

# Guofeng Zhang

## List of Publications by Year in descending order

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71  
papers

857  
citations

516710

16  
h-index

526287

27  
g-index

71  
all docs

71  
docs citations

71  
times ranked

359  
citing authors

#	ARTICLE	IF	CITATIONS
1	On the Dynamics of the Tavis-Cummings Model. IEEE Transactions on Automatic Control, 2023, 68, 2048-2063.	5.7	3
2	Detecting quantum entanglement with unsupervised learning. Quantum Science and Technology, 2022, 7, 015005.	5.8	15
3	Amplification of optical Schrödinger cat states with an implementation protocol based on a frequency comb. Physical Review A, 2022, 105, .	2.5	5
4	Linear quantum systems: A tutorial. Annual Reviews in Control, 2022, 54, 274-294.	7.9	13
5	On the control of flying qubits. Automatica, 2022, 143, 110338.	5.0	4
6	Single-Photon Coherent Feedback Control and Filtering. , 2021, , 2066-2069.		0
7	Quantum context-aware recommendation systems based on tensor singular value decomposition. Quantum Information Processing, 2021, 20, 1.	2.2	2
8	Quantum tensor singular value decomposition*. Journal of Physics Communications, 2021, 5, 075001.	1.2	2
9	Control engineering of continuous-mode single-photon states: a review. Control Theory and Technology, 2021, 19, 544-562.	1.6	4
10	Structural Characterization of Linear Quantum Systems With Application to Back-Action Evading Measurement. IEEE Transactions on Automatic Control, 2020, 65, 3157-3163.	5.7	2
11	Iterative methods for computing U-eigenvalues of non-symmetric complex tensors with application in quantum entanglement. Computational Optimization and Applications, 2020, 75, 779-798.	1.6	5
12	Structural decomposition for quantum two-level systems. Automatica, 2020, 113, 108751.	5.0	2
13	An improved quantum projection filter. Automatica, 2020, 112, 108716.	5.0	15
14	Covariance Functions for Quantum Linear System Driven by Few Photons. , 2020, , .		0
15	On the dynamics of two photons interacting with a two-qubit coherent feedback network. Automatica, 2020, 117, 108978.	5.0	11
16	Single-photon coherent feedback control and filtering. , 2020, , 1-4.		1
17	Atomic excitation for a two-level system driven by three input photons. , 2020, , .		0
18	Quantum filtering for a two-level atom driven by two counter-propagating photons. Quantum Information Processing, 2019, 18, 1.	2.2	13

#	ARTICLE	IF	CITATIONS
19	Energy cost for controlling complex networks with linear dynamics. <i>Physical Review E</i> , 2019, 99, 052305.	2.1	16
20	Quantum Higher Order Singular Value Decomposition. , 2019, , .		5
21	Upper bound of the minimum energy cost for controlling complex networks. , 2019, , .		0
22	An exponential quantum projection filter for open quantum systems. <i>Automatica</i> , 2019, 99, 59-68.	5.0	20
23	How entangled can a multi-party system possibly be?. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2018, 382, 1465-1471.	2.1	17
24	Single-photon quantum filtering with multiple measurements. <i>International Journal of Adaptive Control and Signal Processing</i> , 2018, 32, 528-546.	4.1	12
25	The Kalman Decomposition for Linear Quantum Systems. <i>IEEE Transactions on Automatic Control</i> , 2018, 63, 331-346.	5.7	26
26	Geometric measures of entanglement in multipartite pure states via complex-valued neural networks. <i>Neurocomputing</i> , 2018, 313, 25-38.	5.9	15
27	Representation and network synthesis for a class of mixed quantum-classical linear stochastic systems. <i>Automatica</i> , 2018, 96, 84-97.	5.0	5
28	Admissibility Analysis and Control Synthesis for Fuzzy Descriptor Systems. <i>IEEE Transactions on Fuzzy Systems</i> , 2017, 25, 729-740.	9.8	49
29	Mixed LQG and H $\infty$ coherent feedback control for linear quantum systems. <i>International Journal of Control</i> , 2017, 90, 2575-2588.	1.9	5
30	Dynamical analysis of quantum linear systems driven by multi-channel multi-photon states. <i>Automatica</i> , 2017, 83, 186-198.	5.0	19
31	Scattering of few photons by a ladder-type quantum system. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 345301.	2.1	3
32	Classical and quantum stochastic models of resistive and memristive circuits. <i>Journal of Mathematical Physics</i> , 2017, 58, 073505.	1.1	1
33	Exact analysis of quantum filter for systems driven by two counter-propagating single-photon states <small>1 This work was financially supported in part by National Natural Science Foundation of China (NSFC) grant (No. 61374057), Hong Kong RGC grant (Nos. 531213 and 15206915), and JCRC INS21 2016 project. IFAC-PapersOnLine, 2017, 50, 11749-11754.</small>	0.9	0
34	The Kalman decomposition for Linear Quantum Stochastic Systems. , 2017, , .		3
35	Quantum projection filtering for open quantum systems. , 2017, , .		0
36	Regularly decomposable tensors and classical spin states. <i>Communications in Mathematical Sciences</i> , 2017, 15, 1651-1665.	1.0	5

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37	Exact analysis of the response of quantum systems to two-photons using a QSDE approach. <i>New Journal of Physics</i> , 2016, 18, 033004.	2.9	18
38	Quantum filtering for multiple measurements driven by fields in single-photon states. , 2016, , .		3
39	Wigner spectrum and coherent feedback control of continuous-mode single-photon Fock states. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 435301.	2.1	5
40	Computing the geometric measure of entanglement of multipartite pure states by means of non-negative tensors. <i>Physical Review A</i> , 2016, 93, .	2.5	36
41	Quantum filtering for multiple measurements driven by two single-photon states. , 2016, , .		4
42	Analysis and control of quantum finite-level systems driven by single-photon input states. <i>Automatica</i> , 2016, 69, 18-23.	5.0	19
43	$\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0016.gif" overflow="scroll" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle H \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle mml:mrow \rangle \langle mml:mi \rangle \hat{z} \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle mml:mrow \rangle \langle mml:mi \rangle S$ fuzzy fish population logistic model with the invasion of alien species. <i>Neurocomputing</i> , 2016, 173, 724-733.	5.9	33
44	Generating nonclassical quantum input field states with modulating filters. <i>EPL Quantum Technology</i> , 2015, 2, .	6.3	18
45	Single photon inverting pulse for an atom in a cavity. , 2015, , .		1
46	On realization theory of quantum linear systems. <i>Automatica</i> , 2015, 59, 139-151.	5.0	38
47	LQG/H&lt;inf&gt;&#x221E;&lt;/inf&gt; control of linear quantum stochastic systems. , 2015, , .		1
48	Analysis of quantum linear systems&#x2122; response to multi-photon states. <i>Automatica</i> , 2014, 50, 442-451.	5.0	25
49	Quantum optical realization of classical linear stochastic systems. <i>Automatica</i> , 2013, 49, 3090-3096.	5.0	19
50	On the Response of Quantum Linear Systems to Single Photon Input Fields. <i>IEEE Transactions on Automatic Control</i> , 2013, 58, 1221-1235.	5.7	47
51	Squeezing enhancement of degenerate parametric amplifier via coherent feedback control. <i>International Journal of Control</i> , 2012, 85, 1865-1875.	1.9	3
52	Squeezing enhancement of degenerate parametric amplifiers via coherent feedback control. , 2012, , .		0
53	Synthesis and structure of mixed quantum-classical linear systems. , 2012, , .		13
54	Coherent Feedback Control of Linear Quantum Optical Systems via Squeezing and Phase Shift. <i>SIAM Journal on Control and Optimization</i> , 2012, 50, 2130-2150.	2.1	15

#	ARTICLE	IF	CITATIONS
55	Quantum feedback networks and control: A brief survey. Science Bulletin, 2012, 57, 2200-2214.	1.7	67
56	Direct and Indirect Couplings in Coherent Feedback Control of Linear Quantum Systems. IEEE Transactions on Automatic Control, 2011, 56, 1535-1550.	5.7	111
57	Complexity analysis of network-based dynamical systems. Journal of Systems Science and Complexity, 2011, 24, 413-432.	2.8	1
58	Feedback control of linear quantum optical systems. , 2011, , .		0
59	Linear system based approach for solving some related problems of $M$ -matrices. Linear Algebra and Its Applications, 2010, 432, 327-337.	0.9	0
60	Output feedback stabilisation of networked control systems via switched system approach. International Journal of Control, 2009, 82, 1665-1677.	1.9	32
61	Stability and Bifurcation Analysis of a Class of Networked Dynamical Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 664-668.	3.0	4
62	Controlling chaos in a memristor-based Chua's circuit. , 2009, , .		6
63	Digital redesign via the generalised bilinear transformation. International Journal of Control, 2009, 82, 741-754.	1.9	12
64	$\mu$ -equivalence of Discretizations of Analog Controllers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 15232-15237.	0.4	0
65	DYNAMICAL ANALYSIS OF A NETWORKED CONTROL SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 61-83.	1.7	3
66	Performance comparison of digital implementation of analog systems. , 2007, , .		1
67	Performance Recovery in Digital Implementation of Analogue Systems. SIAM Journal on Control and Optimization, 2007, 45, 2207-2223.	2.1	6
68	A model predictive control approach to networked systems. , 2007, , .		4
69	Analysis of a type of nonsmooth dynamical systems. Chaos, Solitons and Fractals, 2006, 30, 1153-1164.	5.1	4
70	NETWORKED CONTROL SYSTEMS: A PERSPECTIVE FROM CHAOS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2005, 15, 3075-3101.	1.7	7
71	Comparing digital implementation via the bilinear and step-invariant transformations. Automatica, 2004, 40, 327-330.	5.0	3