Timothy F Havel

List of Publications by Year
in descending order

50 papers	4,468 citations	270111 25 h-index	242451 47 g-index
55 all docs	55 docs citations	55 times ranked	2819 citing authors

#	Article	IF	Citations
1	Storing energy and powering small systems with mechanical springs made of carbon nanotube yarn. Energy, 2014, 76, 318-325.	4.5	16
2	Enhancing the Tensile Properties of Continuous Millimeter-Scale Carbon Nanotube Fibers by Densification. ACS Applied Materials & Interfaces, 2013, 5, 7198-7207.	4.0	36
3	Signatures of Incoherence in a Quantum Information Processor. Quantum Information Processing, 2007, 6, 431-444.	1.0	4
4	Quantum Control of Nuclear Spins. , 2006, , .		0
5	Reflection symmetries for multiqubit density operators. Journal of Mathematical Physics, 2006, 47, 032104.	0.5	4
6	Solid-state NMR three-qubit homonuclear system for quantum-information processing: Control and characterization. Physical Review A, 2006, 73, .	1.0	35
7	Selective coherence transfers in homonuclear dipolar coupled spin systems. Physical Review A, 2005, 71, .	1.0	14
8	Geometric algebra and transition-selective implementations of the controlled-NOT gate. Concepts in Magnetic Resonance, 2004, 23A, 49-62.	1.3	2
9	Quantum process tomography of the quantum Fourier transform. Journal of Chemical Physics, 2004, 121, 6117-6133.	1.2	131
10	Experimental Simulation of Spin Squeezing by Nuclear Magnetic Resonance. Quantum Information Processing, 2003, 2, 433-448.	1.0	14
11	Metric matrix embedding in protein structure calculations, NMR spectra analysis, and relaxation theory. Magnetic Resonance in Chemistry, 2003, 41, S37-S50.	1.1	10
12	Robust control of quantum information. Journal of Chemical Physics, 2003, 119, 9993-10001.	1.2	81
13	Robust procedures for converting among Lindblad, Kraus and matrix representations of quantum dynamical semigroups. Journal of Mathematical Physics, 2003, 44, 534.	0.5	113
14	Exploring noiseless subsystems via nuclear magnetic resonance. Physical Review A, 2003, 67, .	1.0	25
15	The Role of Tensegrity in Distance Geometry. , 2002, , 55-68.		0
16	Design of strongly modulating pulses to implement precise effective Hamiltonians for quantum information processing. Journal of Chemical Physics, 2002, 116, 7599-7606.	1.2	204
17	The Real Density Matrix. Quantum Information Processing, 2002, 1, 511-538.	1.0	12
18	Interaction and Entanglement in the Multiparticle Spacetime Algebra. , 2002, , 227-247.		2

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19	Hadamard products of product operators and the design of gradient-diffusion experiments for simulating decoherence byÂNMR spectroscopy. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 280, 282-288.	0.9	29
20	Multiqubit logic gates in NMR quantum computing. New Journal of Physics, 2000, 2, 10-10.	1.2	22
21	Spatially encoded pseudopure states for NMR quantum-information processing. Physical Review A, 2000, 62, .	1.0	19
22	Quantum codes for controlling coherent evolution. Journal of Chemical Physics, 2000, 113, 10878-10885.	1.2	2
23	Generalized methods for the development of quantum logic gates for an NMR quantum information processor. Physical Review A, 1999, 60, 2777-2780.	1.0	56
24	Observations of quantum dynamics by solution-state NMR spectroscopy. Concepts in Magnetic Resonance, 1999, 11, 225-238.	1.3	25
25	Expressing the operations of quantum computing in multiparticle geometric algebra. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 240, 1-7.	0.9	66
26	Nuclear magnetic resonance spectroscopy: An experimentally accessible paradigm for quantum computing. Physica D: Nonlinear Phenomena, 1998, 120, 82-101.	1.3	339
27	Embedding with a rigid substructure. Journal of Mathematical Chemistry, 1997, 21, 223-260.	0.7	3
28	A Robust Method for Estimating Cross-Relaxation Rates from Simultaneous Fits to Build-Up and Decay Curves. Journal of Magnetic Resonance, 1997, 124, 372-382.	1.2	7
29	Recent advances in molecular distance geometry. Lecture Notes in Computer Science, 1996, , 62-71.	1.0	2
30	Applications of geometric algebra to the theory of molecular conformation 2. The local deformation problem. Computational and Theoretical Chemistry, 1995, 336, 175-189.	1.5	6
31	Geometric Algebra and MÃ¶bius Sphere Geometry as a Basis for Euclidean Invariant Theory. , 1995, , 245-256.		14
32	An evaluation of least-squares fits to COSY spectra as a means of estimating proton?proton coupling constants. I. Simulated test problems. Journal of Biomolecular NMR, 1994, 4, 807-826.	1.6	10
33	An evaluation of least-squares fits to COSY spectra as a means of estimating proton?proton coupling constants II. Applications to polypeptides. Journal of Biomolecular NMR, 1994, 4, 827-844.	1.6	5
34	Applications of geometric algebra to the theory of molecular conformation. Computational and Theoretical Chemistry, 1994, 308, 241-262.	1.5	6
35	Distance geometry and geometric algebra. Foundations of Physics, 1993, 23, 1357-1374.	0.6	56
36	The solution structure of eglin c based on measurements of many NOEs and coupling constants and its comparison with Xâ€ray structures. Protein Science, 1992, 1, 736-751.	3.1	411

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37	Bound Smoothing Under Chirality Constraints. SIAM Journal on Discrete Mathematics, 1991, 4, 535-549.	0.4	9
38	Alternating zinc fingers in the human male associated protein ZFY: 2D NMR structure of an even finger and implications for jumping-linker DNA recognition. Biochemistry, 1991, 30, 3371-3386.	1.2	75
39	A new method for building protein conformations from sequence alignments with homologues of known structure. Journal of Molecular Biology, 1991, 217, 1-7.	2.0	132
40	Some examples of the use of distances as coordinates for Euclidean geometry. Journal of Symbolic Computation, 1991, 11, 579-593.	0.5	72
41	The sampling properties of some distance geometry algorithms applied to unconstrained polypeptide chains: A study of 1830 independently computed conformations. Biopolymers, 1990, 29, 1565-1585.	1.2	126
42	Computational experience with an algorithm for tetrangle inequality bound smoothing. Bulletin of Mathematical Biology, 1989, 51, 173-194.	0.9	32
43	Shortest-path problems and molecular conformation. Discrete Applied Mathematics, 1988, 19, 129-144.	0.5	37
44	Protein structures in solution by nuclear magnetic resonance and distance geometry. Journal of Molecular Biology, 1987, 196, 611-639.	2.0	646
45	An evaluation of the combined use of nuclear magnetic resonance and distance geometry for the determination of protein conformations in solution. Journal of Molecular Biology, 1985, 182, 281-294.	2.0	383
46	Solution conformation of proteinase inhibitor IIA from bull seminal plasma by 1H nuclear magnetic resonance and distance geometry. Journal of Molecular Biology, 1985, 182, 295-315.	2.0	599
47	The theory and practice of distance geometry. Bulletin of Mathematical Biology, 1983, 45, 665-720.	0.9	324
48	The combinatorial distance geometry method for the calculation of molecular conformation. I. A new approach to an old problem. Journal of Theoretical Biology, 1983, 104, 359-381.	0.8	52
49	The combinatorial distance geometry method for the calculation of molecular conformation II. Sample problems and computational statistics. Journal of Theoretical Biology, 1983, 104, 383-400.	0.8	23
50	Effects of distance constraints on macromolecular conformation. II. Simulation of experimental results and theoretical predictions. Biopolymers, 1979, 18, 73-81.	1.2	155