

# Francesco Ticozzi

## List of Publications by Year in descending order

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58  
papers

992  
citations

516215

16  
h-index

433756

31  
g-index

58  
all docs

58  
docs citations

58  
times ranked

639  
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling and Control of Quantum Systems: An Introduction. IEEE Transactions on Automatic Control, 2012, 57, 1898-1917.	3.6	187
2	Quantum Markovian Subsystems: Invariance, Attractivity, and Control. IEEE Transactions on Automatic Control, 2008, 53, 2048-2063.	3.6	108
3	Analysis and synthesis of attractive quantum Markovian dynamics. Automatica, 2009, 45, 2002-2009.	3.0	86
4	Stabilizing entangled states with quasi-local quantum dynamical semigroups. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 5259-5269.	1.6	54
5	Consensus for Quantum Networks: Symmetry From Gossip Interactions. IEEE Transactions on Automatic Control, 2015, 60, 158-172.	3.6	41
6	Quantum resources for purification and cooling: fundamental limits and opportunities. Scientific Reports, 2014, 4, 5192.	1.6	38
7	Asymmetric architecture for heralded single-photon sources. Physical Review A, 2013, 88, .	1.0	31
8	Steady-state entanglement by engineered quasi-local Markovian dissipation. Quantum Information and Computation, 2014, 14, 265-294.	0.1	30
9	Discrete-time classical and quantum Markovian evolutions: Maximum entropy problems on path space. Journal of Mathematical Physics, 2010, 51, .	0.5	27
10	Stabilization of Stochastic Quantum Dynamics via Open- and Closed-Loop Control. IEEE Transactions on Automatic Control, 2013, 58, 74-85.	3.6	27
11	Engineering Stable Discrete-Time Quantum Dynamics via a Canonical QR Decomposition. IEEE Transactions on Automatic Control, 2010, 55, 2721-2734.	3.6	26
12	Hamiltonian Control of Quantum Dynamical Semigroups: Stabilization and Convergence Speed. IEEE Transactions on Automatic Control, 2012, 57, 1931-1944.	3.6	26
13	Stabilizing Quantum States by Constructive Design of Open Quantum Dynamics. IEEE Transactions on Automatic Control, 2010, 55, 2901-2905.	3.6	22
14	Heralded single-photon sources for quantum-key-distribution applications. Physical Review A, 2016, 93, .	1.0	19
15	Quantum information encoding, protection, and correction from trace-norm isometries. Physical Review A, 2010, 81, .	1.0	18
16	Robust Steering of $n$ -Level Quantum Systems. IEEE Transactions on Automatic Control, 2004, 49, 1742-1745.	3.6	17
17	Single-bit feedback and quantum-dynamical decoupling. Physical Review A, 2006, 74, .	1.0	17
18	On the Convergence of an Efficient Algorithm for Kullback-Leibler Approximation of Spectral Densities. IEEE Transactions on Automatic Control, 2011, 56, 506-515.	3.6	17

#	ARTICLE	IF	CITATIONS
19	Exponential Stability of Subspaces for Quantum Stochastic Master Equations. <i>Annales Henri Poincare</i> , 2017, 18, 2045-2074.	0.8	13
20	On entropy production for controlled Markovian evolution. <i>Journal of Mathematical Physics</i> , 2006, 47, 063301.	0.5	12
21	Decompositions of Hilbert spaces, stability analysis and convergence probabilities for discrete-time quantum dynamical semigroups. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 085302.	0.7	12
22	Minimum Relative Entropy for Quantum Estimation: Feasibility and General Solution. <i>IEEE Transactions on Information Theory</i> , 2014, 60, 357-367.	1.5	11
23	Alternating Projections Methods for Discrete-Time Stabilization of Quantum States. <i>IEEE Transactions on Automatic Control</i> , 2018, 63, 819-826.	3.6	11
24	Simulation of quantum walks and fast mixing with classical processes. <i>Physical Review A</i> , 2018, 98, .	1.0	11
25	Dynamical decoupling in quantum control: A system theoretic approach. <i>Systems and Control Letters</i> , 2006, 55, 578-584.	1.3	10
26	Quantum and classical resources for unitary design of open-system evolutions. <i>Quantum Science and Technology</i> , 2017, 2, 034001.	2.6	10
27	Exact stabilization of entangled states in finite time by dissipative quantum circuits. <i>Physical Review A</i> , 2017, 96, .	1.0	10
28	General fixed points of quasi-local frustration-free quantum semigroups: from invariance to stabilization. <i>Quantum Information and Computation</i> , 2016, 16, 657-699.	0.1	10
29	Extending Robustness and Randomization from Consensus to Symmetrization Algorithms. <i>SIAM Journal on Control and Optimization</i> , 2015, 53, 2076-2099.	1.1	9
30	Spectral Conditions for Stability and Stabilization of Positive Equilibria for a Class of Nonlinear Cooperative Systems. <i>IEEE Transactions on Automatic Control</i> , 2018, 63, 402-417.	3.6	9
31	Quantum state preparation by controlled dissipation in finite time: From classical to quantum controllers. , 2012, , .		7
32	On time-reversal and space-time harmonic processes for Markovian quantum channels. <i>Quantum Information Processing</i> , 2010, 9, 551-574.	1.0	6
33	Switching quantum dynamics for fast stabilization. <i>Physical Review A</i> , 2015, 91, .	1.0	6
34	Symmetrizing quantum dynamics beyond gossip-type algorithms. <i>Automatica</i> , 2016, 74, 38-46.	3.0	6
35	Discrete-time controllability for feedback quantum dynamics. <i>Automatica</i> , 2011, 47, 2451-2456.	3.0	5
36	A new perspective on gossip iterations: From Symmetrization to quantum consensus. , 2013, , .		5

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37	Uniquely determined pure quantum states need not be unique ground states of quasi-local Hamiltonians. <i>Physical Review A</i> , 2019, 99, .	1.0	5
38	Minimal resources identifiability and estimation of quantum channels. <i>Quantum Information Processing</i> , 2014, 13, 683-707.	1.0	4
39	Existence, uniqueness and stability properties of positive equilibria for a class of nonlinear cooperative systems. , 2015, , .		4
40	Characterizing limits and opportunities in speeding up Markov chain mixing. <i>Stochastic Processes and Their Applications</i> , 2021, 136, 145-191.	0.4	4
41	Pure state stabilization with discrete-time quantum feedback. , 2010, , .		3
42	Generic pure quantum states as steady states of quasi-local dissipative dynamics. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 145304.	0.7	3
43	Quantum Information Encoding from Stabilizing Dynamics. , 2019, , .		3
44	Dissipative encoding of quantum information. <i>Quantum Information and Computation</i> , 2021, 21, 737-770.	0.1	3
45	Stabilization Via Feedback Switching for Quantum Stochastic Dynamics. , 2022, 6, 235-240.		3
46	Estimation of quantum channels: Identifiability and ML methods. , 2012, , .		2
47	Exact and approximate solutions for the quantum minimum-Kullback-entropy estimation problem. <i>Physical Review A</i> , 2014, 89, .	1.0	2
48	Switching quantum dynamics for fast preparation of pure states. , 2015, , .		1
49	An infinitesimal characterization of nonlinear contracting interference functions. , 2016, , .		1
50	Optimal commuting approximation of Hermitian operators. <i>Linear Algebra and Its Applications</i> , 2005, 400, 319-325.	0.4	0
51	Computing and controlling the convergence speed of quantum dynamical semigroups. , 2010, , .		0
52	Engineering a long distance free-space quantum channel. , 2011, , .		0
53	Environment-assisted and feedback-assisted stabilization of quantum stochastic evolutions. , 2012, , .		0
54	On the Role of Hamiltonians for Dissipative Entanglement Engineering* *F.T. acknowledges support by the QUINTET and the QFuture projects of the University of Padova, Italy.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 220-225.	0.4	0

#	ARTICLE	IF	CITATIONS
55	When does memory speed-up mixing?. , 2017, , .		0
56	Distributed finite-time stabilization of entangled quantum states on tree-like hypergraphs. , 2017, , .		0
57	The whole from the parts: Markovian stabilizing dynamics and ground-state cooling under locality constraints. , 2019, , .		0
58	Bounding the Convergence Time of Local Probabilistic Evolution. Lecture Notes in Computer Science, 2017, , 754-762.	1.0	0