Graham A Turnbull

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Honeybee-based biohybrid system for landmine detection. Science of the Total Environment, 2022, 803, 150041.	3.9	7
2	Ecosystem engineer morphological traits and taxon identity shape biodiversity across the euphotic–mesophotic transition. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20211834.	1.2	7
3	Room Temperature Polariton Lasing in Ladderâ€Type Oligo(p â€Phenylene)s with Different Ï€â€Conjugation Lengths. Advanced Photonics Research, 2021, 2, 2000044.	1.7	8
4	Organic photovoltaics for simultaneous energy harvesting and high-speed MIMO optical wireless communications. Light: Science and Applications, 2021, 10, 41.	7.7	37
5	Low Threshold Room Temperature Polariton Lasing from Fluoreneâ€Based Oligomers. Laser and Photonics Reviews, 2021, 15, 2100028.	4.4	12
6	Biomonitoring for wide area surveying in landmine detection using honeybees and optical sensing. Chemosphere, 2021, 273, 129646.	4.2	6
7	Comparison of UV-A photolytic and UV/TiO2 photocatalytic effects on Microcystis aeruginosa PCC7813 and four microcystin analogues: A pilot scale study. Journal of Environmental Management, 2021, 298, 113519.	3.8	9
8	A kinetic model of thin-film fluorescent sensors for strategies to enhance chemical selectivity. Physical Chemistry Chemical Physics, 2021, 23, 10791-10798.	1.3	4
9	High-Speed MIMO Communication and Simultaneous Energy Harvesting Using Novel Organic Photovoltaics. , 2021, , .		1
10	Thermal Desorption of Explosives Vapour from Organic Fluorescent Sensors. , 2021, 5, .		0
11	Honeybee Activity Monitoring in a Biohybrid System for Explosives Detection. IFMBE Proceedings, 2020, , 185-192.	0.2	4
12	Optical Antennas for Wavelength Division Multiplexing in Visible Light Communications beyond the Étendue Limit. Advanced Optical Materials, 2020, 8, 1901139.	3.6	29
13	Correlating Phase Behavior with Photophysical Properties in Mixedâ€Cation Mixedâ€Halide Perovskite Thin Films. Advanced Energy Materials, 2020, 10, 1901350.	10.2	17
14	Explosives detection by swabbing for improvised explosive devices. Analyst, The, 2020, 145, 7956-7963.	1.7	11
15	Distributed Feedback Lasers Based on Green Fluorescent Protein and Conformal High Refractive Index Oxide Layers. Laser and Photonics Reviews, 2020, 14, 2000101.	4.4	9
16	Organic semiconductors for visible light communications. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190186.	1.6	32
17	Sensing of explosive vapor by hybrid perovskites: Effect of dimensionality. APL Materials, 2020, 8, .	2.2	19
18	Pick and Place Distributed Feedback Lasers Using Organic Single Crystals. Advanced Optical Materials, 2020, 8, 1901785.	3.6	7

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19	245 MHz bandwidth organic light-emitting diodes used in a gigabit optical wireless data link. Nature Communications, 2020, 11, 1171.	5.8	56
20	Triple-cation perovskite solar cells for visible light communications. Photonics Research, 2020, 8, A16.	3.4	24
21	Fluorescence-Based Sensors and Preconcentration Techniques for Buried Explosives Detection. , 2019, , .		1
22	A hybrid organic–inorganic polariton LED. Light: Science and Applications, 2019, 8, 81.	7.7	30
23	Design of Linear and Star-Shaped Macromolecular Organic Semiconductors for Photonic Applications. Accounts of Chemical Research, 2019, 52, 1665-1674.	7.6	26
24	Low Threshold Polariton Lasing from a Solutionâ€Processed Organic Semiconductor in a Planar Microcavity. Advanced Optical Materials, 2019, 7, 1801791.	3.6	52
25	Flexible and Ultra-Lightweight Polymer Membrane Lasers. , 2019, , .		1
26	Comment on "Room-Temperature Continuous-Wave Operation of Organometal Halide Perovskite Lasers― ACS Nano, 2019, 13, 12257-12258.	7.3	14
27	Preconcentration techniques for trace explosive sensing. Science of the Total Environment, 2019, 658, 650-658.	3.9	17
28	Low-threshold polariton lasing in a highly disordered conjugated polymer. Optica, 2019, 6, 1124.	4.8	36
29	High-Bandwidth Low-Cost High-Speed Optical Fiber Links using Organic Light Emitting Diodes. , 2019, , .		Ο
30	Carbonâ€Bridged <i>p</i> â€Phenylenevinylene Polymer for Highâ€Performance Solutionâ€Processed Distributed Feedback Lasers. Advanced Optical Materials, 2018, 6, 1800069.	3.6	20
31	Flexible Glass Hybridized Colloidal Quantum Dots for Gb/s Visible Light Communications. IEEE Photonics Journal, 2018, 10, 1-11.	1.0	12
32	An Organic Vortex Laser. ACS Nano, 2018, 12, 2389-2394.	7.3	30
33	Flexible and ultra-lightweight polymer membrane lasers. Nature Communications, 2018, 9, 1525.	5.8	122
34	Ultra-wide coverage VLC system with alignment-free receiver. , 2018, , .		5
35	Ormosil-coated conjugated polymers for the detection of explosives in aqueous environments. Talanta, 2018, 179, 426-429.	2.9	16
36	High-Bandwidth Organic Light Emitting Diodes for Ultra-Low Cost Visible Light Communication Links. , 2018, , .		4

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37	Strong coupling in a microcavity containing \hat{I}^2 -carotene. Optics Express, 2018, 26, 3320.	1.7	10
38	Transfer-printed micro-LED and polymer-based transceiver for visible light communications. Optics Express, 2018, 26, 31474.	1.7	19
39	MIMO Visible Light Communications Using a Wide Field-of-View Fluorescent Concentrator. IEEE Photonics Technology Letters, 2017, 29, 306-309.	1.3	21
40	A low-cost, portable optical explosive-vapour sensor. Sensors and Actuators B: Chemical, 2017, 245, 334-340.	4.0	35
41	A comparative study of optical concentrators for visible light communications. Proceedings of SPIE, 2017, , .	0.8	5
42	An Investigation of the Energy Levels within a Common Perovskite Solar Cell Device and a Comparison of DC/AC Surface Photovoltage Spectroscopy Kelvin Probe Measurements of Different MAPBI3 Perovskite Solar Cell Device Structures. MRS Advances, 2017, 2, 1195-1201.	0.5	5
43	Single cell induced optical confinement in biological lasers. Journal Physics D: Applied Physics, 2017, 50, 084005.	1.3	10
44	A saturated red color converter for visible light communication using a blend of star-shaped organic semiconductors. Applied Physics Letters, 2017, 110, .	1.5	15
45	Green Perovskite Distributed Feedback Lasers. Scientific Reports, 2017, 7, 11727.	1.6	72
46	Polymer colour converter with very high modulation bandwidth for visible light communications. Journal of Materials Chemistry C, 2017, 5, 8916-8920.	2.7	13
47	Intermolecular states in organic dye dispersions: excimers vs. aggregates. Journal of Materials Chemistry C, 2017, 5, 8380-8389.	2.7	60
48	Nanoimprinted distributed feedback lasers of solution processed hybrid perovskites. Optics Express, 2016, 24, 23677.	1.7	80
49	Self-trapping and excited state absorption in fluorene homo-polymer and copolymers with benzothiadiazole and tri-phenylamine. Physical Chemistry Chemical Physics, 2016, 18, 21937-21948.	1.3	13
50	Probing the energy levels of perovskite solar cells via Kelvin probe and UV ambient pressure photoemission spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 19738-19745.	1.3	90
51	BODIPY star-shaped molecules as solid state colour converters for visible light communications. Applied Physics Letters, 2016, 109, .	1.5	16
52	Optofluidic distributed feedback lasers with evanescent pumping: Reduced threshold and angular dispersion analysis. Applied Physics Letters, 2016, 108, .	1.5	18
53	Wide field-of-view fluorescent antenna for visible light communications beyond the étendue limit. Optica, 2016, 3, 702.	4.8	73
54	A Portable, Low-cost System for Optical Explosive Detection based on a CMOS Camera. , 2016, , .		0

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55	Solvent immersion nanoimprint lithography of fluorescent conjugated polymers. Applied Physics Letters, 2015, 107, 163301.	1.5	15
56	Microstructured organic semiconductors: Lasers sensors and visible light communications. , 2015, , .		0
57	A simple wide field of view concentrator for free space visible light communications. , 2015, , .		6
58	Novel Fast Color-Converter for Visible Light Communication Using a Blend of Conjugated Polymers. ACS Photonics, 2015, 2, 194-199.	3.2	57
59	Fabrication of free-standing ordered fluorescent polymer nanofibres by electrospinning. Applied Physics Letters, 2015, 106, .	1.5	4
60	Calculation of the emission power distribution of microstructured OLEDs using the reciprocity theorem. Synthetic Metals, 2015, 205, 127-133.	2.1	25
61	Subpicosecond Exciton Dynamics in Polyfluorene Films from Experiment and Microscopic Theory. Journal of Physical Chemistry C, 2015, 119, 9734-9744.	1.5	17
62	Organic solar cells as high-speed data detectors for visible light communication. Optica, 2015, 2, 607.	4.8	72
63	Demonstration of 2.3 Gb/s RGB white-light VLC using polymer based colour-converters and GaN micro-LEDs. , 2015, , .		17
64	Side-Chain Influence on the Mass Density and Refractive Index of Polyfluorenes and Star-Shaped Oligofluorene Truxenes. Journal of Physical Chemistry C, 2015, 119, 22102-22107.	1.5	13
65	Fluorescent Redâ€Emitting BODIPY Oligofluorene Starâ€6haped Molecules as a Color Converter Material for Visible Light Communications. Advanced Optical Materials, 2015, 3, 536-540.	3.6	44
66	Synthesis and properties of novel star-shaped oligofluorene conjugated systems with BODIPY cores. Beilstein Journal of Organic Chemistry, 2014, 10, 2704-2714.	1.3	8
67	Visible Light Communications: Improving data rate, link margin and field of view. , 2014, , .		3
68	Highly Directional Emission and Beam Steering from Organic Lightâ€Emitting Diodes with a Substrate Diffractive Optical Element. Advanced Optical Materials, 2014, 2, 343-347.	3.6	35
69	Visible Light Communication Using a Blue GaN \$mu \$ LED and Fluorescent Polymer Color Converter. IEEE Photonics Technology Letters, 2014, 26, 2035-2038.	1.3	109
70	Polymer Lasers and Optical Amplifiers. , 2014, , 1-12.		0
71	Maxwell's equations [Scanning Our Past]. Proceedings of the IEEE, 2013, 101, 1801-1805.	16.4	5
72	Enhancing the emission directionality of organic light-emitting diodes by using photonic microstructures. Applied Physics Letters, 2013, 103, .	1.5	28

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73	Micro‣ED pumped polymer laser: A discussion of future pump sources for organic lasers. Laser and Photonics Reviews, 2013, 7, 1065-1078.	4.4	59
74	Nanoimprinted Organic Semiconductor Laser Pumped by a Lightâ€Emitting Diode. Advanced Materials, 2013, 25, 2826-2830.	11.1	92
75	Lowâ€Threshold Nanoimprinted Lasers Using Substructured Gratings for Control of Distributed Feedback. Advanced Optical Materials, 2013, 1, 563-566.	3.6	36
76	Nanoimprinted polymer lasers with threshold below 100 W/cm^2 using mixed-order distributed feedback resonators. Optics Express, 2013, 21, 14362.	1.7	28
77	LED pumped polymer laser sensor for explosives. Laser and Photonics Reviews, 2013, 7, L71-L76.	4.4	56
78	Nanoimprinted resonators for polymer lasers pumped by light-emitting diodes. , 2012, , .		0
79	Strongly modified angular dependence of emission from OLEDs. , 2012, , .		0
80	Laser characteristics of a family of benzene-cored star-shaped oligofluorenes. Semiconductor Science and Technology, 2012, 27, 094005.	1.0	21
81	Explosive Sensing Using Polymer Lasers. Molecular Crystals and Liquid Crystals, 2012, 554, 103-110.	0.4	7
82	Dynamics of fluorescence depolarisation in star-shaped oligofluorene-truxene molecules. Physical Chemistry Chemical Physics, 2012, 14, 9176.	1.3	33
83	New perylene-doped polymeric thin films for efficient and long-lasting lasers. Journal of Materials Chemistry, 2012, 22, 8938.	6.7	48
84	Highly efficient solution-processable europium-complex based organic light-emitting diodes. Organic Electronics, 2012, 13, 3091-3096.	1.4	38
85	Optical Excitations in Star-Shaped Fluorene Molecules. Journal of Physical Chemistry A, 2011, 115, 2913-2919.	1.1	40
86	Ultra-portable explosives sensor based on a CMOS fluorescence lifetime analysis micro-system. AIP Advances, 2011, 1, 032115.	0.6	16
87	Laser action in a surface-structured free-standing membrane based on a π-conjugated polymer-composite. Organic Electronics, 2011, 12, 62-69.	1.4	40
88	Conjugated polymer sensors for explosive vapor detection. , 2011, , .		2
89	Laser Chemosensor with Rapid Responsivity and Inherent Memory Based on a Polymer of Intrinsic Microporosity. Sensors, 2011, 11, 2478-2487.	2.1	66
90	Sensitive Explosive Vapor Detection with Polyfluorene Lasers. Advanced Functional Materials, 2010, 20, 2093-2097.	7.8	84

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91	Dynamics of photoexcitation and stimulated optical emission in conjugated polymers: A multiscale quantum-chemistry and Maxwell-Bloch-equations approach. Physical Review B, 2010, 81, .	1.1	13
92	Broadly tunable deep blue laser based on a star-shaped oligofluorene truxene. Synthetic Metals, 2010, 160, 1397-1400.	2.1	48
93	Synthesis and characterisation of new diindenodithienothiophene (DITT) based materials. Journal of Materials Chemistry, 2010, 20, 1112-1116.	6.7	14
94	Theory of Stimulated Optical Emission Dynamics in Conjugated Polymers. , 2010, , .		0
95	A two-photon pumped polyfluorene laser. Applied Physics Letters, 2009, 94, .	1.5	43
96	Effect of exciton self-trapping and molecular conformation on photophysical properties of oligofluorenes. Journal of Chemical Physics, 2009, 131, 154906.	1.2	33
97	Organic Semiconductor Lasers. ECS Transactions, 2009, 25, 513-523.	0.3	Ο
98	Low-threshold organic laser based on an oligofluorene truxene with low optical losses. Applied Physics Letters, 2009, 94, .	1.5	95
99	Organic Semiconductor Optical Amplifiers. Proceedings of the IEEE, 2009, 97, 1637-1650.	16.4	38
100	Highâ€Gain Broadband Solidâ€6tate Optical Amplifier using a Semiconducting Copolymer. Advanced Materials, 2009, 21, 107-110.	11.1	53
101	The Development of Luminescent Concentrators for Pumping Organic Semiconductor Lasers. Advanced Materials, 2009, 21, 3205-3209.	11.1	19
102	How to recognize lasing. Nature Photonics, 2009, 3, 546-549.	15.6	249
103	Semiconducting polymer waveguides for end-fired ultra-fast optical amplifiers. Optics Express, 2009, 17, 21452.	1.7	6
104	Chemosensing of 1,4-dinitrobenzene using bisfluorene dendrimer distributed feedback lasers. Applied Physics Letters, 2009, 95, .	1.5	41
105	Twoâ€Photon Absorption and Lasing in Firstâ€Generation Bisfluorene Dendrimers. Advanced Materials, 2008, 20, 1940-1944.	11.1	40
106	Hybrid optoelectronics: A polymer laser pumped by a nitride light-emitting diode. Applied Physics Letters, 2008, 92, .	1.5	190
107	Light-emitting diode pumped polymer lasers. Proceedings of SPIE, 2008, , .	0.8	2
108	Picosecond gain switching of an organic semiconductor optical amplifier. Applied Physics Letters, 2008, 92, 083305.	1.5	14

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109	An organic semiconductor laser on silicon. Proceedings of SPIE, 2008, , .	0.8	0
110	Microstructured polymer lasers: diode-pumped lasing and extending operation lifetimes. , 2007, , .		0
111	Shrinking polymer lasers. , 2007, , .		1
112	Freestanding liquid micro-optics. , 2007, , .		0
113	Improved operational lifetime of semiconducting polymer lasers by encapsulation. Applied Physics Letters, 2007, 91, .	1.5	44
114	Silicon based organic semiconductor laser. Applied Physics Letters, 2007, 91, 051124.	1.5	20
115	Amplification of optical pulse sequences at a high repetition rate in a polymer slab waveguide. Applied Physics Letters, 2007, 91, .	1.5	10
116	Microfluidic dye lasers based on microstructured optical fibres. , 2007, , .		0
117	Recent Advances in Polymer Lasers and Optical Amplifiers. , 2007, , .		0
118	Diode-pumped polymer lasers. Proceedings of SPIE, 2007, , .	0.8	1
119	Fluidic fibre dye lasers. Optics Express, 2007, 15, 3962.	1.7	45
120	Amplified spontaneous emission and lasing properties of bisfluorene-cored dendrimers. Applied Physics Letters, 2007, 91, .	1.5	80
121	Organic Semiconductor Lasers. Chemical Reviews, 2007, 107, 1272-1295.	23.0	1,334
122	Diode pumped distributed Bragg reflector lasers based on a dye-to-polymer energy transfer blend. Optics Express, 2006, 14, 9211.	1.7	88
123	Broadband solid state optical amplifier based on a semiconducting polymer. Applied Physics Letters, 2006, 89, 201119.	1.5	34
124	Novel diffractive feedback structures for semiconducting polymer lasers. , 2005, , .		0
125	Temperature tuning of a semiconducting-polymer DFB laser. , 2005, , .		3
126	Influence of grating characteristics on the operation of circular-grating distributed-feedback polymer lasers. Journal of Applied Physics, 2005, 98, 023105.	1.1	21

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127	Effect of gain localization in circular-grating distributed feedback lasers. Applied Physics Letters, 2005, 87, 201101.	1.5	13
128	Low threshold edge emitting polymer distributed feedback laser based on a square lattice. Applied Physics Letters, 2005, 86, 161102.	1.5	34
129	Semiconducting polymer optical amplifiers. , 2005, 5937, 28.		7
130	Holographic recording of sub-micron period gratings and photonic crystals in the photoresist SU8. , 2005, , .		3
131	Gain Localisation in Polymer Circular-Grating Lasers. , 2005, , .		Ο
132	Two-dimensional distributed feedback lasers using a broadband, red polyfluorene gain medium. Journal of Applied Physics, 2004, 96, 6959-6965.	1.1	97
133	Subpicosecond pulses from a gain-switched polymer distributed feedback laser. Applied Physics Letters, 2004, 85, 31-33.	1.5	26
134	Operating characteristics of a traveling-wave semiconducting polymer optical amplifier. Applied Physics Letters, 2004, 85, 6122-6124.	1.5	15
135	Polymer lasers: recent advances. Materials Today, 2004, 7, 28-35.	8.3	86
136	Emission Characteristics and Performance Comparison of Polyfluorene Lasers with One- and Two-Dimensional Distributed Feedback. Advanced Functional Materials, 2004, 14, 91-97.	7.8	193
137	Design and analysis of a low-threshold polymer circular-grating distributed-feedback laser. Journal of the Optical Society of America B: Optical Physics, 2004, 21, 2142.	0.9	29
138	Optical amplification in a first-generation dendritic organic semiconductor. Optics Letters, 2004, 29, 869.	1.7	28
139	Investigation of amplified spontaneous emission in oriented films of a liquid crystalline conjugated polymer. Synthetic Metals, 2003, 139, 727-730.	2.1	33
140	Operating characteristics of a semiconducting polymer laser pumped by a microchip laser. Applied Physics Letters, 2003, 82, 313-315.	1.5	134
141	Polymer laser fabricated by a simple micromolding process. Applied Physics Letters, 2003, 82, 4023-4025.	1.5	81
142	Blue, surface-emitting, distributed feedback polyfluorene lasers. Applied Physics Letters, 2003, 83, 2118-2120.	1.5	111
143	Photonic mode dispersion of a two-dimensional distributed feedback polymer laser. Physical Review B, 2003, 67, .	1.1	56
144	Optical properties of a light-emitting polymer directly patterned by soft lithography. Applied Physics Letters, 2002, 81, 1955-1957.	1.5	39

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145	Light amplification and gain in polyfluorene waveguides. Applied Physics Letters, 2002, 81, 415-417.	1.5	156
146	Photonic band structure and emission characteristics of a metal-backed polymeric distributed feedback laser. Applied Physics Letters, 2002, 81, 954-956.	1.5	75
147	Broadband optical amplifier based on a conjugated polymer. Applied Physics Letters, 2002, 80, 3036-3038.	1.5	46
148	<title>Photonic band structure and emission characteristics of a metal-backed polymeric distributed feedback laser</title> . , 2002, , .		1
149	Index and Relief Gratings in Polymer Films for Organic Distributed Feedback Lasers. Chemistry of Materials, 2002, 14, 4178-4185.	3.2	37
150	Emission characteristics and photonic band structure of microstructured polymer lasers. Synthetic Metals, 2002, 127, 45-48.	2.1	5
151	Tuneable distributed feedback lasing in MEH-PPV films. Synthetic Metals, 2001, 121, 1757-1758.	2.1	38
152	Tuneability of the ASE in thin organic films. Synthetic Metals, 2001, 121, 1759-1760.	2.1	7
153	Fabrication of refractive index and relief gratings in polymer films for DFB lasers. Materials Research Society Symposia Proceedings, 2001, 708, 471.	0.1	Ο
154	Degradation of Substituted Phenylurea Herbicides by Arthrobacter globiformis Strain D47 and Characterization of a Plasmid-Associated Hydrolase Gene, puhA. Applied and Environmental Microbiology, 2001, 67, 2270-2275.	1.4	102
155	Relationship between photonic band structure and emission characteristics of a polymer distributed feedback laser. Physical Review B, 2001, 64, .	1.1	151
156	Tuneability of amplified spontaneous emission through control of the waveguide-mode structure in conjugated polymer films. Physical Review B, 2000, 62, R11929-R11932.	1.1	58
157	Continuous-wave, singly-resonant, optical parametric oscillator based on periodically poled KTiOPO4. Optics Express, 2000, 6, 58.	1.7	18
158	Extended mode-hop-free tuning by use of a dual-cavity, pump-enhanced optical parametric oscillator. Optics Letters, 2000, 25, 341.	1.7	34
159	Transient dynamics of CW intracavity singly resonant optical parametric oscillators. IEEE Journal of Quantum Electronics, 1999, 35, 1666-1672.	1.0	19
160	Intracavity continuous-wave singly resonant optical parametric oscillators. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 1499.	0.9	32
161	Temperature-tuned difference-frequency mixing in periodically poled KTiOPO 4. Applied Physics B: Lasers and Optics, 1998, 67, 675-677.	1.1	21
162	High-power, continuous-wave, singly resonant, intracavity optical parametric oscillator. Applied Physics Letters, 1998, 72, 1527-1529.	1.5	30

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163	Continuous-wave singly resonant optical parametric oscillator based on periodically poled RbTiOAsO_4. Optics Letters, 1998, 23, 837.	1.7	41
164	Doubly resonant continuous-wave optical parametric oscillator pumped by a single-mode diode laser. Optics Letters, 1998, 23, 1889.	1.7	30
165	Continuous-wave singly-resonant intracavity optical parametric oscillator based on periodically-poled LiNbO3. Electronics Letters, 1997, 33, 1817.	0.5	18
166	The generation of free-space Laguerre-Gaussian modes at millimetre-wave frequencies by use of a spiral phaseplate. Optics Communications, 1996, 127, 183-188.	1.0	402
167	Power and beam characteristics of semiconducting polymer lasers pumped by a microchip laser. , 0, , .		0
168	Broadband, semiconducting polymer optical amplifiers. , 0, , .		0
169	Dual-wavelength semiconducting-polymer DFB laser. , 0, , .		0