Zhiliang Yuan

List of Publications by Citations

116 papers	7,355 citations	45 h-index	85 g-index
160 ext. papers	9,035 ext. citations	7.2 avg, IF	5.82 L-index

#	Paper	IF	Citations
116	Electrically driven single-photon source. *Science*, **2002**, 295, 102-5	33.3	934
115	Field test of quantum key distribution in the Tokyo QKD Network. *Optics Express*, **2011**, 19, 10387-409	3.3	579
114	Quantum key distribution over 122 km of standard telecom fiber. *Applied Physics Letters*, **2004**, 84, 3762-3764	3.4	433
113	The SECOQC quantum key distribution network in Vienna. *New Journal of Physics*, **2009**, 11, 075001	2.9	424
112	Overcoming the rate-distance limit of quantum key distribution without quantum repeaters. *Nature* , **2018**, 557, 400-403	50.4	342
111	Practical challenges in quantum key distribution. *Npj Quantum Information*, **2016**, 2,	8.6	269
110	Carrier relaxation and thermal activation of localized excitons in self-organized InAs multilayers grown on GaAs substrates. *Physical Review B*, **1996**, 54, 11528-11531	3.3	197
109	High speed single photon detection in the near infrared. *Applied Physics Letters*, **2007**, 91, 041114	3.4	195
108	An avalanche-photodiode-based photon-number-resolving detector. *Nature Photonics*, **2008**, 2, 425-428	33.9	171
107	Gigahertz decoy quantum key distribution with 1 Mbit/s secure key rate. *Optics Express*, **2008**, 16, 18790-7	3.3	167
106	A quantum access network. *Nature*, **2013**, 501, 69-72	50.4	154
105	A high speed, postprocessing free, quantum random number generator. *Applied Physics Letters*, **2008**, 93, 031109	3.4	146
104	Quantum key distribution without detector vulnerabilities using optically seeded lasers. *Nature Photonics*, **2016**, 10, 312-315	33.9	138
103	Experimental quantum key distribution beyond the repeaterless secret key capacity. *Nature Photonics*, **2019**, 13, 334-338	33.9	125
102	Continuous operation of high bit rate quantum key distribution. *Applied Physics Letters*, **2010**, 96, 161102	3.4	123
101	Effective-mass theory for InAs/GaAs strained coupled quantum dots. *Physical Review B*, **1996**, 54, 11575-11581	3.3	121
100	Quantum key distribution for 10 Gb/s dense wavelength division multiplexing networks. *Applied Physics Letters*, **2014**, 104, 051123	3.4	115

99	On-demand single-photon source for 1.3μm telecom fiber. *Applied Physics Letters*, **2005**, 86, 201111	3.4	103
98	Efficient decoy-state quantum key distribution with quantified security. *Optics Express*, **2013**, 21, 24550-65	3.3	102
97	Unconditionally secure one-way quantum key distribution using decoy pulses. *Applied Physics Letters*, **2007**, 90, 011118	3.4	92
96	Long-distance quantum key distribution secure against coherent attacks. *Optica*, **2017**, 4, 163	8.6	88
95	Avoiding the blinding attack in QKD. *Nature Photonics*, **2010**, 4, 800-801	33.9	87
94	Coexistence of High-Bit-Rate Quantum Key Distribution and Data on Optical Fiber. *Physical Review X*, **2012**, 2,	9.1	81
93	Efficient entanglement distribution over 200 kilometers. *Optics Express*, **2009**, 17, 11440-9	3.3	79
92	Gigahertz quantum key distribution with InGaAs avalanche photodiodes. *Applied Physics Letters*, **2008**, 92, 201104	3.4	78
91	10-Mb/s Quantum Key Distribution. *Journal of Lightwave Technology*, **2018**, 36, 3427-3433	4	75
90	Robust random number generation using steady-state emission of gain-switched laser diodes. *Applied Physics Letters*, **2014**, 104, 261112	3.4	73
89	Ultra-high bandwidth quantum secured data transmission. *Scientific Reports*, **2016**, 6, 35149	4.9	63
88	Resilience of gated avalanche photodiodes against bright illumination attacks in quantum cryptography. *Applied Physics Letters*, **2011**, 98, 231104	3.4	62
87	Continuous operation of a one-way quantum key distribution system over installed telecom fibre. *Optics Express*, **2005**, 13, 660-5	3.3	62
86	Gigahertz-gated InGaAs/InP single-photon detector with detection efficiency exceeding 55% at 1550 nm. *Journal of Applied Physics*, **2015**, 117, 083109	2.5	60
85	Electrically driven telecommunication wavelength single-photon source. *Applied Physics Letters*, **2007**, 90, 063512	3.4	60
84	Multi-gigahertz operation of photon counting InGaAs avalanche photodiodes. *Applied Physics Letters*, **2010**, 96, 071101	3.4	58
83	Room temperature single-photon detectors for high bit rate quantum key distribution. *Applied Physics Letters*, **2014**, 104, 021101	3.4	57
82	Experimental measurement-device-independent quantum digital signatures. *Nature Communications*, **2017**, 8, 1098	17.4	56

81	Quantum key distribution using a triggered quantum dot source emitting near 1.3μm. *Applied Physics Letters*, **2007**, 91, 161103	3.4	56
80	Thermal activation and thermal transfer of localized excitons in InAs self-organized quantum dots. *Superlattices and Microstructures*, **1998**, 23, 381-387	2.8	53
79	High speed prototype quantum key distribution system and long term field trial. *Optics Express*, **2015**, 23, 7583-92	3.3	52
78	Practical Security Bounds Against the Trojan-Horse Attack in Quantum Key Distribution. *Physical Review X*, **2015**, 5,	9.1	51
77	Stability of high bit rate quantum key distribution on installed fiber. *Optics Express*, **2012**, 20, 16339	3.3	50
76	Quantum key distribution over multicore fiber. *Optics Express*, **2016**, 24, 8081-7	3.3	50
75	Cambridge quantum network. *Npj Quantum Information*, **2019**, 5,	8.6	48
74	Field trial of a quantum secured 10 Gb/s DWDM transmission system over a single installed fiber. *Optics Express*, **2014**, 22, 23121-8	3.3	47
73	Security of two-way quantum key distribution. *Physical Review A*, **2013**, 88,	2.6	47
72	Experimental test of two-way quantum key distribution in the presence of controlled noise. *Physical Review Letters*, **2006**, 96, 200501	7.4	46
71	Ultrashort dead time of photon-counting InGaAs avalanche photodiodes. *Applied Physics Letters*, **2009**, 94, 231113	3.4	45
70	Decoy-state quantum key distribution with a leaky source. *New Journal of Physics*, **2016**, 18, 065008	2.9	39
69	Practical gigahertz quantum key distribution based on avalanche photodiodes. *New Journal of Physics*, **2009**, 11, 045019	2.9	33
68	Quantifying backflash radiation to prevent zero-error attacks in quantum key distribution. *Light: Science and Applications*, **2017**, 6, e16261	16.7	30
67	Efficient photon number detection with silicon avalanche photodiodes. *Applied Physics Letters*, **2010**, 97, 031102	3.4	29
66	Efficient and robust quantum random number generation by photon number detection. *Applied Physics Letters*, **2015**, 107, 071106	3.4	28
65	Quantum secured gigabit optical access networks. *Scientific Reports*, **2015**, 5, 18121	4.9	28
64	An entangled-LED-driven quantum relay over 1 km. *Npj Quantum Information*, **2016**, 2,	8.6	28

63	Gigacount/second photon detection with InGaAs avalanche photodiodes. *Electronics Letters*, **2012**, 48, 111	1.1	25
62	600-km repeater-like quantum communications with dual-band stabilization. *Nature Photonics*,	33.9	25
61	Patterning-effect mitigating intensity modulator for secure decoy-state quantum key distribution. *Optics Letters*, **2018**, 43, 5110-5113	3	24
60	Long-Term Test of a Fast and Compact Quantum Random Number Generator. *Journal of Lightwave Technology*, **2018**, 36, 3778-3784	4	22
59	A modulator-free quantum key distribution transmitter chip. *Npj Quantum Information*, **2019**, 5,	8.6	22
58	Single-photon-emitting diodes: a review. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3730-3740	1.3	22
57	Two-dimensional excitonic emission in InAs submonolayers. *Physical Review B*, **1996**, 54, 16919-16924	3.3	22
56	Interference of Short Optical Pulses from Independent Gain-Switched Laser Diodes for Quantum Secure Communications. *Physical Review Applied*, **2014**, 2,	4.3	21
55	Two-way quantum key distribution at telecommunication wavelength. *Physical Review A*, **2008**, 77,	2.6	21
54	Practical quantum key distribution over 60 hours at an optical fiber distance of 20km using weak and vacuum decoy pulses for enhanced security. *Optics Express*, **2007**, 15, 8465-71	3.3	21
53	Unconditionally secure quantum key distribution over 50 km of standard telecom fibre. *Electronics Letters*, **2004**, 40, 1603	1.1	20
52	Practical photon number detection with electric field-modulated silicon avalanche photodiodes. *Nature Communications*, **2012**, 3, 644	17.4	19
51	Quantum key distribution with hacking countermeasures and long term field trial. *Scientific Reports* , **2017**, 7, 1978	4.9	18
50	Key to the quantum industry. *Physics World*, **2007**, 20, 24-29	0.5	18
49	Security Bounds for Efficient Decoy-State Quantum Key Distribution. *IEEE Journal of Selected Topics in Quantum Electronics*, **2015**, 21, 197-204	3.8	15
48	Probing higher order correlations of the photon field with photon number resolving avalanche photodiodes. *Optics Express*, **2011**, 19, 13268-76	3.3	15
47	Robust unconditionally secure quantum key distribution with two nonorthogonal and uninformative states. *Physical Review A*, **2009**, 80,	2.6	15
46	Comment on "secure communication using mesoscopic coherent states". *Physical Review Letters*, **2005**, 94, 048901; author reply 048902	7.4	14

45	Real-time interferometric quantum random number generation on chip. *Journal of the Optical Society of America B: Optical Physics*, **2019**, 36, B137	1.7	13
44	A photonic integrated quantum secure communication system. *Nature Photonics*, **2021**, 15, 850-856	33.9	13
43	Quantum communication using single photons from a semiconductor quantum dot emitting at a telecommunication wavelength. *Journal of Optics*, **2009**, 11, 054005		12
42	Energy relaxation processes of hot quasi-two-dimensional excitons in very thin GaAs/AlGaAs quantum wells by exciton□acoustic-phonon interaction. *Journal of Applied Physics*, **1996**, 79, 424-426	2.5	12
41	Near perfect mode overlap between independently seeded, gain-switched lasers. *Optics Express*, **2016**, 24, 17849-59	3.3	11
40	Response to □comment on □esilience of gated avalanche photodiodes against bright illumination attacks in quantum cryptography□[Appl. Phys. Lett. 99, 196101 (2011)]. *Applied Physics Letters*, **2011**, 99, 196102	3.4	10
39	Photoluminescence studies of single submonolayer InAs structures grown on GaAs (001) matrix. *Applied Physics Letters*, **1995**, 67, 1874-1876	3.4	10
38	Exciton localization in corrugated GaAs/AlAs superlattices grown on (311) GaAs substrates. *Physical Review B*, **1995**, 51, 7024-7028	3.3	10
37	Gigahertz measurement-device-independent quantum key distribution using directly modulated lasers. *Npj Quantum Information*, **2021**, 7,	8.6	10
36	Simple source device-independent continuous-variable quantum random number generator. *Physical Review A*, **2019**, 99,	2.6	9
35	Evolution of locally excited avalanches in semiconductors. *Applied Physics Letters*, **2010**, 96, 191107	3.4	9
34	Single quantum dot electroluminescence near. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 21, 390-394	3	9
33	Quantum key distribution and beyond: introduction. *Journal of the Optical Society of America B: Optical Physics*, **2019**, 36, QKD1	1.7	9
32	Intensity modulation as a preemptive measure against blinding of single-photon detectors based on self-differencing cancellation. *Physical Review A*, **2018**, 98,	2.6	8
31	Quantum key distribution with an entangled light emitting diode. *Applied Physics Letters*, **2015**, 107, 261101	3.4	8
30	Optical study of heterointerface configuration in narrow GaAs/AlGaAs single quantum wells prepared with growth interruption. *Journal of Applied Physics*, **1996**, 79, 1073	2.5	8
29	Modulator-Free Coherent-One-Way Quantum Key Distribution. *Laser and Photonics Reviews*, **2017**, 11, 1700067	8.3	7
28	Worldwide standardization activity for quantum key distribution **2014**,		7

27	Experimental position-time entanglement with degenerate single photons. *Physical Review A*, **2008**, 77,	2.6	7
26	A direct GHz-clocked phase and intensity modulated transmitter applied to quantum key distribution. *Quantum Science and Technology*, **2018**, 3, 045010	5.5	6
25	Manipulating photon coherence to enhance the security of distributed phase reference quantum key distribution. *Applied Physics Letters*, **2017**, 111, 261106	3.4	6
24	Tokyo QKD Network and the evolution to Secure Photonic Network **2011**,		5
23	Self-assembled quantum dots as a source of single photons and photon pairs. *Physica Status Solidi (B): Basic Research*, **2003**, 238, 353-359	1.3	5
22	Testing the photon-number statistics of a quantum key distribution light source. *Optics Express*, **2018**, 26, 22733-22749	3.3	5
21	Introduction to the Issue on Quantum Communication and Cryptography. *IEEE Journal of Selected Topics in Quantum Electronics*, **2015**, 21, 3-4	3.8	4
20	Optical characterization of InAs monolayer quantum structures grown on (311)A, (311)B, and (100) GaAs substrates. *IEEE Journal of Selected Topics in Quantum Electronics*, **1997**, 3, 471-474	3.8	4
19	Recombination of Many-Particle States in InAs Self-Organized Quantum Dots. *Physica Status Solidi (B): Basic Research*, **2001**, 224, 409-412	1.3	4
18	Dynamical Band Gap Renormalization in Self-Organized InAs/GaAs Quantum Dots. *Physica Status Solidi A*, **2000**, 178, 345-348		4
17	Photoluminescence studies of chemical adsorption of GaAs/AlxGa1 ⊠As multiquantum well semiconductor. *Journal of the Chemical Society Chemical Communications*, **1995**, 1439-1440		4
16	Advanced Laser Technology for Quantum Communications (Tutorial Review). *Advanced Quantum Technologies*, **2021**, 4, 2100062	4.3	4
15	Compensating the noise of a communication channel via asymmetric encoding of quantum information. *Physical Review Letters*, **2010**, 105, 140504	7.4	3
14	Decoy pulse quantum key distribution for practical purposes. *IET Optoelectronics*, **2008**, 2, 195	1.5	3
13	Real-time operation of a multi-rate, multi-protocol quantum key distribution transmitter. *Optica*, **2021**, 8, 911	8.6	3
12	Quantum Secured Gigabit Passive Optical Networks **2015**,		2
11	First quantum secured 10-Gb/s DWDM transmission over the same installed fibre **2014**,		2
10	Practical treatment of quantum bugs **2012**,		2

9	Biexciton cascade in telecommunication wavelength quantum dots. *Journal of Physics: Conference Series*, **2010**, 210, 012036	0.3	2
8	Intrawell and interwell transfer of excitons in growth-interrupted quantum wells. *Superlattices and Microstructures*, **1998**, 24, 163-167	2.8	2
7	Photoluminescence studies on the interaction of near-surface GaAs/AlxGa1−xAs quantum wells with chemical adsorbates. *Journal of Photochemistry and Photobiology A: Chemistry*, **1996**, 101, 113-117	4.7	2
6	Coherent phase transfer for real-world twin-field quantum key distribution.. *Nature Communications*, **2022**, 13, 157	17.4	2
5	Quantum key distribution using in-line highly birefringent interferometers. *Applied Physics Letters*, **2018**, 113, 031107	3.4	1
4	Comment on "High-efficiency energy up-conversion at GaAs-GaInP2 interfaces" [Appl. Phys. Lett. 67, 2813 (1995)]. *Applied Physics Letters*, **1997**, 70, 1628-1629	3.4	1
3	Setting best practice criteria for self-differencing avalanche photodiodes in quantum key distribution **2017**,		1
2	Backflashes from fast-gated avalanche photodiodes in quantum key distribution. *Applied Physics Letters*, **2020**, 116, 154001	3.4	1
1	Quantum dots for single photon and photon pair technology **2006**, 288-297		