# Francesco Ticozzi

List of Publications by Year
in descending order

| | | | |
|---|---|---|---|
| 58 papers | 992 citations | 516710<br>16 h-index | 434195<br>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. | 5.7 | 187 |
| 2 | Quantum Markovian Subsystems: Invariance, Attractivity, and Control. IEEE Transactions on Automatic Control, 2008, 53, 2048-2063. | 5.7 | 108 |
| 3 | Analysis and synthesis of attractive quantum Markovian dynamics. Automatica, 2009, 45, 2002-2009. | 5.0 | 86 |
| 4 | Stabilizing entangled states with quasi-local quantum dynamical semigroups. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 5259-5269. | 3.4 | 54 |
| 5 | Consensus for Quantum Networks: Symmetry From Gossip Interactions. IEEE Transactions on Automatic Control, 2015, 60, 158-172. | 5.7 | 41 |
| 6 | Quantum resources for purification and cooling: fundamental limits and opportunities. Scientific Reports, 2014, 4, 5192. | 3.3 | 38 |
| 7 | Asymmetric architecture for heralded single-photon sources. Physical Review A, 2013, 88, . | 2.5 | 31 |
| 8 | Steady-state entanglement by engineered quasi-local Markovian dissipation. Quantum Information and Computation, 2014, 14, 265-294. | 0.3 | 30 |
| 9 | Discrete-time classical and quantum Markovian evolutions: Maximum entropy problems on path space. Journal of Mathematical Physics, 2010, 51, . | 1.1 | 27 |
| 10 | Stabilization of Stochastic Quantum Dynamics via Open- and Closed-Loop Control. IEEE Transactions on Automatic Control, 2013, 58, 74-85. | 5.7 | 27 |
| 11 | Engineering Stable Discrete-Time Quantum Dynamics via a Canonical QR Decomposition. IEEE Transactions on Automatic Control, 2010, 55, 2721-2734. | 5.7 | 26 |
| 12 | Hamiltonian Control of Quantum Dynamical Semigroups: Stabilization and Convergence Speed. IEEE Transactions on Automatic Control, 2012, 57, 1931-1944. | 5.7 | 26 |
| 13 | Stabilizing Quantum States by Constructive Design of Open Quantum Dynamics. IEEE Transactions on Automatic Control, 2010, 55, 2901-2905. | 5.7 | 22 |
| 14 | Heralded single-photon sources for quantum-key-distribution applications. Physical Review A, 2016, 93, . | 2.5 | 19 |
| 15 | Quantum information encoding, protection, and correction from trace-norm isometries. Physical Review A, 2010, 81, . | 2.5 | 18 |
| 16 | Robust Steering of&lt;tex&gt;$n$&lt;/tex&gt;-Level Quantum Systems. IEEE Transactions on Automatic Control, 2004, 49, 1742-1745. | 5.7 | 17 |
| 17 | Single-bit feedback and quantum-dynamical decoupling. Physical Review A, 2006, 74, . | 2.5 | 17 |
| 18 | On the Convergence of an Efficient Algorithm for Kullbackâ€"Leibler Approximation of Spectral Densities. IEEE Transactions on Automatic Control, 2011, 56, 506-515. | 5.7 | 17 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 19 | Exponential Stability of Subspaces for Quantum Stochastic Master Equations. Annales Henri Poincare, 2017, 18, 2045-2074. | 1.7 | 13 |
| 20 | On entropy production for controlled Markovian evolution. Journal of Mathematical Physics, 2006, 47, 063301. | 1.1 | 12 |
| 21 | Decompositions of Hilbert spaces, stability analysis and convergence probabilities for discrete-time quantum dynamical semigroups. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 085302. | 2.1 | 12 |
| 22 | Minimum Relative Entropy for Quantum Estimation: Feasibility and General Solution. IEEE Transactions on Information Theory, 2014, 60, 357-367. | 2.4 | 11 |
| 23 | Alternating Projections Methods for Discrete-Time Stabilization of Quantum States. IEEE Transactions on Automatic Control, 2018, 63, 819-826. | 5.7 | 11 |
| 24 | Simulation of quantum walks and fast mixing with classical processes. Physical Review A, 2018, 98, . | 2.5 | 11 |
| 25 | Dynamical decoupling in quantum control: A system theoretic approach. Systems and Control Letters, 2006, 55, 578-584. | 2.3 | 10 |
| 26 | Quantum and classical resources for unitary design of open-system evolutions. Quantum Science and Technology, 2017, 2, 034001. | 5.8 | 10 |
| 27 | Exact stabilization of entangled states in finite time by dissipative quantum circuits. Physical Review A, 2017, 96, . | 2.5 | 10 |
| 28 | General fixed points of quasi-local frustration-free quantum semigroups: from invariance to stabilization. Quantum Information and Computation, 2016, 16, 657-699. | 0.3 | 10 |
| 29 | Extending Robustness and Randomization from Consensus to Symmetrization Algorithms. SIAM Journal on Control and Optimization, 2015, 53, 2076-2099. | 2.1 | 9 |
| 30 | Spectral Conditions for Stability and Stabilization of Positive Equilibria for a Class of Nonlinear Cooperative Systems. IEEE Transactions on Automatic Control, 2018, 63, 402-417. | 5.7 | 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. Quantum Information Processing, 2010, 9, 551-574. | 2.2 | 6 |
| 33 | Switching quantum dynamics for fast stabilization. Physical Review A, 2015, 91, . | 2.5 | 6 |
| 34 | Symmetrizing quantum dynamics beyond gossip-type algorithms. Automatica, 2016, 74, 38-46. | 5.0 | 6 |
| 35 | Discrete-time controllability for feedback quantum dynamics. Automatica, 2011, 47, 2451-2456. | 5.0 | 5 |
| 36 | A new perspective on gossip iterations: From Symmetrization to quantum consensus. , 2013, , . |  | 5 |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 37 | Uniquely determined pure quantum states need not be unique ground states of quasi-local Hamiltonians. Physical Review A, 2019, 99, . | 2.5 | 5 |
| 38 | Minimal resources identifiability and estimation of quantum channels. Quantum Information Processing, 2014, 13, 683-707. | 2.2 | 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. Stochastic Processes and Their Applications, 2021, 136, 145-191. | 0.9 | 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. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 145304. | 2.1 | 3 |
| 43 | Quantum Information Encoding from Stabilizing Dynamics. , 2019, , . | | 3 |
| 44 | Dissipative encoding of quantum information. Quantum Information and Computation, 2021, 21, 737-770. | 0.3 | 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. Physical Review A, 2014, 89, . | 2.5 | 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. Linear Algebra and Its Applications, 2005, 400, 319-325. | 0.9 | 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. | 1.3 | 0 |