David G Lancaster

List of Publications by Year
in descending order

143	2,106	201658 27	254170 43
papers	citations	h-index	g-index

145	145	145	1616
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Efficient coupling between single mode fibers and glass chip waveguides via graded refractive index fiber tips. Optics Express, 2022, 30, 12294.	3.4	4
2	Temperature-Compensated Interferometric Torque Sensor With Bi-Directional Coiling. Journal of Lightwave Technology, 2021, 39, 4166-4173.	4.6	1
3	Graded-index fiber on-chip absorption spectroscopy. , 2021, , .		0
4	Two-dimensional mapping of surface scatterers on an optical fiber core using selective mode launching. APL Photonics, 2021, 6, 026105.	5.7	1
5	Design considerations for graded index fiber tip Fabryâ€“Perot interferometers. Measurement Science and Technology, 2021, 32, 055201.	2.6	3
6	Femtosecond laser induced low propagation loss waveguides in a lead-germanate glass for efficient lasing in near to mid-IR. Scientific Reports, 2021, 11, 10742.	3.3	11
7	Design guidelines for collimating or focusing graded-index fiber tips. Optics Express, 2021, 29, 29982.	3.4	3
8	On-chip absorption spectroscopy enabled by graded index fiber tips. Biomedical Optics Express, 2021, 12, 181.	2.9	5
9	Light-Sheet Skew Ray-Enhanced Localized Surface Plasmon Resonance-Based Chemical Sensing. ACS Sensors, 2020, 5, 127-132.	7.8	3
10	Short-wavelength infrared reflectance spectroscopy of minerals by supercontinuum illumination and speckle reduction. Minerals Engineering, 2020, 156, 106528.	4.3	4
11	Fiber-Optic Skew Ray Sensors. Sensors, 2020, 20, 2499.	3.8	1
12	Lensed GRIN Fiber-Optic Fabry-Perot Interferometers. , 2020, , .		2
13	Spectroscopic analysis and laser simulations of Yb³⁺/Ho³⁺ co-doped lead-germanate glass. Optical Materials Express, 2020, 10, 2819.	3.0	12
14	Towards distributed particle sensing using a few-mode exposed-core optical fibre with a spatially referenced evanescent field. , 2020, , .		0
15	Supercontinuum laser illumination for NIR reflectance spectroscopy of minerals and speckle reduction. , 2020, , .		1
16	Nitrate sensing using optical properties of PEDOT at the tip of the fibre. , 2020, , .		0
17	Localized surface plasmons excited by skew rays. , 2020, , .		0
18	Single-peak fiber Bragg gratings in suspended-core optical fibers. Optics Express, 2020, 28, 23354.	3.4	3

#	Article	IF	Citations
19	A Multiple-Waveguide Mode-Locked Chip-Laser Architecture. , 2019, , .		1
20	Optical hygrometer using light-sheet skew-ray probed multimode fiber with polyelectrolyte coating. Sensors and Actuators B: Chemical, 2019, 296, 126685.	7.8	9
21	Short-Range Non-Bending Fully Distributed Water/Humidity Sensors. Journal of Lightwave Technology, 2019, 37, 2014-2022.	4.6	6
22	Light-Sheet Skew-Ray Enhanced Pump-Absorption for Sensing. Journal of Lightwave Technology, 2019, 37, 2140-2146.	4.6	5
23	Passively Mode-Locked Depressed-Cladding Waveguide Laser in Yb Fluorozirconate Glass. , 2019, , .		0
24	Broadband Dual-Comb Spectroscopy of Methane with a Free-Running Erbium Chip Laser. , 2019, , .		0
25	Versatile Waveguide Chip Laser for 2.9 Î¼m Emission. , 2019, , .		0
26	An ultra-stable 2.9 Î¼m guided-wave chip laser and application to nano-spectroscopy. APL Photonics, 2019, 4, 110802.	5.7	0
27	Stability of Grating-Based Optical Fiber Sensors at High Temperature. IEEE Sensors Journal, 2019, 19, 2978-2983.	4.7	26
28	Single-frequency mid-infrared waveguide laser. Optics Express, 2019, 27, 33737.	3.4	2
29	Methane spectroscopy using a free-running chip-based dual-comb laser. Optics Letters, 2019, 44, 4375.	3.3	11
30	Microchip and ultra-fast laser inscribed waveguide lasers in Yb³⁺germanate glass. Optical Materials Express, 2019, 9, 3557.	3.0	11
31	Towards new fiber optic sensors based on the vapor deposited conducting polymer PEDOT:Tos. Optical Materials Express, 2019, 9, 4517.	3.0	4
32	Microstructured optical fiber high-temperature sensors. , 2019, , .		0
33	Free-running optical frequency combs for remote sensing. , 2019, , .		1
34	Narrow linewidth single-mode chip laser operating at 2.9 Âµm. , 2019, , .		0
35	Sensitized Light Pipes: Multimode Fibers Empowered by Skew Rays. , 2019, , .		0
36	Multi-point high temperature optical fiber sensor. , 2019, , .		0

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37	Mode-locked chip-lasers with multiple waveguides. , 2019, , .		0
38	Multi-point optical fiber pressure sensor. , 2019, , .		4
39	Femtosecond laser inscribed waveguide and micro-chip laser operation at 1.07Î¼m in Yb3+ doped germanate glass. , 2019, , .		1
40	Toward a new sensing platform based on conducting polymer: thickness measurement and the effect of different oxidant solution on damage threshold. , 2019, , .		0
41	Passive mode-locked Yb fluorozirconate glass waveguide laser. , 2019, , .		0
42	Recent Progress in Advanced Humidity Sensors. Journal of Physics: Conference Series, 2018, 1065, 252008.	0.4	0
43	Double edge-diffraction mediated virtual shadow for distance metrology. New Journal of Physics, 2018, 20, 103029.	2.9	2
44	Synchronised dual-wavelength mode-locking in waveguide lasers. Scientific Reports, 2018, 8, 7821.	3.3	10
45	Widely tunable, high slope efficiency waveguide lasers in a Yb-doped glass chip operating at 1â€‰â€‰Î¼m. Optics Letters, 2018, 43, 1902.	3.3	12
46	Highly coherent free-running dual-comb chip platform. Optics Letters, 2018, 43, 1814.	3.3	19
47	Optical Microfiber Technology for Current, Temperature, Acceleration, Acoustic, Humidity and Ultraviolet Light Sensing. Sensors, 2018, 18, 72.	3.8	22
48	Femtosecond-laser-written Microstructured Waveguides in BK7 Glass. Scientific Reports, 2018, 8, 10377.	3.3	23
49	Force Sensors Using the Skew-Ray-Probed Plastic Optical Fibers. IEEE Photonics Journal, 2018, 10, 1-8.	2.0	6
50	Force Sensors based on Skew-ray-probed Optical Fibers. , 2018, , .		0
51	Low-noise dual-comb platform based on mode-locked lasers in a multi-waveguide chip. , 2018, , .		0
52	Photodetector based on Vernier-Enhanced Fabry-Perot Interferometers with a Photo-Thermal Coating. Scientific Reports, 2017, 7, 41895.	3.3	4
53	Mode-locked sub 200 fs laser pulses from an Er-Yb-Ce ZBLAN waveguide laser. , 2017, , .		0
54	Photodetector with photothermal cascaded Fabry-Perot etalons. Proceedings of SPIE, 2017, , .	0.8	1

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55	Gold-Decorated Porous Silicon Nanopillars for Targeted Hyperthermal Treatment of Bacterial Infections. ACS Applied Materials & Interfaces, 2017, 9, 33707-33716.	8.0	47
56	Ultra-fast Hygrometer based on U-shaped Optical Microfiber with Nanoporous Polyelectrolyte Coating. Scientific Reports, 2017, 7, 7943.	3.3	27
57	Skew rays analysis to determine radial position of defects within optical fibers. , 2017, , .		0
58	Ultrafast colorimetric humidity-sensitive polyelectrolyte coating for touchless control. Materials Horizons, 2017, 4, 72-82.	12.2	54
59	Super-fast optical hygrometer probe based on polyelectrolyte-coated fiber taper. , 2017, , .		0
60	A numerical study of single-pulse dual-wavelength mode-locked waveguide laser. , 2017, , .		0
61	Radial position measurement of defects within optical fibers using skew rays interrogation. , 2017, , .		0
62	Self-corrected chip-based dual-comb spectrometer. Optics Express, 2017, 25, 8168.	3.4	84
63	Visible laser emission from a praseodymium-doped fluorozirconate guided-wave chip. Optics Letters, 2017, 42, 3339.	3.3	7
64	Measuring the Radial Position of Defects within Optical Fibers Using Skew Rays. Journal of Sensors, 2017, 2017, 1-5.	1.1	3
65	Transform-limited dual-comb spectroscopy using free-running waveguide lasers. , 2017, , .		0
66	Er3+Active Yb3+Ce3+Co-Doped Fluorozirconate Guided-Wave Chip Lasers. IEEE Photonics Technology Letters, 2016, 28, 2315-2318.	2.5	9
67	Enhanced Pump Absorption of Active Fiber Components With Skew Rays. Journal of Lightwave Technology, 2016, 34, 5642-5650.	4.6	5
68	Detection of microscopic defects in optical fiber coatings using angle-resolved skew rays. Optics Letters, 2016, 41, 4036.	3.3	5
69	Ultrafast pulse generation in a mode-locked Erbium chip waveguide laser. Optics Express, 2016, 24, 27177.	3.4	28
70	Air-Clad Holmium-Doped Silica Fiber Laser. IEEE Journal of Quantum Electronics, 2016, 52, 1-8.	1.9	4
71	Mode-Locked 305 fs laser pulses from an Er-Yb-Ce ZBLAN Waveguide Laser. , 2016, , .		0
72	Angle-Resolved Skew Rays for Microscopic Fault Detection in Optical Fiber Coatings. , 2016, , .		0

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73	Negative to positive refractive index change in borosilicate BK7 glass through MHz femtosecond laser writing. , 2016, , .		0
74	Holmium-doped 21 Î¼m waveguide chip laser with an output power > 1 W. Optics Express, 2015, 23, 32664.	3.4	13
75	Widely tunable short-infrared thulium and holmium doped fluorozirconate waveguide chip lasers. Optics Express, 2014, 22, 25286.	3.4	10
76	Graphene-based passive Q-switching of a Tm3+:ZBLAN short-infrared waveguide laser. , 2014, , .		1
77	Theoretical modeling of the Faraday effect within a gas-filled photonic bandgap fiber. , 2013, , .		0
78	Guided-mode based Faraday rotation spectroscopy within a photonic bandgap fiber. Proceedings of SPIE, 2013, , .	0.8	1
79	Magnetic field interaction with guided light for detection of an active gaseous medium within an optical fiber. Optics Express, 2013, 21, 2491.	3.4	5
80	High slope efficiency and high refractive index change in direct-written Yb-doped waveguide lasers with depressed claddings. Optics Express, 2013, 21, 17413.	3.4	36
81	Efficient 29ÂÎ¼m fluorozirconate glass waveguide chip laser. Optics Letters, 2013, 38, 2588.	3.3	40
82	Femtosecond laser induced structural changes in fluorozirconate glass. Optical Materials Express, 2013, 3, 574.	3.0	33
83	Ultrafast laser inscribed 3D integrated photonics. , 2013, , .		1
84	Efficient direct-laser written Yb:ZBLAN Waveguide Laser. , 2013, , .		0
85	Versatile fs laser-written glass chip lasers. , 2013, , .		1
86	Ultrafast laser inscribed integrated photonics: material science to device development. MATEC Web of Conferences, 2013, 8, 06004.	0.2	0
87	Femtosecond direct-write Ã¼berstructure waveguide Bragg gratings in ZBLAN. Optics Letters, 2012, 37, 3999.	3.3	23
88	Versatile large-mode-area femtosecond laser-written Tm:ZBLAN glass chip lasers. Optics Express, 2012, 20, 27503.	3.4	56
89	Ultrafast Laser Inscription in Soft Glasses: A Comparative Study of Athermal and Thermal Processing Regimes for Guided Wave Optics. International Journal of Applied Glass Science, 2012, 3, 332-348.	2.0	48
90	21 Î¼m waveguide laser fabricated by femtosecond laser direct-writing in Ho^3+, Tm^3+:ZBLAN glass. Optics Letters, 2012, 37, 996.	3.3	47

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91	Extruded Microstructured Fiber Lasers. IEEE Photonics Technology Letters, 2012, 24, 578-580.	2.5	20
92	Direct-write depressed cladding waveguide Bragg-gratings in ZBLAN glass. , 2012, , .		0
93	Femtosecond laser direct-written microstructured waveguides in passive as well as in novel active glasses. , 2012, , .		1
94	Integrated waveguide lasers. , 2011, , .		0
95	Extruded fluoride fiber for 2.3μm laser application. , 2011, , .		0
96	Fifty percent internal slope efficiency femtosecond direct-written Tm^3+:ZBLAN waveguide laser. Optics Letters, 2011, 36, 1587.	3.3	124
97	Fabrication of depressed cladding waveguide Bragg-gratings in rare-earth doped heavy-metal fluoride glass. , 2011, , .		0
98	A high power hybrid mid-IR laser source. Optics Communications, 2010, 283, 4041-4045.	2.1	21
99	High power, narrow bandwidth and broadly tunable Tm3+, Ho3+-co-doped aluminosilicate glass fibre laser. Electronics Letters, 2010, 46, 1617.	1.0	27
100	Efficient Nd:YAG pumped mid-IR laser based on cascaded KTP and ZGP optical parametric oscillators and a ZGP parametric amplifier. Optics Communications, 2009, 282, 272-275.	2.1	18
101	A large core microstructured fluoride glass optical fibre for mid-infrared single-mode transmission. Journal of Non-Crystalline Solids, 2009, 355, 1461-1467.	3.1	16
102	In-fiber resonantly pumped Q-switched holmium fiber laser. Optics Letters, 2009, 34, 3412.	3.3	11
103	Gain-switched holmium-doped fibre laser. Optics Express, 2009, 17, 20872.	3.4	51
104	In-fiber resonant pumping of a fiber laser. , 2009, , .		0
105	Highly Narrow Linewidth, CW, All-Fiber Oscillator With a Switchable Linear Polarization. IEEE Photonics Technology Letters, 2008, 20, 809-811.	2.5	17
106	Fluoride glass microstructured optical fiber with large mode area and mid-infrared transmission. Optics Letters, 2008, 33, 2861.	3.3	58
107	A 226W high power Tm fibre laser. , 2008, , .		1
108	Multiple-watt Tm³⁺, Ho³⁺-co-doped silica fibre laser tunable across both dopant transitions. , 2008, , .		0

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109	Fluoride glass microstructured optical fibre with large mode area and mid-infrared transmission. , 2008, , .		1
110	110W 790nm pumped 1908nm thulium fibre laser. , 2008, , .		2
111	In-fibre resonant pumping of a fibre laser. , 2008, , .		0
112	A 4W tunable Tm³⁺:Ho³⁺ silica fibre laser. , 2008, , .		0
113	Power-Scalable Thulium and Holmium Fibre Lasers Pumped by 793 nm Diode Lasers. , 2007, , WE5.		1
114	Compact, all-fibre, linearly polarized, single-mode Ytterbium doped fibre laser utilizing point-by-point inscribed intra-core fibre Bragg gratings. Proceedings of SPIE, 2007, , .	0.8	3
115	High-power 83 W holmium-doped silica fiber laser operating with high beam quality. Optics Letters, 2007, 32, 241.	3.3	113
116	Application and Development of High-Power and Highly Efficient Silica-Based Fiber Lasers Operating at 2 mum. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 567-572.	2.9	131
117	Power scaling of a 60% efficient, 793 nm pumped, 2 Î¼m large mode area fibre laser. , 2006, , .		0
118	Power scalable and efficient 790-nm pumped Tm3+-doped fiber lasers. , 2006, 6102, 44.		18
119	85â€…Wâ€…Tm3+-doped silica fibre laser. Electronics Letters, 2005, 41, 687.	1.0	52
120	High-power 2-Î¼m Tm3+-doped fibre lasers. , 2004, , .		12
121	Engineering development of a directed IR countermeasure laser. , 2004, 5615, 48.		1
122	Laser-pumped cascaded optical parametric oscillators for watt level mid-IR generation. , 2004, , .		2
123	Real-time measurements of endogenous CO production from vascular cells using an ultrasensitive laser sensor. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H483-H488.	3.2	66
124	Compact CH4 sensor based on difference frequency mixing of diode lasers in quasi-phasematched LiNbO3. Optics Communications, 2000, 175, 461-468.	2.1	43
125	Tunable continuous wave DFG-based gas sensor using fibre amplified 1.5 [micro sign]m external cavity diode laser and high power 1 [micro sign]m diode laser. Electronics Letters, 2000, 36, 1739.	1.0	4
126	Difference-frequency-based tunable absorption spectrometer for detection of atmospheric formaldehyde. Applied Optics, 2000, 39, 4436.	2.1	54

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127	Development of an automated diode-laser-based multicomponent gas sensor. Applied Optics, 2000, 39, 4444.	2.1	90
128	Field intercomparison of a novel optical sensor for formaldehyde quantification. Geophysical Research Letters, 2000, 27, 2093-2096.	4.0	32
129	Compact high power mid-IR spectroscopic source based on difference frequency generation in PPLN. , 2000, , .		0
130	Laser Based Absorption Sensors for Trace Gas Monitoring in a Spacecraft Habitat. , 1999, , .		3
131	Portable fiber-coupled diode-laser-based sensor for multiple trace gas detection. Applied Physics B: Lasers and Optics, 1999, 69, 459-465.	2.2	43
132	High-power continuous-wave mid-infrared radiation generated by difference frequency mixing of diode-laser-seeded fiber amplifiers and its application to dual-beam spectroscopy. Optics Letters, 1999, 24, 1744.	3.3	23
133	Detection of carbon monoxide from biological tissue using difference frequency generation in periodically poled lithium niobate near 4.6 Î¼m. , 1999, , .		0
134	<title>Compact mid-infrared trace gas sensor based on difference frequency mixing</title>. , 1999, , .		0
135	Diode lasers, DFG and Molecules. , 1999, , .		0
136	CO-detection from biological tissues using a mid-infrared laser based gas sensor. , 1999, , .		0
137	Compact mid-infrared trace gas sensor based on difference-frequency generation of two diode lasers in periodically poled LiNbO 3. Applied Physics B: Lasers and Optics, 1998, 67, 347-350.	2.2	66
138	Thermal-lens measurement of a quasi steady-state repetitively flashlamp-pumped Cr, Tm, Ho:YAG laser. Optics and Laser Technology, 1998, 30, 103-108.	4.6	44
139	Mid-infrared difference-frequency generation source pumped by a 11â€“15-Âµm dual-wavelength fiber amplifier for trace-gas detection. Optics Letters, 1998, 23, 1517.	3.3	39
140	Fibre coupled difference frequency generation utilising ytterbium-doped fibre amplifier and periodically poled LiNbO3. Electronics Letters, 1998, 34, 1345.	1.0	9
141	Detection of formaldehyde using mid-infrared difference-frequency generation. Applied Physics B: Lasers and Optics, 1997, 65, 771-774.	2.2	45
142	Methane detection with a narrow-band source at 34 Î¼m based on a Nd:YAG pump laser and a combination of stimulated Raman scattering and difference frequency mixing. Applied Optics, 1996, 35, 4041.	2.1	10
143	A pulsed laser source using stimulated Raman scattering and difference frequency mixing: Remote sensing of methane in air. Optics Communications, 1995, 120, 307-310.	2.1	9