Hamza Fawzi

List of Publications by Year
in descending order

23 papers	1,423 citations	1040056 9 h-index	839539 18 g-index
24 all docs	24 docs citations	24 times ranked	1138 citing authors

#	Article	IF	Citations
1	The sum-of-squares hierarchy on the sphere and applications in quantum information theory. Mathematical Programming, 2021, 190, 331-360.	2.4	30
2	Computing conditional entropies for quantum correlations. Nature Communications, 2021, 12, 575.	12.8	25
3	Geometric RÃ©nyi Divergence and its Applications in Quantum Channel Capacities. Communications in Mathematical Physics, 2021, 384, 1615-1677.	2.2	28
4	The Set of Separable States has no Finite Semidefinite Representation Except in Dimension $$3\times 2$$. Communications in Mathematical Physics, 2021, 386, 1319-1335.	2.2	4
5	Semidefinite Approximations of the Matrix Logarithm. Foundations of Computational Mathematics, 2019, 19, 259-296.	2.5	47
6	On representing the positive semidefinite cone using the second-order cone. Mathematical Programming, 2019, 175, 109-118.	2.4	11
7	AnySOS: An anytime algorithm for SOS programming. , 2019, , .		1
8	Efficient optimization of the quantum relative entropy. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 154003.	2.1	32
9	A Lower Bound on the Positive Semidefinite Rank of Convex Bodies. SIAM Journal on Applied Algebra and Geometry, 2018, 2, 126-139.	1.4	5
10	Equivariant Semidefinite Lifts of Regular Polygons. Mathematics of Operations Research, 2017, 42, 472-494.	1.3	1
11	Lieb's concavity theorem, matrix geometric means, and semidefinite optimization. Linear Algebra and Its Applications, 2017, 513, 240-263.	0.9	10
12	Sparse sums of squares on finite abelian groups and improved semidefinite lifts. Mathematical Programming, 2016, 160, 149-191.	2.4	18
13	Rational and real positive semidefinite rank can be different. Operations Research Letters, 2016, 44, 59-60.	0.7	3
14	Self-scaled bounds for atomic cone ranks: applications to nonnegative rank and cp-rank. Mathematical Programming, 2016, 158, 417-465.	2.4	15
15	Sparse sum-of-squares certificates on finite abelian groups. , 2015, , .		9
16	Lower bounds on nonnegative rank via nonnegative nuclear norms. Mathematical Programming, 2015, 153, 41-66.	2.4	8
17	Positive semidefinite rank. Mathematical Programming, 2015, 153, 133-177.	2.4	57
18	Equivariant Semidefinite Lifts and Sum-of-Squares Hierarchies. SIAM Journal on Optimization, 2015, 25, 2212-2243.	2.0	9

#	Article	IF	Citations
19	Secure Estimation and Control for Cyber-Physical Systems Under Adversarial Attacks. IEEE Transactions on Automatic Control, 2014, 59, 1454-1467.	5.7	958
20	Security for control systems under sensor and actuator attacks. , 2012, , .		41
21	Secure state-estimation for dynamical systems under active adversaries. , 2011, , .		92
22	On Polyhedral Approximations of the Positive Semidefinite Cone. Mathematics of Operations Research, 0, , .	1.3	2
23	Defining quantum divergences via convex optimization. Quantum - the Open Journal for Quantum Science, 0, 5, 387.	0.0	16