cells. OSA Continuum, 2021, 4, 732.	1.8	10
6	Simple carrier-envelope phase control and stabilization scheme for difference frequency generation-based systems. Optics Express, 2021, 29, 16261.	3.4	4
7	Enhanced extreme ultraviolet high-harmonic generation from chromium-doped magnesium oxide. Applied Physics Letters, 2021, 118, .	3.3	22
8	Raman conversion in a multipass cell. , 2021, , .		0
9	Raman wavelength conversion in a multipass cell. Optics Letters, 2021, 46, 3380.	3.3	9
10	Single-stage few-cycle nonlinear compression of milliJoule energy Ti:Sa femtosecond pulses in a multipass cell. Optics Letters, 2021, 46, 5264.	3.3	13
11	Nonlinear Optics in Multipass Cells. Laser and Photonics Reviews, 2021, 15, 2100220.	8.7	27
12	Multipass cells: 1D numerical model and investigation of spatio-spectral couplings at high nonlinearity. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 993.	2.1	22
13	Hybrid pulse propagation model and quasi-phase-matched four-wave mixing in multipass cells. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 2982.	2.1	10
14	High repetition rate CEP-stable Yb-doped laser source for attoscience. , 2020, , .		0
15	High repetition rate CEP-stable Yb-doped fiber amplifier. , 2020, , .		0
16	Spectral compression in a multipass cell. Optics Express, 2020, 28, 21571.	3.4	8
17	High Efficiency, High Energy Few-Cycle Driver at 1-Î¼m. , 2019, , .		0
18	CEP-Stable 100 kHz Nonlinearly Compressed YDFA Source for HHG. , 2019, , .		0

#	Article	IF	Citations
19	Soliton Compression in a Multipass Cell. , 2019, , .		1
20	High-power two-cycle ultrafast source based on hybrid nonlinear compression. Optics Express, 2019, 27, 1958.	3.4	42
21	Orbital angular momentum from semiconductor high-order harmonics. Optics Letters, 2019, 44, 546.	3.3	28
22	CEP-stable high-energy ytterbium-doped fiber amplifier. Optics Letters, 2019, 44, 3909.	3.3	13
23	Sub-380 mrad CEP-stable Yb-doped amplifier delivering 60 microjoules, 80 fs pulses at 100 kHz. , 2019, , .		0
24	Compact, high-efficiency, ultrafast 2-cycles sources at 1030nm. , 2019, , .		0
25	Efficient, ultrafast few-cycle driver based on hybrid nonlinear compression. , 2019, , .		0
26	High-efficiency nonlinear compression using a gas-filled multipass cell. , 2019, , .		0
27	Spatio-spectral structures in high harmonic generation driven by tightly focused high repetition rate lasers. Journal of the Optical Society of America B: Optical Physics, 2018, 35, A6.	2.1	12
28	Dual-color deep-tissue three-photon microscopy with a multiband infrared laser. Light: Science and Applications, 2018, 7, 12.	16.6	91
29	Nonlinear pulse compression based on a gas-filled multipass cell. Optics Letters, 2018, 43, 2252.	3.3	83
30	Few cycle pulses IR laser system based on a bandwidth-optimized high energy Yb-doped fiber laser: Application to XUV generation. , 2018, , .		0
31	Coherent combining of high brightness tapered lasers in master oscillator power amplifier configuration. , 2018, , .		1
32	Self-compression in a multipass cell. Optics Letters, 2018, 43, 5643.	3.3	25
33	High power mid-IR OPCPA system pumped by a femtosecond Yb-doped fiber amplifier. , 2017, , .		0
34	Coherent beam combining architectures for high power tapered laser arrays. , 2017, , .		10
35	Generation of few cycle pulses from a bandwidth-optimized high energy Yb-doped fiber laser source. , 2017, , .		0
36	Coherent beam combining of high-power tapered amplifiers. , 2017, , .		0

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37	Coherent combining architectures for high-brightness laser diodes. , 2017, , .		3
38	High-energy few-cycle Yb-doped fiber amplifier source based on a single nonlinear compression stage. Optics Express, 2017, 25, 7530.	3.4	49
39	Coherent beam combining of a narrow-linewidth long-pulse Er^3+-doped multicore fiber amplifier. Optics Express, 2017, 25, 9528.	3.4	14
40	Nonlinear temporal compression in multipass cells: theory. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1340.	2.1	90
41	Simple phase locker for coherent beam combining of multicore fiber amplifiers. , 2017, , .		0
42	Coherent combining efficiency in strongly saturated divided-pulse amplification systems. Optics Express, 2016, 24, 25329.	3.4	6
43	Power dependence on the nonlinear interaction enhancement in a coherently excited microcavity. Proceedings of SPIE, 2016, , .	0.8	0
44	High energy pulsewidth tunable CPA free picosecond source. Proceedings of SPIE, 2016, , .	0.8	0
45	Coherent combination of ultrafast fiber amplifiers. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 062004.	1.5	25
46	Contradiction within wave optics and its solution within a particle picture: comment. Optics Express, 2016, 24, 2106.	3.4	1
47	Supercontinuum-seeded few-cycle mid-infrared OPCPA system. Optics Express, 2016, 24, 26494.	3.4	49
48	High-power operation of coherently coupled tapered laser diodes in an external cavity. , 2016, , .		2
49	10Î¼j, ultrashort sub-100 fs FCPA synthesizer. Proceedings of SPIE, 2016, , .	0.8	1
50	Rear-side resonator architecture for the passive coherent combining of high-brightness laser diodes. Optics Letters, 2016, 41, 950.	3.3	11
51	Coherent Beam Combining in Er3+ Doped Multicore Fiber with 1480nm Core Pumping. , 2016, , .		0
52	Hybrid Yb-doped-fiber/Yb:YAG architecture for high-energy, high-power, picosecond source tunable in duration. , 2016, , .		0
53	Passive coherent combining of two tapered laser diodes in an interferometric external cavity. , 2015, , .		0
54	Enhanced nonlinear interaction in a microcavity under coherent excitation. Optics Express, 2015, 23, 29964.	3.4	15

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55	Separate phase-locking and coherent combining of two laser diodes in a Michelson cavity. Proceedings of SPIE, 2015, , .	0.8	3
56	Spectral pulse synthesis in large-scale ultrafast coherent combining systems. European Physical Journal: Special Topics, 2015, 224, 2545-2549.	2.6	1
57	Hybrid high-energy high-power pulsewidth-tunable picosecond source. Optics Letters, 2015, 40, 5184.	3.3	8
58	Nonlinear compression of ultrafast industrial lasers in hypocyloid-core Kagome hollow-core fiber. , 2015, , .		0
59	High-energy chirped- and divided-pulse Sagnac femtosecond fiber amplifier. Optics Letters, 2015, 40, 89.	3.3	27
60	Spectral and spatial full-bandwidth correlation analysis of bulk-generated supercontinuum in the mid-infrared. Optics Letters, 2015, 40, 673.	3.3	17
61	Coherent beam combining with an ultrafast multicore Yb-doped fiber amplifier. Optics Express, 2015, 23, 5406.	3.4	51
62	Passive coherent combining of CEP-stable few-cycle pulses from a temporally divided hollow fiber compressor. Optics Letters, 2015, 40, 709.	3.3	25
63	High-energy, 34 fs, fiber source via nonlinear compression in hypocycloid-core Kagome fiber. , 2015, , .		0
64	Nonlinear compression of high energy fiber amplifier pulses in air-filled hypocycloid-core Kagome fiber. Optics Express, 2015, 23, 7416.	3.4	38
65	Chirped and divided-pulse Sagnac fiber amplifier. Proceedings of SPIE, 2015, , .	0.8	0
66	High average power 600â€‰Î¼J ultrafast fiber laser for micromachining application. Journal of Laser Applications, 2015, 27, S29301.	1.7	6
67	High Repetition Rate Yb:CaF₂ Multipass Amplifiers Operating in the 100-<roman>mJ</roman> Range. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 464-474.	2.9	14
68	Divided-pulse nonlinear compression. , 2014, , .		0
69	Spectral synthesis to overcome gain-narrowing in femtosecond fiber amplifiers. , 2014, , .		0
70	Coherent excitation of a nonlinear silicon microcavity. , 2014, , .		0
71	High average power and energetic femtosecond fiber laser using chirped- and divided-pulse amplification. , 2014, , .		0
72	High-energy post-compression in hypocycloid-core Kagome fiber. , 2014, , .		0

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73	Analysis of Limitations in Divided-Pulse Nonlinear Compression and Amplification. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 619-623.	2.9	14
74	ICAN as a new laser paradigm for high energy, high average power femtosecond pulses. European Physical Journal: Special Topics, 2014, 223, 1189-1195.	2.6	21
75	Energetic and high average power femtosecond fiber laser using chirped- and divided-pulse amplification. , 2014, , .		0
76	Study on the influence of repetition rate and pulse duration on ablation efficiency using a new generation of high power ytterbium doped fiber ultrafast laser. Proceedings of SPIE, 2013, , .	0.8	7
77	Femtosecond fiber chirped- and divided-pulse amplification. , 2013, , .		0
78	Narrow-linewidth UV laser source at 257 nm. , 2013, , .		0
79	Compact, simple, and robust cross polarized wave generation source of few-cycle, high-contrast pulses for seeding petawatt-class laser systems. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 2607.	2.1	16
80	Hybrid master oscillator power amplifier high-power narrow-linewidth nanosecond laser source at 257Ânm. Optics Letters, 2013, 38, 995.	3.3	28
81	Energy scaling of a nonlinear compression setup using passive coherent combining. Optics Letters, 2013, 38, 4437.	3.3	33
82	Two-channel pulse synthesis to overcome gain narrowing in femtosecond fiber amplifiers. Optics Letters, 2013, 38, 5430.	3.3	13
83	Energy scaling of ultrafast fiber systems using chirped and divided pulse amplification. , 2013, , .		0
84	Femtosecond fiber chirped- and divided-pulse amplification system. Optics Letters, 2013, 38, 106.	3.3	82
85	Parameters of influence in surface ablation of metals with using a high power tunable ultrafast laser. , 2013, , .		4
86	Investigation on repetition rate and pulse duration influences on ablation efficiency of metals using a high average power Yb-doped ultrafast laser. MATEC Web of Conferences, 2013, 8, 04010.	0.2	0
87	Spatio-temporal coherent combining scheme for fiber-based nonlinear compression. , 2013, , .		0
88	Power and energy scaling of ultrafast fiber systems using chirped and divided pulse amplification for high end applications. , 2013, , .		0
89	High power Yb:CALGO thin-disk lasers in cw and fs regime. , 2013, , .		1
90	Measurement and influence of spectral phase mismatch in femtosecond coherent beam combining systems. , 2012, , .		0

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91	Impact of spectral phase mismatch on femtosecond coherent beam combining systems. Optics Letters, 2012, 37, 650.	3.3	13
92	Complete measurement of fiber modal content by wavefront analysis. Optics Express, 2012, 20, 4074.	3.4	46
93	Passive coherent combination of two ultrafast rod type fiber chirped pulse amplifiers. Optics Letters, 2012, 37, 1460.	3.3	32
94	High peak-power stretcher-free femtosecond fiber amplifier using passive spatio-temporal coherent combining. Optics Express, 2012, 20, 21627.	3.4	38
95	Passive coherent beam combining of two femtosecond fiber chirped-pulse amplifiers. , 2012, , .		0
96	Frequency conversion in the visible and UV regions of a high average power and high peak power ultrafast fiber amplifier. , 2012, , .		0
97	2 GW peak power ultrafast fiber system using passive coherent beam combining. , 2012, , .		0
98	Coherent combining of two femtosecond chirped-pulse amplifiers in a passive architecture. , 2012, , .		0
99	High energy diode pumped Yb:doped crystal amplifiers for ultrashort OPCPA. , 2012, , .		0
100	Coherent beam combining of two femtosecond fiber chirped-pulse amplifiers. Optics Letters, 2011, 36, 621.	3.3	102
101	Temporal cleaning of a high-energy fiber-based ultrafast laser using cross-polarized wave generation. Optics Letters, 2011, 36, 1830.	3.3	10
102	Passive coherent beam combining of two femtosecond fiber chirped-pulse amplifiers. Optics Letters, 2011, 36, 4023.	3.3	38
103	High power femtosecond chirped pulse amplification in large mode area photonic bandgap Bragg fibers. Applied Physics B: Lasers and Optics, 2011, 103, 615-621.	2.2	6
104	Coherent combining of two femtosecond fiber chirped pulse amplifiers. , 2011, , .		2
105	Yb doped Fluorides for High Power and Short-Pulse Laser Applications. , 2011, , .		0
106	All-Silica Photonic Bandgap Fiber Oscillators and Amplifiers. , 2011, , .		2
107	High-energy femtosecond fiber laser at 1.6 microns for corneal surgery. , 2010, , .		4
108	Frequency conversion from near-infrared to mid-infrared in highly nonlinear optical fibres. , 2010, , .		3

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109	Amplification of femtosecond pulses in large mode area Bragg fibers. , 2010, , .		1
110	Coherent fiber combining by digital holography. , 2010, , .		0
111	Wavefront control by digital holography in an Yb-doped multi-core fiber amplifier. , 2010, , .		0
112	Ultrashort pulse laser surgery of the cornea and the sclera. Journal of Optics (United Kingdom), 2010, 12, 084002.	2.2	56
113	Greffes de cornÃ©e automatisÃ©es par laser femtoseconde optimisÃ© et systÃ¨me de contrÃ1e aberromÃ©trique. Irbm, 2010, 31, 97-100.	5.6	1
114	Photonic bandgap fibre oscillators and amplifiers. Optical Fiber Technology, 2010, 16, 419-427.	2.7	4
115	Dual-pumping scheme for high-energy femtosecond Er-doped fiber laser at 1.6 Âµm. , 2010, , .		0
116	Amplification of femtosecond pulses in two-stage chirped pulse amplification system based on large mode area photonic bandgap fibres. , 2010, , .		0
117	Mid-Infrared Supercontinuum Generation in Lead-Bismuth-Gallium Oxide Glass Photonic Crystal Fiber. , 2010, , .		1
118	Amplification of Femtosecond Pulses in Large Mode Area Photonic Bandgap Bragg Fiber. , 2010, , .		1
119	Mid-IR Supercontinuum in a Fluorozirconate Fiber Pumped by a Femtosecond CPA System at 1.6Âµm. , 2010, , .		1
120	Impact of self-phase modulation on coherently combined fiber chirped-pulse amplifiers. Optics Letters, 2010, 35, 1293.	3.3	12
121	Wavefront control of a multicore ytterbium-doped pulse fiber amplifier by digital holography. Optics Letters, 2010, 35, 1428.	3.3	19
122	Photonic bandgap fibres for nonlinear optics. , 2010, , .		0
123	Diffraction-limited operation from multimode and multi-core fibers using active digital holography precompensation. , 2010, , .		0
124	High-energy femtosecond Er-doped fiber laser at 1.6 Î¼m: influence of pumping scheme. , 2010, , .		0
125	Distributed nonlinear fiber chirped-pulse amplification system. , 2009, , .		0
126	Generation of 49 fs, 41 MW peak power pulses from fiber laser using nonlinear compression in rod type fiber. , 2009, , .		0

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127	Compensation of Gain Narrowing by Self-Phase Modulation in High-Energy Ultrafast Fiber Chirped-Pulse Amplifiers. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 182-186.	2.9	18
128	Low-repetition-rate femtosecond operation in extended-cavity mode-locked Yb:CALGO laser. Optics Letters, 2009, 34, 196.	3.3	40
129	Diode-pumped 99 fs Yb:CaF_2 oscillator. Optics Letters, 2009, 34, 1474.	3.3	64
130	Microjoule femtosecond fiber laser at 16 Î¼m for corneal surgery applications. Optics Letters, 2009, 34, 1991.	3.3	101
131	Mode-locked operation of a diode-pumped femtosecond Yb:SrF_2 laser. Optics Letters, 2009, 34, 2354.	3.3	25
132	Distributed nonlinear fiber chirped-pulse amplifier system. Optics Express, 2009, 17, 10835.	3.4	19
133	Nonlinear compression in a rod-type fiber for high energy ultrashort pulse generation. Optics Express, 2009, 17, 11155.	3.4	17
134	Phase and amplitude control of a multimode LMA fiber beam by use of digital holography. Optics Express, 2009, 17, 13000.	3.4	36
135	Stretcher-free high energy nonlinear amplification of femtosecond pulses in rod-type fibers. Optics Letters, 2008, 33, 107.	3.3	80
136	Active spectral phase control by use of an acousto-optic programmable filter in high-repetition-rate sub-80 fs nonlinear fiber amplifiers. Optics Letters, 2008, 33, 1431.	3.3	9
137	Efficient versatile-repetition-rate picosecond source for material processing applications. Applied Optics, 2008, 47, 967.	2.1	14
138	Simple and general method to calculate the dispersion properties of complex and aberrated stretchers-compressors. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 754.	2.1	9
139	Picosecond polarized supercontinuum generation controlled by intermodal four-wave mixing for fluorescence lifetime imaging microscopy. Optics Express, 2008, 16, 18844.	3.4	9
140	Direct Amplification of Femtosecond Pulses in Ytterbium-Doped Fiber Amplifiers. Fiber and Integrated Optics, 2008, 27, 467-483.	2.5	0
141	Two-port vectorial terahertz electro-optic sampling system. Applied Physics Letters, 2008, 92, .	3.3	9
142	Parabolic fiber amplifier beyond the gain bandwidth limits. Proceedings of SPIE, 2008, , .	0.8	0
143	Direct pulse compression of yb-doped fiber amplified pulses by use of a dazzler. , 2008, , .		0
144	High-energy direct amplification of femtosecond pulses in the nonlinear regime. , 2008, , .		0

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145	Low-repetition-rate femtosecond operation in long cavity modelocked Yb:CALGO laser. , 2008, , .		0
146	High energy direct amplification of femtosecond pulse in a highly non-linear fiber amplifier. , 2008, , .		0
147	Supercontinuum generation in a highly birefringent photonic crystal fibre seeded by a low-repetition rate picosecond infrared laser. , 2007, , .		0
148	Continuous-wave and femtosecond laser operation of Yb:CaGdAlO_4 under high-power diode pumping. Optics Letters, 2007, 32, 1962.	3.3	87
149	Visible supercontinuum generation controlled by intermodal four-wave mixing in microstructured fiber. Optics Letters, 2007, 32, 2173.	3.3	71
150	Generation of 63 fs 41 MW peak power pulses from a parabolic fiber amplifier operated beyond the gain bandwidth limit. Optics Letters, 2007, 32, 2520.	3.3	65
151	Third-order spectral phase compensation in parabolic pulse compression. Optics Express, 2007, 15, 9372.	3.4	26
152	Alternate Multiwavelength Picosecond Pulse Generation by Use of an Unbalanced Machâ€“Zehnder Interferometer in a Mode-locked Fiber Ring Laser. IEEE Journal of Quantum Electronics, 2007, 43, 85-96.	1.9	2
153	Experimental Measurement of Optical Phase Variance in RZ-DPSK Systems Using Direct Detection After Demodulation by an MZDI. IEEE Photonics Technology Letters, 2006, 18, 1990-1992.	2.5	2
154	New Yb-doped crystals for high-power and ultrashort lasers. , 2006, , .		12
155	Reduction of Gordon-Mollenauer phase noise in dispersion-managed systems using in-line spectral inversion. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 2019.	2.1	5
156	Fiber optical parametric chirped-pulse amplification in the femtosecond regime. Optics Express, 2006, 14, 2783.	3.4	48
157	Stabilization of an actively mode-locked erbium-doped fiber ring laser by multi-harmonic phase modulation. , 2006, , .		0
158	Numerical and experimental study of an alternate multiwavelength mode-locked fiber ring laser. , 2006, , .		1
159	Stabilization of an actively modelocked fibre laser by multi-harmonic phase modulation. Optics Communications, 2005, 256, 394-399.	2.1	2
160	From Flow to Map in an Experimental High-Dimensional Electro-Optic Nonlinear Delay Oscillator. Physical Review Letters, 2005, 95, 043903.	7.8	33
161	Optical pulse generation using soliton-assisted time-lens compression. Optics Express, 2005, 13, 1743.	3.4	21
162	Broad-band and ultrasensitive pulse characterization using frequency-resolved optical gating via four-wave mixing in a semiconductor optical amplifier. IEEE Photonics Technology Letters, 2005, 17, 157-159.	2.5	14

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163	Reduced-bandwidth duobinary differential continuous-phase Modulation format for optical communications. IEEE Photonics Technology Letters, 2005, 17, 1331-1333.	2.5	3
164	Numerical and theoretical analysis of an alternate multiwavelength mode-locked fiber laser. IEEE Photonics Technology Letters, 2005, 17, 2295-2297.	2.5	1
165	Generation of interleaved pulses on time-wavelength grid by actively modelocked fibre laser. Electronics Letters, 2004, 40, 901.	1.0	6
166	Effect of sliding filters on the soliton optical phase jitter in constant-dispersion systems. Optics Communications, 2004, 231, 181-185.	2.1	5
167	Alternate Multiwavelength Modelocked Fiber Laser. IEEE Photonics Technology Letters, 2004, 16, 1816-1818.	2.5	9
168	Electro-optical chaos for multi-10â€…Gbitâˆ•s optical transmissions. Electronics Letters, 2004, 40, 898.	1.0	67
169	Calculation of optical phase jitter in dispersion-managed systems by use of the moment method. Journal of the Optical Society of America B: Optical Physics, 2004, 21, 24.	2.1	15
170	Reduction of phase jitter in dispersion-managed systems by in-line filtering. Optics Letters, 2004, 29, 688.	3.3	8
171	Electro-optic nonlinear oscillator for ultra-fast secure chaos communication. , 2004, , .		0
172	Spectral method for the simultaneous determination of uncorrelated and correlated amplitude and timing jitter. Applied Physics Letters, 2002, 80, 3694-3696.	3.3	11
173	Reduction of power fluctuations in ultrafast optically time-division-multiplexed pulse trains by use of a nonlinear amplifying loop mirror. IEEE Photonics Technology Letters, 2002, 14, 690-692.	2.5	7
174	Microcavity-enhanced surface-emitted second-harmonic generation for ultrafast all-optical signal processing. IEEE Journal of Quantum Electronics, 2002, 38, 19-30.	1.9	12
175	Complete intensity and chirp characterisation of mW peak power ps pulses at 10â€…GHz propagating over 308â€…km in fibre recirculation loop. Electronics Letters, 2002, 38, 1696.	1.0	3
176	Performance assessment of DPSK soliton transmission system. Electronics Letters, 2001, 37, 644.	1.0	11
177	Microcavity-enhanced surface-emitted second-harmonic generation from 200 fs pulses at 1.5 Î¼m. Applied Physics Letters, 2001, 78, 3406-3408.	3.3	3
178	Experimental investigation of soliton optical phase jitter. IEEE Journal of Quantum Electronics, 2000, 36, 1333-1338.	1.9	11
179	Soliton optical phase control by use of in-line filters. Optics Letters, 1999, 24, 732.	3.3	31