## Masayuki Fujita

List of Publications by Year in descending order

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167	5,421	35	70
papers	citations	h-index	g-index
170	170	170	4307 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	Timing-Jitter Tolerant Nyquist Pulse for Terahertz Communications. Journal of Lightwave Technology, 2022, 40, 557-564.	2.7	4
2	PAM4 48-Gbit/s wireless communication using a resonant tunneling diode in the 300-GHz band. IEICE Electronics Express, 2022, 19, 20210494-20210494.	0.3	9
3	Hybrid Integration Between Resonant Tunneling Diodes and Unclad Microphotonic Diplexer for Dual-Channel Coherent Terahertz Receiver. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-10.	1.9	8
4	Nanophotonics-inspired all-silicon waveguide platforms for terahertz integrated systems. Nanophotonics, 2022, 11, 1741-1759.	2.9	33
5	Structure dependence of oscillation characteristics of structure-simplified resonant-tunneling-diode terahertz oscillator. Applied Physics Express, 2022, 15, 042003.	1.1	3
6	Silicon Dielectric Diplexer Module for 600-GHz-Band Frequency-Division Multiplexing Wireless Communication. IEEE Transactions on Terahertz Science and Technology, 2022, 12, 334-344.	2.0	8
7	Remote detection of oils in water using laser Raman spectroscopy. Optics Communications, 2021, 480, 126508.	1.0	6
8	IEEE 802.15.3d-Compliant Waveforms for Terahertz Wireless Communications. Journal of Lightwave Technology, 2021, 39, 7748-7760.	2.7	11
9	Terahertz coherent oscillator integrated with slot-ring antenna using two resonant tunneling diodes. Applied Physics Express, 2021, 14, 034001.	1.1	22
10	Gratingless integrated tunneling multiplexer for terahertz waves. Optica, 2021, 8, 621.	4.8	29
11	48â€Gbit/s 8K videoâ€transmission using resonant tunnelling diodes inÂ300â€GHz band. Electronics Letters, 2021, 57, 668-669.	0.5	15
12	Broadband terahertz resonant tunnelling diode transmitter integrated with coplanarâ€waveguideâ€fed slotâ€fing antenna. Electronics Letters, 2021, 57, 1001-1003.	0.5	3
13	Dielectric slot-coupled half-Maxwell fisheye lens as octave-bandwidth beam expander for terahertz-range applications. APL Photonics, 2021, 6, .	3.0	19
14	Packaged Dish Antenna for Wireless Terahertz Photonic Crystal Waveguide Devices., 2021,,.		0
15	Terahertz Band Communications With Topological Valley Photonic Crystal Waveguide. Journal of Lightwave Technology, 2021, 39, 7609-7620.	2.7	32
16	Highly Efficient Resonant Tunneling Diode Terahertz Oscillator With a Split Ring Resonator. IEEE Electron Device Letters, 2021, 42, 982-985.	2.2	13
17	Towards Practical Terahertz Imaging System With Compact Continuous Wave Transceiver. Journal of Lightwave Technology, 2021, 39, 7850-7861.	2.7	14
18	Characteristics of Effective-Medium-Clad Dielectric Waveguides. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 28-41.	2.0	45

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19	Waveforms with High Spectral Efficiency for Terahertz Communications. , 2021, , .		O
20	600-GHz-band Silicon Dielectric Waveguide Module., 2021,,.		6
21	Integrated Resonant Tunneling Diode with Rectangular Waveguide I/O using Photonic Crystal Interface., 2021,,.		6
22	Integrated Terahertz Tunneling Filter. , 2021, , .		1
23	Terahertz RTD Chip Backside-coupled to Photonic-crystal Waveguide. , 2021, , .		2
24	600-GHz-Band Frequency-Division Multiplexing Communication with Silicon Unclad Diplexer., 2021,,.		0
25	Experimental Verification of Output Power Enhancement in Photonic-based 300-GHz Generation by Optical Pulse Compression. , $2021, \ldots$		2
26	Advanced Terahertz Devices Based on Photonic Crystal and Resonant Tunneling Diode., 2021,,.		0
27	Enabling Device Technologies for Photonics-assisted Millimeter and Terahertz Wave Applications. , 2021, , .		0
28	Advanced Terahertz Devices and Systems Toward 6G and Beyond., 2021,,.		1
29	Bragg-Mirror Suppression for Enhanced Bandwidth in Terahertz Photonic Crystal Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-9.	1.9	27
30	Dispersion in broadband terahertz photonic crystal waveguides employing Bragg-mirror suppression. , 2020, , .		1
31	Unclad Microphotonics for Terahertz Waveguides and Systems. Journal of Lightwave Technology, 2020, , 1-1.	2.7	49
32	Terahertz topological photonics for on-chip communication. Nature Photonics, 2020, 14, 446-451.	15.6	449
33	Waveguideâ€input resonant tunnelling diode mixer for THz communications. Electronics Letters, 2020, 56, 342-344.	0.5	19
34	Half-Maxwell fisheye lens with photonic crystal waveguide for the integration of terahertz optics. Optics Express, 2020, 28, 2366.	1.7	31
35	Quantitative evaluation of enhanced Er luminescence in GaAs-based two-dimensional photonic crystal nanocavities. Applied Physics Letters, 2020, 116, 181102.	1.5	2
36	Effective-Medium-Cladded Dielectric Waveguides Towards Terahertz Integrated Platform. , 2020, , .		0

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37	Terahertz Slab-Mode Beam Launchers using Photonic Crystal Waveguides and Integrated Optics. , 2020, , .		O
38	Integrated Terahertz Optics with Effective Medium for 600-GHz-band Imaging., 2020,,.		8
39	Unclad Microphotonic Waveguide Bend. , 2020, , .		0
40	Imaging Applications with a Single Resonant Tunneling Diode Transceiver in 300-GHz Band. , 2020, , .		4
41	50-Gbit/s Terahertz Communication using a Valley Photonic Crystal Waveguide. , 2020, , .		1
42	Resonant Tunneling Diode Array Oscillator Integrated with Slot-ring Antenna for Terahertz Wireless Communications. , 2020, , .		1
43	Communications with Terahertz Slab-Mode Beam. , 2020, , .		0
44	Evolution from Air-Cladded to Effective-Medium-Cladded Dielectric Waveguides. , 2019, , .		3
45	Direct Terahertz Communications with Wireless and Fiber Links. , 2019, , .		4
46	Integrated Luneburg and Maxwell Fisheye Lenses for the Terahertz Range. , 2019, , .		3
47	Terahertz Wireless Communication using Resonant Tunneling Diodes and Practical Radio-over-Fiber Technology. , $2019,  ,  .$		2
48	Terahertz Wireless CDMA Communication Using Resonant Tunneling Diodes. , 2019, , .		1
49	Terahertz wireless communications using resonant tunnelling diodes with radioâ€overâ€ibre. Electronics Letters, 2019, 55, 949-951.	0.5	10
50	Polarization Responses of Terahertz Dielectric Rod Antenna Arrays., 2019,,.		1
51	Terahertz fibre transmission link using resonant tunnelling diodes integrated with photonicâ€crystal waveguides. Electronics Letters, 2019, 55, 398-400.	0.5	21
52	Terahertz coherent receiver using a single resonant tunnelling diode. Scientific Reports, 2019, 9, 18125.	1.6	50
53	Near-field vertical coupling between terahertz photonic crystal waveguides. , 2019, , .		3
54	Injection Locking of Resonant Tunneling Diode Oscillator Using Coherent Terahertz Pulses. , 2019, , .		1

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55	Terahertz Information Tag System with Over-100-bit/s Reading Speed. , 2019, , .		1
56	Simultaneous low-loss and low-dispersion in a photonic-crystal waveguide for terahertz communications. Applied Physics Express, 2019, 12, 012005.	1.1	36
57	Efficient mode converter to deep-subwavelength region with photonic-crystal waveguide platform for terahertz applications. Optics Express, 2019, 27, 28707.	1.7	44
58	Effective-medium-cladded dielectric waveguides for terahertz waves. Optics Express, 2019, 27, 38721.	1.7	71
59	Near-field out-of-plane coupling between terahertz photonic crystal waveguides. Optica, 2019, 6, 1002.	4.8	17
60	All-dielectric rod antenna array for terahertz communications. APL Photonics, 2018, 3, .	3.0	75
61	Terahertz Tag Using Photonic-Crystal Slabs. Journal of Lightwave Technology, 2018, 36, 4386-4392.	2.7	20
62	Integrated Circuits Using Photonic-Crystal Slab Waveguides and Resonant Tunneling Diodes for Terahertz Communication. , $2018$ , , .		16
63	Highly Stable Terahertz Resonant Tunneling Diode Oscillator Coupled to Photonic-Crystal Cavity. , 2018, , .		4
64	Resonant Tunneling Diode Receiver for Coherent Terahertz Wireless Communication. , 2018, , .		6
65	Evolution of Rod Antennas for Integrated Terahertz Photonics. , 2018, , .		1
66	Terahertz multi-beam antenna using photonic crystal waveguide and Luneburg lens. APL Photonics, 2018, 3, 126105.	3.0	69
67	Integrated Silicon Photonic Crystals Toward Terahertz Communications. Advanced Optical Materials, 2018, 6, 1800401.	3.6	71
68	External Feedback Effect in Terahertz Resonant Tunneling Diode Oscillators. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 455-464.	2.0	12
69	Terahertz Sensor Using Photonic Crystal Cavity and Resonant Tunneling Diodes. Journal of Infrared, Millimeter, and Terahertz Waves, 2017, 38, 1085-1097.	1.2	79
70	Terahertz systems based on resonant tunneling diodes and photonic crystals. , 2017, , .		0
71	All-dielectric integration of dielectric resonator antenna and photonic crystal waveguide. Optics Express, 2017, 25, 14706.	1.7	46
72	Asymmetrical conductance model to analyze resonant tunneling diode terahertz oscillators. , 2017, , .		4

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73	Large capacity terahertz tag using photonic crystal slabs. , 2017, , .		2
74	Terahertz Photonic Crystals and Their Device Applications. The Review of Laser Engineering, 2017, 45, 752.	0.0	1
75	Modulation schemes for resonant tunneling diodes to enhance the data-rate of wireless communications. , $2016,  ,  .$		1
76	A terahertz monolithic integrated resonant tunneling diode oscillator and mixer circuit. Proceedings of SPIE, 2016, , .	0.8	7
77	Photonic crystal technology for terahertz system integration. Proceedings of SPIE, 2016, , .	0.8	14
78	Modeling and Simulation of Terahertz Resonant Tunneling Diode-Based Circuits. IEEE Transactions on Terahertz Science and Technology, 2016, , 1-8.	2.0	33
79	Terahertz sensing based on photonic crystal cavity and resonant tunneling diode. , 2016, , .		4
80	Highâ€speed errorâ€free wireless data transmission using a terahertz resonant tunnelling diode transmitter and receiver. Electronics Letters, 2016, 52, 1999-2001.	0.5	66
81	Photonic-crystal diplexers for terahertz-wave applications. Optics Express, 2016, 24, 7835.	1.7	63
82	Photonic-crystal slab for terahertz-wave technology platform. Proceedings of SPIE, 2016, , .	0.8	2
83	Millimeter-Wave and Terahertz-Wave Applications Enabled by Photonics. IEEE Journal of Quantum Electronics, 2016, 52, 1-12.	1.0	60
84	Packaging of THz circuits using a HDPE lens and an impedance-matched carrier substrate. , 2015, , .		2
85	Extremely low-loss terahertz waveguide based on silicon photonic-crystal slab. Optics Express, 2015, 23, 31977.	1.7	143
86	Terahertz resonant tunneling diode systems for next generation wireless communication. , 2015, , .		3
87	Integration of resonant tunneling diode with Terahertz photonic-crystal waveguide and its application to gigabit terahertz-wave communications. , $2014$ , , .		11
88	Diplexer for terahertz-wave integrated circuit using a photonic-crystal slab. , 2014, , .		5
89	Ultra-Broadband Terahertz Receivers Using Polymer Substrate. IEEE Transactions on Terahertz Science and Technology, 2014, 4, 225-231.	2.0	8
90	Capture of a terahertz wave in a photonic-crystal slab. Nature Photonics, 2014, 8, 657-663.	15.6	135

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91	Femtosecond-Laser-Induced Surface Texturing of Al-Si Alloy for Lower Friction Surface. The Review of Laser Engineering, 2014, 42, 341.	0.0	0
92	Enhancement of optical absorption in solar cells by band-edge effect of photonic crystals. I & amp; #x2014; Formation of multiple bandedges. , 2013, , .		0
93	Terahertz-wave absorbers using a photonic crystal slab. , 2013, , .		0
94	Ultralow-loss photonic-crystal waveguides for gigabit terahertz-wave communications., 2013,,.		5
95	Nanocavity brightens silicon. Nature Photonics, 2013, 7, 264-265.	15.6	19
96	Enhancement of broadband optical absorption in photovoltaic devices by band-edge effect of photonic crystals. Optics Express, 2013, 21, 20111.	1.7	35
97	Enhancement of photocurrent in ultrathin active-layer photodetecting devices with photonic crystals. Applied Physics Letters, 2012, 101, .	1.5	20
98	Photonic-crystal slab for terahertz-wave integrated circuits. , 2012, , .		7
99	Trapping a terahertz wave in a photonic-crystal slab. , 2012, , .		1
100	Photocurrent enhancement in ultrathin silicon by the photonic band-edge effect. , 2012, , .		0
101	Green GalnN photonic-crystal light-emitting diodes with small surface recombination effect. Applied Physics Letters, 2011, 98, .	1.5	19
102	Temperature Dependence of Damage Thresholds in Silica Glasses with UV Laser. The Review of Laser Engineering, 2010, 38, 620-623.	0.0	0
103	Reduction in surface recombination and enhancement of light emission in silicon photonic crystals treated by high-pressure water-vapor annealing. Applied Physics Letters, 2010, 97, 121111.	1.5	16
104	Reflectance measurement of two-dimensional photonic crystal nanocavities with embedded quantum dots. Physical Review B, 2010, 82, .	1.1	12
105	Enhancement of light emission from silicon by a photonic crystal nanocavity and high-pressure water vapor annealing. , 2010, , .		0
106	Debris-free Low-stress High-speed Laser-assisted Dicing for Multi-layered MEMS. IEEJ Transactions on Sensors and Micromachines, 2010, 130, 118-123.	0.0	2
107	Ultrathin amorphization of single-crystal silicon by ultraviolet femtosecond laser pulse irradiation. Journal of Applied Physics, 2009, 105, .	1.1	27
108	Photonic crystal efficiency boost. Nature Photonics, 2009, 3, 129-130.	15.6	84

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109	Theoretical analysis of light emission from a coupled system of a photonic nanocavity and a quantum dot. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2828-2830.	0.8	9
110	Light Emission From Silicon in Photonic Crystal Nanocavity. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1090-1097.	1.9	51
111	Spectral reflectance measurement of two-dimensional photonic nanocavities with embedded quantum dots., 2008,,.		0
112	Enhanced light emission from silicon photonic crystal nanocavity. , 2008, , .		0
113	Current Status and Prospects of the Femtosecond Laser Processing. The Review of Laser Engineering, 2008, 36, 257-262.	0.0	0
114	Light Emission from Quantum Dots embedded in a Photonic Double-Heterostructure Nanocavity. , 2007, , .		0
115	Light-emission properties of quantum dots embedded in a photonic double-heterostructure nanocavity. Applied Physics Letters, 2007, 90, 231101.	1.5	29
116	Organic light-emitting diodes with photonic crystals on glass substrate fabricated by nanoimprint lithography. Applied Physics Letters, 2007, 90, 111114.	1.5	149
117	Cavity-Mode Light Emission in Silicon Photonic Nanocavities at Room Temperature. , 2007, , .		0
118	Spontaneous-emission control by photonic crystals and nanocavities. Nature Photonics, 2007, 1, 449-458.	15.6	842
119	Simultaneous inhibition and redistribution of spontaneous emission in 2D photonic crystal slabs. , 2006, 6127, 300.		0
120	Direct Fabrication of Photonic Crystal on Glass Substrate by Nanoimprint Lithography. Japanese Journal of Applied Physics, 2006, 45, L210-L212.	0.8	24
121	Controlled spontaneous-emission phenomena in semiconductor slabs with a two-dimensional photonic bandgap. Journal of Optics, 2006, 8, S131-S138.	1.5	19
122	Controlling spontaneous emission phenomena in defect-free 2D photonic crystals with quantum dots. , 2006, , .		0
123	Light Emission Control by Photonic Bandgap. The Review of Laser Engineering, 2006, 34, 761-766.	0.0	0
124	Introduction of photonic crystal structure into organic light-emitting diode., 2005, 5624, 142.		0
125	Theoretical analysis on light-extraction efficiency of organic light-emitting diodes using FDTD and mode-expansion methods. Organic Electronics, 2005, 6, 3-9.	1.4	183
126	Optical and Electrical Characteristics of Organic Light-Emitting Diodes with Two-Dimensional Photonic Crystals in Organic/Electrode Layers. Japanese Journal of Applied Physics, 2005, 44, 3669-3677.	0.8	88

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127	Investigation of spontaneous emission from quantum dots embedded in two-dimensional photonic-crystal slab. Electronics Letters, 2005, 41, 1402.	0.5	39
128	Ozone-Based Decomposition of Main Endocrine Disruption Chemicals in Sewage Effluent. Ozone: Science and Engineering, 2005, 27, 389-395.	1.4	17
129	Demonstration of organic light-emitting diodes with photonic crystal on glass substrate fabricated by nanoimprint lithography. , 2005, , .		0
130	Spontaneous emission control by defect-free 2D photonic crystal slabs. , 2005, , .		0
131	Characterizing kinetics of transport and transformation of selenium in water–sediment microcosm free from selenium contamination using a simple mathematical model. Chemosphere, 2005, 58, 705-714.	4.2	26
132	Simultaneous Inhibition and Redistribution of Spontaneous Light Emission in Photonic Crystals. Science, 2005, 308, 1296-1298.	6.0	451
133	Fabrication of Indium Phosphide Compound Photonic Crystal by Hydrogen Iodide/Xenon Inductively Coupled Plasma Etching. Japanese Journal of Applied Physics, 2004, 43, L1400-L1402.	0.8	10
134	Fine fabrication of gainasp-inp photonic crystal by Hi/Xe ICP etching using electron beam resist mask. , 2004, , .		0
135	Improvement of signal-to-noise ratio of a subterahertz spectrometer using a continuous-wave multimode laser diode by single-mode fiber optics. Applied Physics Letters, 2004, 85, 881-883.	1.5	26
136	Reduction of operating voltage in organic light-emitting diode by corrugated photonic crystal structure. Applied Physics Letters, 2004, 85, 5769-5771.	1.5	71
137	Organic light-emitting diode with ITOâ^•organic photonic crystal. Electronics Letters, 2003, 39, 1750.	0.5	40
138	Strain relaxation effect in microdisk lasers with compressively strained quantum wells. Applied Physics Letters, 2002, 80, 1511-1513.	1.5	9
139	GalnAsP Microdisk Injection Laser with Benzocyclobutene Polymer Cladding and Its Athermal Effect. Japanese Journal of Applied Physics, 2002, 41, 6364-6369.	0.8	30
140	Microgear laser. Applied Physics Letters, 2002, 80, 2051-2053.	1.5	101
141	Degradation of biotansformation products of nonylphenol ethoxylates by ozonation and UV/TiO2 treatment. Water Science and Technology, 2002, 46, 127-132.	1.2	47
142	Effective Carrier Confinement in Microdisk Lasers by Strain Relaxation in Quantum Wells., 2002,,.		0
143	Large spontaneous emission factor of $0.1$ in a microdisk injection laser. IEEE Photonics Technology Letters, $2001,13,403-405.$	1.3	47
144	Proposal and finite-difference time-domain simulation of whispering gallery mode microgear cavity. IEEE Journal of Quantum Electronics, 2001, 37, 1253-1258.	1.0	48

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145	Bioflocculation production from lower-molecular fatty acids as a novel strategy for utilization of sludge digestion liquor. Water Science and Technology, 2001, 44, 237-243.	1.2	27
146	Design of PCR primers and a gene probe for extensive detection of poly(3-hydroxybutyrate) (PHB)-degrading bacteria possessing fibronectin type III linker type-PHB depolymerases. Applied Microbiology and Biotechnology, 2001, 55, 801-806.	1.7	7
147	GalnAsP Microcylinder (Microdisk) Injection Laser with AllnAs(Ox) Claddings. Japanese Journal of Applied Physics, 2001, 40, 5338-5339.	0.8	11
148	Low-Threshold Continuous-Wave Lasing in Photopumped GalnAsP Microdisk Lasers. Japanese Journal of Applied Physics, 2001, 40, L875-L877.	0.8	13
149	Bioflocculation production from lower-molecular fatty acids as a novel strategy for utilization of sludge digestion liquor. Water Science and Technology, 2001, 44, 237-43.	1.2	6
150	Continuous wave lasing in GalnAsP microdisk injection laser with threshold current of 40 [micro sign]A. Electronics Letters, 2000, 36, 790.	0.5	163
151	Nutrient removal and starch production through cultivation of Wolffia arrhiza. Journal of Bioscience and Bioengineering, 1999, 87, 194-198.	1.1	50
152	Ultrasmall and ultralow threshold GalnAsP-InP microdisk injection lasers: design, fabrication, lasing characteristics, and spontaneous emission factor. IEEE Journal of Selected Topics in Quantum Electronics, 1999, 5, 673-681.	1.9	153
153	Optical near-field probe action in microdisk laser with 0.12 resolution. Electronics Letters, 1999, 35, 222.	0.5	7
154	Room temperature continuous wave lasing characteristics of GalnAsP/InP microdisk injection laser. Electronics Letters, 1998, 34, 278.	0.5	41
155	Proposal of Optical Near-Field Probe Using Evanescent Field of Microdisk Laser. Japanese Journal of Applied Physics, 1998, 37, 517-521.	0.8	9
156	Lasing characteristics of GalnAsP-InP strained quantum-well microdisk injection lasers with diameter of 2-10 $\hat{l}$ /4m. IEEE Photonics Technology Letters, 1997, 9, 878-880.	1.3	130
157	Title is missing!. World Journal of Microbiology and Biotechnology, 1997, 13, 273-277.	1.7	21
158	Production and recovery of an enzyme fromPseudomonas vesicularis var.povalolyticus PH that degrades polyvinyl alcohol. World Journal of Microbiology and Biotechnology, 1997, 13, 63-67.	1.7	7
159	Compact high brightness radiation sources. AIP Conference Proceedings, 1996, , .	0.3	0
160	Observation of long life plasma generated in a cavity by CO <sub>2</sub> lasers. Laser and Particle Beams, 1986, 4, 17-25.	0.4	7
161	Lateral transport of hot electrons on a spherical target by 10.6â€Î¼m CO2laser irradiation. Applied Physics Letters, 1985, 46, 355-357.	1.5	12
162	Suppression of preheating in a double foil target irradiated by a 10.6â€Î⅓m laser. Applied Physics Letters, 1984, 45, 370-372.	1.5	6

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163	Performance analysis of QoS guarantees scheduling disciplines over scalable number of flows. , 0, , .		O
164	Ultimate low threshold and high efficiency calculated for GaInAsP microdisk injection lasers with optimum posts. , 0, , .		0
165	Lasing charactertstics of two-dimensional photonic crystal slab lasers with a modified linear shaped donor-type point defect. , 0, , .		1
166	Direct Fabrication of 2D Glass Photonic Crystals by Nanoimprint Lithography. , 0, , .		0
167	Green Photoluminescence from GalnN Photonic Crystals. Applied Physics Express, 0, 1, 032004.	1.1	30