

# Guang-Qiong Xia

## List of Publications by Year in descending order

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71  
papers

1,480  
citations

331670

21  
h-index

330143

37  
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71  
all docs

71  
docs citations

71  
times ranked

592  
citing authors

#	ARTICLE	IF	CITATIONS
1	Suppression of time delay signatures of chaotic output in a semiconductor laser with double optical feedback. Optics Express, 2009, 17, 20124.	3.4	164
2	Chaotic optical communications over 100-km fiber transmission at 30-Gb/s bit rate. Optics Letters, 2018, 43, 1323.	3.3	135
3	Dual-channel chaos synchronization and communication based on unidirectionally coupled VCSELs with polarization-rotated optical feedback and polarization-rotated optical injection. Optics Express, 2009, 17, 12619.	3.4	98
4	Tbits/s physical random bit generation based on mutually coupled semiconductor laser chaotic entropy source. Optics Express, 2015, 23, 33130.	3.4	82
5	Prediction performance of reservoir computing system based on a semiconductor laser subject to double optical feedback and optical injection. Optics Express, 2018, 26, 10211.	3.4	79
6	Evolution of time delay signature of chaos generated in a mutually delay-coupled semiconductor lasers system. Optics Express, 2012, 20, 1741.	3.4	69
7	High-purity 60GHz band millimeter-wave generation based on optically injected semiconductor laser under subharmonic microwave modulation. Optics Express, 2016, 24, 18252.	3.4	63
8	Time delay signature concealment of optical feedback induced chaos in an external cavity semiconductor laser. Optics Express, 2010, 18, 6661.	3.4	61
9	Optical generation of a precise microwave frequency comb by harmonic frequency locking. Optics Letters, 2007, 32, 1917.	3.3	53
10	Experimental Demonstration of LD-Based Bidirectional Fiber-Optic Chaos Communication. IEEE Photonics Technology Letters, 2013, 25, 587-590.	2.5	50
11	Simulation of Bidirectional Long-Distance Chaos Communication Performance in a Novel Fiber-Optic Chaos Synchronization System. Journal of Lightwave Technology, 2013, 31, 461-467.	4.6	47
12	Multistability in a semiconductor laser with optoelectronic feedback. Optics Express, 2007, 15, 572.	3.4	42
13	Crosstalk Noise Analysis and Optimization in 5\$,imes,\$5 Hitless Silicon-Based Optical Router for Optical Networks-on-Chip (ONoC). Journal of Lightwave Technology, 2012, 30, 198-203.	4.6	35
14	Parallel information processing by a reservoir computing system based on a VCSEL subject to double optical feedback and optical injection. Optics Express, 2019, 27, 26070.	3.4	29
15	Experimental investigations on the external cavity time signature in chaotic output of an incoherent optical feedback external cavity semiconductor laser. Optics Communications, 2009, 282, 3153-3156.	2.1	28
16	Prediction and classification performance of reservoir computing system using mutually delay-coupled semiconductor lasers. Optics Communications, 2019, 433, 215-220.	2.1	27
17	Time-Delay Signature Suppression of Polarization-Resolved Chaos Outputs from Two Mutually Coupled VCSELs. IEEE Photonics Journal, 2013, 5, 1500409-1500409.	2.0	26
18	Performance optimization research of reservoir computing system based on an optical feedback semiconductor laser under electrical information injection. Optics Express, 2019, 27, 19931.	3.4	24

#	ARTICLE	IF	CITATIONS
19	Impact of optical feedback on current-induced polarization behavior of 1550-nm vertical-cavity surface-emitting lasers. <i>Applied Optics</i> , 2013, 52, 3833.	1.8	22
20	Polarization-resolved time-delay signatures of chaos induced by FBG-feedback in VCSEL. <i>Optics Express</i> , 2015, 23, 15459.	3.4	21
21	Tunable Broadband Chaotic Signal Synthesis From a WRC-FPLD Subject to Filtered Feedback. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 1506-1509.	2.5	21
22	Frequency-modulated continuous-wave generation based on an optically injected semiconductor laser with optical feedback stabilization. <i>Optics Express</i> , 2019, 27, 1217.	3.4	19
23	Time-delay signature of chaos in 1550 nm VCSELs with variable-polarization FBG feedback. <i>Optics Express</i> , 2014, 22, 19610.	3.4	17
24	Reservoir Computing Based on Two Parallel Reservoirs Under Identical Electrical Message Injection. <i>IEEE Photonics Journal</i> , 2021, 13, 1-11.	2.0	16
25	Modulation response performances of a Fabry-Perot semiconductor laser subjected to light injection from another Fabry-Perot semiconductor laser. <i>Science Bulletin</i> , 2009, 54, 3643-3648.	1.7	15
26	Tunable Ultra-Broadband Microwave Frequency Combs Generation Based on a Current Modulated Semiconductor Laser Under Optical Injection. <i>IEEE Access</i> , 2017, 5, 17764-17771.	4.2	15
27	Nonlinear Dynamics of 1550-nm VCSELs Subject to Positive Optoelectronic Feedback. <i>IEEE Photonics Technology Letters</i> , 2013, 25, 1605-1608.	2.5	14
28	Time Delay Concealment in Feedback Chaotic Systems With Dispersion in Loop. <i>IEEE Photonics Journal</i> , 2017, 9, 1-8.	2.0	13
29	Numerical Investigation on Ultra-Broadband Tunable Microwave Frequency Comb Generation Using a Semiconductor Laser Under Regular Pulse Injection. <i>IEEE Access</i> , 2018, 6, 55284-55290.	4.2	12
30	Generation of Tunable and Ultra-Broadband Microwave Frequency Combs Based on a Semiconductor Laser Subject to Pulse Injection From a Current Modulated Laser. <i>IEEE Photonics Journal</i> , 2018, 10, 1-10.	2.0	12
31	Nonlinear Dynamics of Exclusive Excited-State Emission Quantum Dot Lasers Under Optical Injection. <i>Photonics</i> , 2019, 6, 58.	2.0	11
32	Nonuniform DFB-SOAs: dynamic Characteristics of bistability and a novel configuration based on linearly variable current injection. <i>IEEE Journal of Quantum Electronics</i> , 2005, 41, 384-389.	1.9	10
33	Multi-Channel Physical Random Bits Generation Using a Vertical-Cavity Surface-Emitting Laser Under Chaotic Optical Injection. <i>IEEE Access</i> , 2018, 6, 3565-3572.	4.2	10
34	Power-induced polarization switching and bistability characteristics in 1550-nm VCSELs subjected to orthogonal optical injection. <i>Chinese Physics B</i> , 2015, 24, 024210.	1.4	9
35	Fast Physical Random Bit Generation Based on a Broadband Chaotic Entropy Source Originated From a Filtered Feedback WRC-FPLD. <i>IEEE Photonics Journal</i> , 2019, 11, 1-10.	2.0	9
36	Generation of Widely Tunable Narrow-Linewidth Photonic Microwave Signals Based on an Optoelectronic Oscillator Using an Optically Injected Semiconductor Laser as the Active Tunable Microwave Photonic Filter. <i>IEEE Photonics Journal</i> , 2018, 10, 1-9.	2.0	8

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37	Observation of additional delayed-time in chaos synchronization of uni-directionally coupled VCSELs. Chaos, 2018, 28, 123103.	2.5	8
38	Anticipation in the Polarization Chaos Synchronization of Uni-Directionally Coupled Vertical-Cavity Surface-Emitting Lasers With Polarization-Preserved Optical Injection. IEEE Access, 2018, 6, 58482-58490.	4.2	8
39	Generation of Broadband Optical Frequency Comb Based on a Gain-Switching 1550 nm Vertical-Cavity Surface-Emitting Laser under Optical Injection. Photonics, 2020, 7, 95.	2.0	8
40	Experimental Investigation of an Optical Reservoir Computing System Based on Two Parallel Time-Delay Reservoirs. IEEE Photonics Journal, 2021, 13, 1-11.	2.0	7
41	Theoretical investigation on commanding the bistability and self-pulsation of bistable semiconductor laser diode using delayed optoelectronic feedback. Journal of Lightwave Technology, 2005, 23, 4296-4304.	4.6	6
42	Experimental Observation of Current-Induced Bistability in a Semiconductor Laser With Positive Optoelectronic Feedback. IEEE Photonics Technology Letters, 2012, 24, 1434-1436.	2.5	6
43	Performance Enhancement of a Delay-Based Reservoir Computing System by Using Gradient Boosting Technology. IEEE Access, 2020, 8, 151990-151996.	4.2	6
44	Performance optimization of a reservoir computing system based on a solitary semiconductor laser under electrical-message injection. Applied Optics, 2020, 59, 6932.	1.8	6
45	Polarization Switching Characteristics of 1550-nm Vertical-Cavity Surface-Emitting Lasers Subject to Double Polarization Pulsed Injection. IEEE Journal of Quantum Electronics, 2016, 52, 1-7.	1.9	5
46	Experimental investigation on nonlinear dynamics of 1550-nm VCSEL simultaneously subject to orthogonal optical injection and negative optoelectronic feedback. Laser Physics, 2017, 27, 045402.	1.2	5
47	Effects of Some Operation Parameters on the Performance of a Reservoir Computing System Based on a Delay Feedback Semiconductor Laser With Information Injection by Current Modulation. IEEE Access, 2019, 7, 128767-128773.	4.2	5
48	Investigation of the Effect of Intra-Cavity Propagation Delay in Secure Optical Communication Using Chaotic Semiconductor Lasers. Photonics, 2019, 6, 49.	2.0	5
49	Experimental demonstration of a chaotic communication system with a switchable chaotic carrier wavelength based on two weak-resonant-cavity Fabry-Perot laser diodes. Applied Optics, 2021, 60, 2745.	1.8	4
50	Experimental Investigation on the Ranging Resolution of a FMCW Lidar. Photonics, 2022, 9, 11.	2.0	4
51	Experimental Investigation on Wideband Optical Frequency Comb Generation Based on a Gain-Switched 1550 nm Multi-Transverse Mode Vertical-Cavity Surface-Emitting Laser Subject to Dual Optical Injection. IEEE Access, 2020, 8, 170203-170210.	4.2	3
52	Simultaneous Generation of Multi-Channel Broadband Chaotic Signals Based on Two Unidirectionally Coupled WRC-FPLDs. IEEE Photonics Journal, 2020, 12, 1-8.	2.0	3
53	Numerical investigation on photonic microwave generation by a sole excited-state emitting quantum dot laser with optical injection and optical feedback*. Chinese Physics B, 2021, 30, 050504.	1.4	3
54	Numerical simulations on narrow-linewidth photonic microwave generation based on a QD laser simultaneously subject to optical injection and optical feedback. Applied Optics, 2020, 59, 2935.	1.8	3

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55	Generation of Chaotic Signals With Concealed Time-Delay Signature Based on a Semiconductor Laser Under Multi-Path Optical Feedback. IEEE Photonics Journal, 2022, 14, 1-5.	2.0	3
56	Nonlinear Dynamics of Mid-Infrared Interband Cascade Lasers Subject to Variable-Aperture Optical Feedback. Photonics, 2022, 9, 410.	2.0	3
57	Detailed Theoretical Investigation on Enhanced Nondegenerate Four-Wave Mixing in Passive Mode-Locked Semiconductor Lasers. IEEE Journal of Quantum Electronics, 2007, 43, 1065-1073.	1.9	2
58	Current- and Feedback-Induced State Bistability in a 1550Ånm-VCSEL With Negative Optoelectronic Feedback. IEEE Photonics Journal, 2017, 9, 1-10.	2.0	2
59	State bistability between pure- and mixed-mode states in a 1550 nm vertical-cavity surface-emitting laser subject to parallel optical injection. Japanese Journal of Applied Physics, 2017, 56, 070314.	1.5	2
60	High-quality frequency-modulated continuous-wave generation based on a semiconductor laser subject to cascade-modulated optical injection. Optics Express, 2021, 29, 26265.	3.4	2
61	Nonlinear Dynamics of Two-State Quantum Dot Lasers under Optical Feedback. Photonics, 2021, 8, 300.	2.0	2
62	Theoretical Investigation of State Bistability Between Pure- and Mixed-Mode States in a 1550-nm VCSEL Under Parallel Optical Injection. IEEE Access, 2018, 6, 19791-19797.	4.2	1
63	Photonic Microwave Generation Based on an OISL by Subharmonic Modulation From an OEO. IEEE Photonics Technology Letters, 2019, 31, 1846-1849.	2.5	1
64	Dual-linear chirp microwave signal generation by using single-beam injection to a DFB semiconductor laser and optical heterodyne technique. Optics Express, 2022, 30, 21698.	3.4	1
65	Synchronization Characteristics of Feedback-Induced Chaos in Strongly Injection-Locked Semiconductor Lasers. , 2009, , .		0
66	Impacts of mismatched intrinsic parameter on leader-laggard synchronization between two mutually coupled VCSELs. Frontiers of Optoelectronics in China, 2011, 4, 298-307.	0.2	0
67	Nonlinear dynamics of 1550nm VCSELs under external perturbations. , 2013, , .		0
68	Experimental Investigations on Polarization Switching and Bistability in a 1550 nm VCSEL Subject to Orthogonal Optical Injection With Time-Varying Injection Power. IEEE Photonics Journal, 2020, 12, 1-8.	2.0	0
69	Theoretical investigation on the propagation characteristics of inhibited spiking dynamics between two VCSEL-based photonic neurons. , 2018, , .		0
70	Wavelength-tunability chaos synchronization based on two unidirectionally coupled WRC-FPLDs. , 2018, , .		0
71	Spoken digit recognition utilizing a reservoir computing system based on mutually coupled VCSELs under optical injection. , 2022, 1, 1593.		0