## Daniel A Lidar

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3195423/publications.pdf

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230 papers

16,987 citations

14124 69 h-index 123 g-index

239 all docs

239 docs citations

times ranked

239

7681 citing authors

| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Identification of driver genes for critical forms of COVID-19 in a deeply phenotyped young patient cohort. Science Translational Medicine, 2022, 14, eabj7521.                       | 5.8  | 71        |
| 2  | 3-regular three-XORSAT planted solutions benchmark of classical and quantum heuristic optimizers. Quantum Science and Technology, 2022, 7, 025008.                                   | 2.6  | 18        |
| 3  | Standard quantum annealing outperforms adiabatic reverse annealing with decoherence. Physical Review A, 2022, 105, .   | 1.0  | 9         |
| 4  | Customized Quantum Annealing Schedules. Physical Review Applied, 2022, 17, .   | 1.5  | 5         |
| 5  | Predicting Non-Markovian Superconducting-Qubit Dynamics from Tomographic Reconstruction. Physical Review Applied, 2022, 17, .  | 1.5  | 8         |
| 6  | Hamiltonian open quantum system toolkit. Communications Physics, 2022, 5, .  | 2.0  | 10        |
| 7  | Breakdown of the Weak-Coupling Limit in Quantum Annealing. Physical Review Applied, 2022, 17, .  | 1.5  | 4         |
| 8  | Anneal-path correction in flux qubits. Npj Quantum Information, 2021, 7, .   | 2.8  | 7         |
| 9  | Prospects for quantum enhancement with diabatic quantum annealing. Nature Reviews Physics, 2021, 3, 466-489.   | 11.9 | 59        |
| 10 | Quantum processor-inspired machine learning in the biomedical sciences. Patterns, 2021, 2, 100246.   | 3.1  | 16        |
| 11 | Low overhead universality and quantum supremacy using only Z control. Physical Review Research, 2021, 3, .   | 1.3  | 0         |
| 12 | Phase transitions in the frustrated Ising ladder with stoquastic and nonstoquastic catalysts. Physical Review Research, 2021, 3, .   | 1.3  | 3         |
| 13 | Charged particle tracking with quantum annealing optimization. Quantum Machine Intelligence, 2021, 3, $1.$   | 2.7  | 10        |
| 14 | Optimal Control for Quantum Optimization of Closed and Open Systems. Physical Review Applied, 2021, 16, .  | 1.5  | 12        |
| 15 | Why and When Pausing is Beneficial in Quantum Annealing. Physical Review Applied, 2020, 14, .  | 1.5  | 27        |
| 16 | Quantum adiabatic machine learning by zooming into a region of the energy surface. Physical Review A, 2020, 102, .   | 1.0  | 15        |
| 17 | Limitations of error corrected quantum annealing in improving the performance of Boltzmann machines. Quantum Science and Technology, 2020, 5, 045010.                                | 2.6  | 19        |
| 18 | Reverse quantum annealing of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -spin model with relaxation. Physical Review A, 2020, 101, . | 1.0  | 39        |

| #  | Article   | IF   | CITATIONS |
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| 19 | Probing the universality of topological defect formation in a quantum annealer: Kibble-Zurek mechanism and beyond. Physical Review Research, 2020, 2, .                                   | 1.3  | 70        |
| 20 | Fast, Lifetime-Preserving Readout for High-Coherence Quantum Annealers. PRX Quantum, 2020, 1, .   | 3.5  | 6         |
| 21 | Fast, Lifetime-Preserving Readout for High-Coherence Quantum Annealers. PRX Quantum, 2020, 1, .   | 3.5  | 8         |
| 22 | A double-slit proposal for quantum annealing. Npj Quantum Information, 2019, 5, .   | 2.8  | 13        |
| 23 | Nested quantum annealing correction at finite temperature: p -spin models. Physical Review A, 2019, 99,   | 1.0  | 14        |
| 24 | Arbitrary-time error suppression for Markovian adiabatic quantum computing using stabilizer subspace codes. Physical Review A, 2019, 100, .   | 1.0  | 5         |
| 25 | Sensitivity of quantum speedup by quantum annealing to a noisy oracle. Physical Review A, 2019, 99, .   | 1.0  | 7         |
| 26 | On the computational complexity of curing non-stoquastic Hamiltonians. Nature Communications, 2019, 10, 1571.   | 5.8  | 38        |
| 27 | Dynamics of reverse annealing for the fully connected <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -spin model. Physical Review A, 2019, 100, . | 1.0  | 41        |
| 28 | Analog errors in quantum annealing: doom and hope. Npj Quantum Information, 2019, 5, .  | 2.8  | 47        |
| 29 | Quantum annealing versus classical machine learning applied to a simplified computational biology problem. Npj Quantum Information, 2018, 4, .  | 2.8  | 126       |
| 30 | Quantum trajectories for time-dependent adiabatic master equations. Physical Review A, 2018, 97, .  | 1.0  | 15        |
| 31 | Adiabatic quantum computation. Reviews of Modern Physics, 2018, 90, .   | 16.4 | 743       |
| 32 | Scalable effective-temperature reduction for quantum annealers via nested quantum annealing correction. Physical Review A, 2018, 97, .  | 1.0  | 18        |
| 33 | Exploring More-Coherent Quantum Annealing. , 2018, , .  |      | 11        |
| 34 | Demonstration of Fidelity Improvement Using Dynamical Decoupling with Superconducting Qubits. Physical Review Letters, 2018, 121, 220502.   | 2.9  | 110       |
| 35 | Non-Markovianity of the post-Markovian master equation. Physical Review A, 2018, 98, .  | 1.0  | 6         |
| 36 | Quantum annealing of the p -spin model under inhomogeneous transverse field driving. Physical Review A, 2018, 98, .   | 1.0  | 42        |

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| 37 | Test-driving 1000 qubits. Quantum Science and Technology, 2018, 3, 030501.  | 2.6  | 29        |
| 38 | Demonstration of a Scaling Advantage for a Quantum Annealer over Simulated Annealing. Physical Review X, $2018,8,.$   | 2.8  | 108       |
| 39 | Finite temperature quantum annealing solving exponentially small gap problem with non-monotonic success probability. Nature Communications, 2018, 9, 2917.  | 5.8  | 35        |
| 40 | Reverse annealing for the fully connected <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -spin model. Physical Review A, 2018, 98, .                          | 1.0  | 65        |
| 41 | Error reduction in quantum annealing using boundary cancellation: Only the end matters. Physical Review A, 2018, 98, .  | 1.0  | 12        |
| 42 | Evolution prediction from tomography. Quantum Information Processing, 2017, 16, 1.  | 1.0  | 1         |
| 43 | Error suppression for Hamiltonian quantum computing in Markovian environments. Physical Review A, 2017, 95, .   | 1.0  | 13        |
| 44 | Solving a Higgs optimization problem with quantum annealing for machine learning. Nature, 2017, 550, 375-379.   | 13.7 | 143       |
| 45 | Non-stoquastic Hamiltonians in quantum annealing via geometric phases. Npj Quantum Information, 2017, 3, .  | 2.8  | 31        |
| 46 | Relaxation versus adiabatic quantum steady-state preparation. Physical Review A, 2017, 95, .  | 1.0  | 21        |
| 47 | Quasiadiabatic Grover search via the Wentzel-Kramers-Brillouin approximation. Physical Review A, 2017, 96, .  | 1.0  | 1         |
| 48 | Quantum-annealing correction at finite temperature: Ferromagnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -spin models. Physical Review A, 2017, 95, . | 1.0  | 32        |
| 49 | Suppression of effective noise in Hamiltonian simulations. Physical Review A, 2017, 96, .   | 1.0  | 1         |
| 50 | Error Suppression for Hamiltonian-Based Quantum Computation Using Subsystem Codes. Physical Review Letters, 2017, 118, 030504.  | 2.9  | 26        |
| 51 | Simulated-quantum-annealing comparison between all-to-all connectivity schemes. Physical Review A, 2016, 94, .  | 1.0  | 22        |
| 52 | Adiabaticity in open quantum systems. Physical Review A, 2016, 93, .  | 1.0  | 68        |
| 53 | Mean Field Analysis of Quantum Annealing Correction. Physical Review Letters, 2016, 116, 220501.  | 2.9  | 28        |
| 54 | Eigenstate tracking in open quantum systems. Physical Review A, 2016, 94, .   | 1.0  | 22        |

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| 55 | Tunneling and Speedup in Quantum Optimization for Permutation-Symmetric Problems. Physical Review X, 2016, $6$ , .                    | 2.8 | 53        |
| 56 | Nested quantum annealing correction. Npj Quantum Information, 2016, 2, .  | 2.8 | 39        |
| 57 | Optimally Stopped Optimization. Physical Review Applied, 2016, 6, .   | 1.5 | 19        |
| 58 | Performance of two different quantum annealing correction codes. Quantum Information Processing, 2016, 15, 609-636.                   | 1.0 | 30        |
| 59 | Beyond complete positivity. Quantum Information Processing, 2016, 15, 1349-1360.  | 1.0 | 32        |
| 60 | A general framework for complete positivity. Quantum Information Processing, 2016, 15, 465-494.                                       | 1.0 | 41        |
| 61 | A general framework for complete positivity. , 2016, 15, 465.   |     | 1         |
| 62 | Decoherence in adiabatic quantum computation. Physical Review A, 2015, 91, .  | 1.0 | 104       |
| 63 | Quantum annealing correction with minor embedding. Physical Review A, 2015, 92, .   | 1.0 | 67        |
| 64 | Probing for quantum speedup in spin-glass problems with planted solutions. Physical Review A, 2015, 92, .                             | 1.0 | 117       |
| 65 | Reexamination of the evidence for entanglement in a quantum annealer. Physical Review A, 2015, 92, .                                  | 1.0 | 27        |
| 66 | Quantum Speed Limits for Leakage and Decoherence. Physical Review Letters, 2015, 115, 210402.   | 2.9 | 57        |
| 67 | Reexamining classical and quantum models for the D-Wave One processor. European Physical Journal: Special Topics, 2015, 224, 111-129. | 1.2 | 77        |
| 68 | Consistency tests of classical and quantum models for a quantum annealer. Physical Review A, 2015, 91, .                              | 1.0 | 97        |
| 69 | Quantum annealing correction for random Ising problems. Physical Review A, 2015, 91, .  | 1.0 | 74        |
| 70 | Quantum Error Suppression with Commuting Hamiltonians: Two Local is Too Local. Physical Review Letters, 2014, 113, 260504.            | 2.9 | 16        |
| 71 | Max 2-SAT with up to 108 qubits. New Journal of Physics, 2014, 16, 045006.  | 1.2 | 46        |
| 72 | Evidence for quantum annealing with more than one hundred qubits. Nature Physics, 2014, 10, 218-224.                                  | 6.5 | 539       |

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| 73             | Error-corrected quantum annealing with hundreds of qubits. Nature Communications, 2014, 5, 3243.   | 5.8               | 139                  |
| 74             | Defining and detecting quantum speedup. Science, 2014, 345, 420-424.   | 6.0               | 405                  |
| 75             | Optimized dynamical decoupling via genetic algorithms. Physical Review A, 2013, 88, .  | 1.0               | 20                   |
| 76             | Quantum adiabatic machine learning. Quantum Information Processing, 2013, 12, 2027-2070.   | 1.0               | 95                   |
| 77             | Experimental signature of programmable quantum annealing. Nature Communications, 2013, 4, 2067.  | 5.8               | 223                  |
| 78             | Analysis of the quantum Zeno effect for quantum control and computation. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 075306.   | 0.7               | 21                   |
| 79             | Fluctuation theorems for quantum processes. Physical Review E, 2013, 88, 032146.   | 0.8               | 95                   |
| 80             | Adiabatic quantum optimization with the wrong Hamiltonian. Physical Review A, 2013, 88, .  | 1.0               | 41                   |
| 81             | Coarse graining can beat the rotating-wave approximation in quantum Markovian master equations.<br>Physical Review A, 2013, 88, .  | 1.0               | 48                   |
| 82             | Introduction to decoherence-free subspaces and noiseless subsystems. , 2013, , 78-104.   |                   | 1                    |
|                |  |                   |                      |
| 83             | No-go theorem for passive single-rail linear optical quantum computing. Scientific Reports, 2013, 3, 1394.   | 1.6               | 11                   |
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|                | Optimally combining dynamical decoupling and quantum error correction. Scientific Reports, 2013, 3,  |                   |                      |
| 84             | Optimally combining dynamical decoupling and quantum error correction. Scientific Reports, 2013, 3, 1530.  Universality proof and analysis of generalized nested Uhrig dynamical decoupling. Journal of  | 1.6               | 26                   |
| 84             | Optimally combining dynamical decoupling and quantum error correction. Scientific Reports, 2013, 3, 1530.  Universality proof and analysis of generalized nested Uhrig dynamical decoupling. Journal of Mathematical Physics, 2012, 53, 122207.  | 1.6<br>0.5        | 26                   |
| 84<br>85<br>86 | Optimally combining dynamical decoupling and quantum error correction. Scientific Reports, 2013, 3, 1530.  Universality proof and analysis of generalized nested Uhrig dynamical decoupling. Journal of Mathematical Physics, 2012, 53, 122207.  Zeno Effect for Quantum Computation and Control. Physical Review Letters, 2012, 108, 080501.  | 1.6<br>0.5<br>2.9 | 26<br>7<br>95        |
| 84<br>85<br>86 | Optimally combining dynamical decoupling and quantum error correction. Scientific Reports, 2013, 3, 1530.  Universality proof and analysis of generalized nested Uhrig dynamical decoupling. Journal of Mathematical Physics, 2012, 53, 122207.  Zeno Effect for Quantum Computation and Control. Physical Review Letters, 2012, 108, 080501.  Quantum adiabatic Markovian master equations. New Journal of Physics, 2012, 14, 123016. | 1.6<br>0.5<br>2.9 | 26<br>7<br>95<br>202 |

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| 91  | Rigorous performance bounds for quadratic and nested dynamical decoupling. Physical Review A, $2011$ , $84$ , .  | 1.0 | 5         |
| 92  | Quadratic dynamical decoupling: Universality proof and error analysis. Physical Review A, 2011, 84, .  | 1.0 | 33        |
| 93  | Quadratic dynamical decoupling with nonuniform error suppression. Physical Review A, 2011, 84, .   | 1.0 | 14        |
| 94  | Combining dynamical decoupling with fault-tolerant quantum computation. Physical Review A, 2011, 84, .   | 1.0 | 74        |
| 95  | High fidelity quantum memory via dynamical decoupling: theory and experiment. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 154003. | 0.6 | 27        |
| 96  | Channel-Optimized Quantum Error Correction. IEEE Transactions on Information Theory, 2010, 56, 1461-1473.  | 1.5 | 21        |
| 97  | Accuracy versus run time in an adiabatic quantum search. Physical Review A, 2010, 82, .  | 1.0 | 57        |
| 98  | Optimized entanglement-assisted quantum error correction. Physical Review A, 2010, 82, .   | 1.0 | 7         |
| 99  | Intrinsic geometry of quantum adiabatic evolution and quantum phase transitions. Physical Review A, 2010, 82, .  | 1.0 | 67        |
| 100 | Rigorous bounds for optimal dynamical decoupling. Physical Review A, 2010, 82, .   | 1.0 | 29        |
| 101 | Channel capacities of an exactly solvable spin-star system. Physical Review A, 2010, 81, .   | 1.0 | 25        |
| 102 | Optimal control landscape for the generation of unitary transformations with constrained dynamics. Physical Review A, 2010, 81, .                            | 1.0 | 14        |
| 103 | Near-Optimal Dynamical Decoupling of a Qubit. Physical Review Letters, 2010, 104, 130501.  | 2.9 | 87        |
| 104 | Classical Ising model test for quantum circuits. New Journal of Physics, 2010, 12, 075026.   | 1.2 | 13        |
| 105 | High Fidelity Quantum Gates via Dynamical Decoupling. Physical Review Letters, 2010, 105, 230503.  | 2.9 | 118       |
| 106 | Arbitrarily Accurate Dynamical Control in Open Quantum Systems. Physical Review Letters, 2010, 104, 090501.  | 2.9 | 144       |
| 107 | Entanglement and area law with a fractal boundary in a topologically ordered phase. Physical Review A, 2010, 81, .   | 1.0 | 3         |
| 108 | Scheme for fault-tolerant holonomic computation on stabilizer codes. Physical Review A, 2009, 80, .  | 1.0 | 16        |

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| 109 | Maps for general open quantum systems and a theory of linear quantum error correction. Physical Review A, 2009, 80, .  | 1.0 | 39        |
| 110 | Quantum error correction via convex optimization. Quantum Information Processing, 2009, 8, 443-459.  | 1.0 | 34        |
| 111 | Fault-Tolerant Holonomic Quantum Computation. Physical Review Letters, 2009, 102, 070502.  | 2.9 | 61        |
| 112 | Quantum Adiabatic Brachistochrone. Physical Review Letters, 2009, 103, 080502.   | 2.9 | 126       |
| 113 | Adiabatic approximation with exponential accuracy for many-body systems and quantum computation. Journal of Mathematical Physics, 2009, 50, .                  | 0.5 | 135       |
| 114 | Vanishing Quantum Discord is Necessary and Sufficient for Completely Positive Maps. Physical Review Letters, 2009, 102, 100402.                                | 2.9 | 283       |
| 115 | On the Exact Evaluation of Certain Instances of the Potts Partition Function by Quantum Computers. Communications in Mathematical Physics, 2008, 279, 735-768. | 1.0 | 26        |
| 116 | Entanglement, fidelity, and topological entropy in a quantum phase transition to topological order. Physical Review B, 2008, 77, .                             | 1.1 | 95        |
| 117 | Quantum-process tomography: Resource analysis of different strategies. Physical Review A, 2008, 77, .  | 1.0 | 274       |
| 118 | Distance bounds on quantum dynamics. Physical Review A, 2008, 78, .  | 1.0 | 47        |
| 119 | Towards Fault Tolerant Adiabatic Quantum Computation. Physical Review Letters, 2008, 100, 160506.  | 2.9 | 102       |
| 120 | Encoding one logical qubit into six physical qubits. Physical Review A, 2008, 78, .  | 1.0 | 25        |
| 121 | Adiabatic Preparation of Topological Order. Physical Review Letters, 2008, 100, 030502.  | 2.9 | 88        |
| 122 | Optimal Dynamical Decoherence Control of a Qubit. Physical Review Letters, 2008, 101, 010403.  | 2.9 | 155       |
| 123 | Spin density matrix of a two-electron system. II. Application to a system of two quantum dots. Physical Review B, 2008, 77, .                                  | 1.1 | 8         |
| 124 | Publisher's Note: Towards Fault Tolerant Adiabatic Quantum Computation [Phys. Rev. Lett.100, 160506 (2008)]. Physical Review Letters, 2008, 100, .             | 2.9 | 1         |
| 125 | Bang-bang control of a qubit coupled to a quantum critical spin bath. Physical Review A, 2008, 77, .   | 1.0 | 39        |
| 126 | Operator quantum error correction for continuous dynamics. Physical Review A, 2008, 78, .  | 1.0 | 11        |

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| 127 | Robust Quantum Error Correction via Convex Optimization. Physical Review Letters, 2008, 100, 020502.  | 2.9 | 48        |
| 128 | Rigorous bounds on the performance of a hybrid dynamical-decoupling quantum-computing scheme. Physical Review A, 2008, 78, .  | 1.0 | 36        |
| 129 | Spin density matrix of a two-electron system. I. General theory and exact master equations. Physical Review B, 2008, 77, .  | 1.1 | 1         |
| 130 | Optimal control of quantum gates and suppression of decoherence in a system of interacting two-level particles. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, S103-S125. | 0.6 | 92        |
| 131 | Performance of deterministic dynamical decoupling schemes: Concatenated and periodic pulse sequences. Physical Review A, 2007, 75, .  | 1.0 | 164       |
| 132 | Direct characterization of quantum dynamics: General theory. Physical Review A, 2007, 75, .   | 1.0 | 46        |
| 133 | Fidelity of optimally controlled quantum gates with randomly coupled multiparticle environments. Journal of Modern Optics, 2007, 54, 2339-2349.   | 0.6 | 24        |
| 134 | Simple Proof of Equivalence between Adiabatic Quantum Computation and the Circuit Model. Physical Review Letters, 2007, 99, 070502.   | 2.9 | 161       |
| 135 | Efficient Multiqubit Entanglement via a Spin Bus. Physical Review Letters, 2007, 98, 230503.  | 2.9 | 72        |
| 136 | Decoherence-induced geometric phase in a multilevel atomic system. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, S127-S142.  | 0.6 | 13        |
| 137 | How to control decoherence and entanglement in quantum complex systems?. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, .   | 0.6 | 1         |
| 138 | Non-Markovian dynamics of a qubit coupled to an Ising spin bath. Physical Review A, 2007, 76, .   | 1.0 | 51        |
| 139 | Abelian and non-Abelian geometric phases in adiabatic open quantum systems. Physical Review A, 2006, 73, .  | 1.0 | 71        |
| 140 | Linking entanglement and quantum phase transitions via density-functional theory. Physical Review A, 2006, 74, .  | 1.0 | 97        |
| 141 | Quantum Malware. Quantum Information Processing, 2006, 5, 69-81.  | 1.0 | 4         |
| 142 | Few-body spin couplings and their implications for universal quantum computation. Journal of Physics Condensed Matter, 2006, 18, S721-S744.   | 0.7 | 10        |
| 143 | Encoding a qubit into multilevel subspaces. New Journal of Physics, 2006, 8, 35-35.   | 1.2 | 30        |
| 144 | Quantum logic gates in iodine vapor using time–frequency resolved coherent anti-Stokes Raman scattering: a theoretical study. Molecular Physics, 2006, 104, 1249-1266.                            | 0.8 | 12        |

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| 145 | Internal consistency of fault-tolerant quantum error correction in light of rigorous derivations of the quantum Markovian limit. Physical Review A, 2006, 73, . | 1.0 | 113       |
| 146 | Robust transmission of non-Gaussian entanglement over optical fibers. Physical Review A, 2006, 74, .  | 1.0 | 16        |
| 147 | Direct Characterization of Quantum Dynamics. Physical Review Letters, 2006, 97, 170501.   | 2.9 | 115       |
| 148 | Robust dynamical decoupling: feedback-free error correction. , 2005, , .  |     | 0         |
| 149 | Against the odds of imperfection. Nature Physics, 2005, 1, 145-146.   | 6.5 | O         |
| 150 | Theory of initialization-free decoherence-free subspaces and subsystems. Physical Review A, 2005, 72, .   | 1.0 | 80        |
| 151 | Control of decoherence: Analysis and comparison of three different strategies. Physical Review A, 2005, 71, .   | 1.0 | 181       |
| 152 | Adiabatic Quantum Computation in Open Systems. Physical Review Letters, 2005, 95, 250503.   | 2.9 | 175       |
| 153 | Robustness of multiqubit entanglement in the independent decoherence model. Physical Review A, 2005, 72, .  | 1.0 | 35        |
| 154 | Universal leakage elimination. Physical Review A, 2005, 71, .   | 1.0 | 51        |
| 155 | Fault-Tolerant Quantum Computation via Exchange Interactions. Physical Review Letters, 2005, 94, 040507.  | 2.9 | 29        |
| 156 | Fault-Tolerant Quantum Dynamical Decoupling. Physical Review Letters, 2005, 95, 180501.   | 2.9 | 420       |
| 157 | ROBUST DYNAMICAL DECOUPLING: FEEDBACK-FREE ERROR CORRECTION. International Journal of Quantum Information, 2005, 03, 41-52.                                     | 0.6 | O         |
| 158 | Adiabatic approximation in open quantum systems. Physical Review A, 2005, 71, .   | 1.0 | 157       |
| 159 | Holonomic Quantum Computation in Decoherence-Free Subspaces. Physical Review Letters, 2005, 95, 130501.   | 2.9 | 119       |
| 160 | Entanglement observables and witnesses for interacting quantum spin systems. Physical Review A, 2005, 72, .   | 1.0 | 66        |
| 161 | Completely positive post-Markovian master equation via a measurement approach. Physical Review A, 2005, 71, .   | 1.0 | 145       |
| 162 | ROBUST DYNAMICAL DECOUPLING: FEEDBACK-FREE ERROR CORRECTION., 2005, , .   |     | 0         |

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| 163 | Overcoming quantum noise in optical fibers. Physical Review A, 2004, 70, .   | 1.0 | 19        |
| 164 | Exchange interaction between three and four coupled quantum dots:â€,Theory and applications to quantum computing. Physical Review B, 2004, 70, .                   | 1.1 | 30        |
| 165 | One-Spin Quantum Logic Gates from Exchange Interactions and a Global Magnetic Field. Physical Review Letters, 2004, 93, 030501.                                    | 2.9 | 31        |
| 166 | Entangling capacities of noisy two-qubit Hamiltonians. Physical Review A, 2004, 70, .  | 1.0 | 35        |
| 167 | Dynamical decoupling using slow pulses: Efficient suppression of 1/fnoise. Physical Review A, 2004, 69, .  | 1.0 | 72        |
| 168 | Purity and state fidelity of quantum channels. Physical Review A, 2004, 70, .  | 1.0 | 52        |
| 169 | Long-range entanglement generation via frequent measurements. Physical Review A, 2004, 70, .   | 1.0 | 33        |
| 170 | Consistency of the Adiabatic Theorem. Quantum Information Processing, 2004, 3, 331-349.  | 1.0 | 92        |
| 171 | Overview of quantum error prevention and leakage elimination. Journal of Modern Optics, 2004, 51, 2449-2460.   | 0.6 | 40        |
| 172 | Quantum Phase Transitions and Bipartite Entanglement. Physical Review Letters, 2004, 93, 250404.   | 2.9 | 423       |
| 173 | Three- and Four-Body Interactions in Spin-Based Quantum Computers. Physical Review Letters, 2004, 92, 077903.  | 2.9 | 31        |
| 174 | Unification of dynamical decoupling and the quantum Zeno effect. Physical Review A, 2004, 69, .  | 1.0 | 274       |
| 175 | Exponentially localized magnetic fields for single-spin quantum logic gates. Journal of Applied Physics, 2004, 96, 754-758.  | 1.1 | 24        |
| 176 | Quantum Tensor Product Structures are Observable Induced. Physical Review Letters, 2004, 92, 060402.   | 2.9 | 196       |
| 177 | On the quantum computational complexity of the Ising spin glass partition function and of knot invariants. New Journal of Physics, 2004, 6, 167-167.               | 1.2 | 25        |
| 178 | Magnetic Resonance Realization of Decoherence-Free Quantum Computation. Physical Review Letters, 2003, 91, 217904.   | 2.9 | 92        |
| 179 | Universal quantum computation using exchange interactions and measurements of single- and two-spin observables. Physical Review A, 2003, 67, .                     | 1.0 | 13        |
| 180 | Quantum computing in the presence of spontaneous emission by a combined dynamical decoupling and quantum-error-correction strategy. Physical Review A, 2003, 68, . | 1.0 | 25        |

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| 181 | Dressed Qubits. Physical Review Letters, 2003, 91, 097904.   | 2.9 | 45        |
| 182 | Encoded recoupling and decoupling: An alternative to quantum error-correcting codes applied to trapped-ion quantum computation. Physical Review A, 2003, 67, .   | 1.0 | 33        |
| 183 | Wuet al.Reply:. Physical Review Letters, 2003, 90, .   | 2.9 | 6         |
| 184 | Decoherence-Free Subspaces and Subsystems. Lecture Notes in Physics, 2003, , 83-120.   | 0.3 | 162       |
| 185 | Empirical determination of dynamical decoupling operations. Physical Review A, 2003, 67, .   | 1.0 | 48        |
| 186 | Comment on "Conservative Quantum Computing― Physical Review Letters, 2003, 91, 089801; discussion 089802.  | 2.9 | 9         |
| 187 | Combined error correction techniques for quantum computing architectures. Journal of Modern Optics, 2003, 50, 1285-1297.   | 0.6 | 15        |
| 188 | Quantum computers and decoherence: exorcising the demon from the machine., 2003, 5115, 256.  |     | 1         |
| 189 | Comment on "Quantum waveguide array generator for performing Fourier transforms: Alternate route to quantum computing―[Appl. Phys. Lett. 79, 2823 (2001)]. Applied Physics Letters, 2002, 80, 2419-2419. | 1.5 | 3         |
| 190 | Publisher's Note: Polynomial-Time Simulation of Pairing Models on a Quantum Computer [Phys. Rev. Lett.89, 057904 (2002)]. Physical Review Letters, 2002, 89, .   | 2.9 | 1         |
| 191 | Power of anisotropic exchange interactions: Universality and efficient codes for quantum computing. Physical Review A, 2002, 65, .   | 1.0 | 31        |
| 192 | Qubits as parafermions. Journal of Mathematical Physics, 2002, 43, 4506-4525.  | 0.5 | 47        |
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