

# Yi Yu

## List of Publications by Year in descending order

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66  
papers

1,094  
citations

471371

17  
h-index

395590

33  
g-index

67  
all docs

67  
docs citations

67  
times ranked

807  
citing authors

#	ARTICLE	IF	CITATIONS
1	Demonstration of a self-pulsing photonic crystal Fano laser. <i>Nature Photonics</i> , 2017, 11, 81-84.	15.6	166
2	Nonreciprocal transmission in a nonlinear photonic-crystal Fano structure with broken symmetry. <i>Laser and Photonics Reviews</i> , 2015, 9, 241-247.	4.4	125
3	Fano resonance control in a photonic crystal structure and its application to ultrafast switching. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	107
4	Ultra-coherent Fano laser based on a bound state in the continuum. <i>Nature Photonics</i> , 2021, 15, 758-764.	15.6	76
5	Maximizing the quality factor to mode volume ratio for ultra-small photonic crystal cavities. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	67
6	Threshold Characteristics of Slow-Light Photonic Crystal Lasers. <i>Physical Review Letters</i> , 2016, 116, 063901.	2.9	59
7	Switching characteristics of an InP photonic crystal nanocavity: Experiment and theory. <i>Optics Express</i> , 2013, 21, 31047.	1.7	50
8	In-plane Photonic Crystal Devices using Fano Resonances. <i>Laser and Photonics Reviews</i> , 2019, 13, 1900054.	4.4	40
9	Ultrafast all-optical modulation using a photonic-crystal Fano structure with broken symmetry. <i>Optics Letters</i> , 2015, 40, 2357.	1.7	36
10	Ultrafast Coherent Dynamics of a Photonic Crystal all-Optical Switch. <i>Physical Review Letters</i> , 2016, 117, 233901.	2.9	30
11	Experimental demonstration of a four-port photonic crystal cross-waveguide structure. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	28
12	All-optical non-linear activation function for neuromorphic photonic computing using semiconductor Fano lasers. <i>Optics Letters</i> , 2020, 45, 3844.	1.7	28
13	Theory of Self-pulsing in Photonic Crystal Fano Lasers. <i>Laser and Photonics Reviews</i> , 2017, 11, 1700089.	4.4	24
14	Signal reshaping and noise suppression using photonic crystal Fano structures. <i>Optics Express</i> , 2018, 26, 19596.	1.7	21
15	Suppression of Coherence Collapse in Semiconductor Fano Lasers. <i>Physical Review Letters</i> , 2019, 123, 233904.	2.9	21
16	Modal Properties of Photonic Crystal Cavities and Applications to Lasers. <i>Nanomaterials</i> , 2021, 11, 3030.	1.9	20
17	Spectral symmetry of Fano resonances in a waveguide coupled to a microcavity. <i>Optics Letters</i> , 2016, 41, 2065.	1.7	19
18	Modes, stability, and small-signal response of photonic crystal Fano lasers. <i>Optics Express</i> , 2018, 26, 16365.	1.7	19

#	ARTICLE	IF	CITATIONS
19	Wavelength Conversion of a 9.35-Gb/s RZ OOK Signal in an InP Photonic Crystal Nanocavity. IEEE Photonics Technology Letters, 2014, 26, 257-260.	1.3	18
20	Semiconductor Fano Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-14.	1.9	18
21	Nonlinear switching dynamics in a photonic-crystal nanocavity. Applied Physics Letters, 2014, 105, .	1.5	16
22	All-Optical Switching Improvement Using Photonic-Crystal Fano Structures. IEEE Photonics Journal, 2016, 8, 1-8.	1.0	14
23	Pulse carving using nanocavity-enhanced nonlinear effects in photonic crystal Fano structures. Optics Letters, 2018, 43, 955.	1.7	14
24	Thermal analysis of line-defect photonic crystal lasers. Optics Express, 2015, 23, 18277.	1.7	12
25	Performance study of InAs/GaAs quantum dot covered by graded In <sub>x</sub> Ga <sub>1-x</sub> As layer. Thin Solid Films, 2010, 518, 5278-5281.	0.8	8
26	Small and Large Signal Analysis of Photonic Crystal Fano Laser. Journal of Lightwave Technology, 2018, 36, 5611-5616.	2.7	8
27	Remote excitation between quantum emitters mediated by an optical Fano resonance. Optica, 2021, 8, 1605.	4.8	7
28	Polarization-insensitive quantum-dot coupled quantum-well semiconductor optical amplifier. Semiconductor Science and Technology, 2009, 24, 015009.	1.0	6
29	Optimal Scheduling Strategy of Cascade Hydropower Plants Under the Joint Market of Day-Ahead Energy and Frequency Regulation. IEEE Access, 2021, 9, 87749-87762.	2.6	6
30	Crosstalk-free all-optical switching enabled by Fano resonance in a multi-mode photonic crystal nanocavity. Optics Express, 2022, 30, 7457.	1.7	6
31	Influence of V/III ratio on QD size distribution. Frontiers of Optoelectronics in China, 2011, 4, 364-368.	0.2	3
32	Ultrafast low-energy all-optical switching using a photonic-crystal asymmetric Fano structure. , 2015, , .		3
33	An integrated circuit subsystem of quantum dot semiconductor optical amplifier coupled with electro-absorption modulator and its application in wavelength conversion. Optics Communications, 2011, 284, 1847-1854.	1.0	2
34	Ultra-fast low energy switching using an InP photonic crystal H0 nanocavity. , 2013, , .		2
35	Low-Power Thermo-Optic Switching Using Photonic Crystal Fano Structure with p-i-n Junction. , 2019, , .		2
36	Photonic crystal laser based on Fano interference allows for ultrafast frequency modulation in the THz range. , 2019, , .		2

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37	Circuit modeling of quantum dot semiconductor optical amplifier. <i>Frontiers of Optoelectronics in China</i> , 2010, 3, 232-240.	0.2	1
38	Structural and optical properties of self-assembled InAs quantum dot molecules on GaAs substrates. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, 1271-1273.	0.6	1
39	Low-power 10 Gbit/s RZ-OOK all-optical modulation using a novel photonic-crystal Fano switch. , 2014, , .		1
40	All-optical signal processing using InP photonic-crystal nanocavity switches. , 2014, , .		1
41	Highly Sensitive Photonic Crystal Cavity Laser Noise Measurements using Bayesian Filtering. , 2015, , .		1
42	Lasers, switches and non-reciprocal elements based on photonic crystal Fano resonances. , 2017, , .		1
43	Ultrafast parametric process in a photonic-crystal nanocavity switch. <i>Physical Review A</i> , 2019, 99, .	1.0	1
44	Towards High-Speed Fano Photonic Switches. , 2019, , .		1
45	Photonic crystal Fano resonances for realizing optical switches, lasers, and non-reciprocal elements. , 2017, , .		1
46	Experimental Realization of Topology-Optimized InP Photonic Cavities with Extreme Dielectric Confinement. , 2021, , .		1
47	Temporal dynamics of all-optical switching in Photonic Crystal Cavity. , 2014, , .		0
48	Slow-light effects in photonic crystal membrane lasers. , 2015, , .		0
49	Parametric gain assisted by free-carriers population oscillations in photonic crystal cavity. , 2016, , .		0
50	Switching dynamics in InP photonic-crystal nanocavity. <i>Frontiers of Optoelectronics</i> , 2016, 9, 395-398.	1.9	0
51	Photonic crystal Fano lasers and Fano switches. , 2017, , .		0
52	Experimental demonstration of a Fano laser based on photonic crystals. , 2017, , .		0
53	Regimes of self-pulsing in photonic crystal Fano lasers. , 2017, , .		0
54	Large signal simulation of photonic crystal Fano laser. , 2017, , .		0

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55	Theory and simulations of self-pulsing in photonic crystal Fano lasers. , 2017, , .		0
56	Fano Resonances for Realizing Compact and Low Energy Consumption Photonic Switches. , 2018, , .		0
57	Coupling Distant Quantum Dots using a Photonic Crystal Fano Structure. , 2019, , .		0
58	Electrically-operated buried-heterostructure nanocavity laser with sub-20 $\mu$ A threshold current. , 2021, , .		0
59	All-Optical 9.35 Gb/s Wavelength Conversion in an InP Photonic Crystal Nanocavity. , 2013, , .		0
60	Saturation broadening effect in an InP photonic-crystal nanocavity switch. , 2014, , .		0
61	Experimental demonstration of non-reciprocal transmission in a nonlinear photonic-crystal Fano structure. , 2015, , .		0
62	Spectrally and temporally resolved resonance shifts of a photonic crystal cavity switch. , 2016, , .		0
63	Coupled photonic crystal cavity-waveguide structures incorporating site-controlled semiconductor quantum dots. , 2018, , .		0
64	Parametric processes induced by ultrafast dynamics in a photonic crystal nanocavity switch. , 2018, , .		0
65	Optimization of the threshold pump power of a photonic crystal nanolaser: experiment and theory. , 2019, , .		0
66	Direct Optical Modulation of Photonic Crystal Fano Laser via the Mirror. , 2021, , .		0