Lev Vaidman

List of Publications by Year
in descending order

130 papers	8,880 citations	81900 39 h-index	42399 92 g-index
132 all docs	132 docs citations	132 times ranked	3361 citing authors

#	Article	IF	Citations
1	How the result of a measurement of a component of the spin of a spin-1/2particle can turn out to be 100. Physical Review Letters, 1988, 60, 1351-1354.	7.8	1,952
2	Properties of a quantum system during the time interval between two measurements. Physical Review A, 1990, 41, 11-20.	2.5	900
3	Teleportation of quantum states. Physical Review A, 1994, 49, 1473-1476.	2.5	747
4	Quantum mechanical interaction-free measurements. Foundations of Physics, 1993, 23, 987-997.	1.3	605
5	Two interferometric complementarities. Physical Review A, 1995, 51, 54-67.	2.5	338
6	Quantum Cryptography Based on Orthogonal States. Physical Review Letters, 1995, 75, 1239-1243.	7.8	262
7	Meaning of the wave function. Physical Review A, 1993, 47, 4616-4626.	2.5	240
8	Methods for reliable teleportation. Physical Review A, 1999, 59, 116-125.	2.5	227
9	Phase Estimation with Weak Measurement Using a White Light Source. Physical Review Letters, 2013, 111, 033604.	7.8	222
10	Superpositions of time evolutions of a quantum system and a quantum time-translation machine. Physical Review Letters, 1990, 64, 2965-2968.	7.8	198
11	Minimum time for the evolution to an orthogonal quantum state. American Journal of Physics, 1992, 60, 182-183.	0.7	147
12	Asking Photons Where They Have Been. Physical Review Letters, 2013, 111, 240402.	7.8	146
13	Comment on â€˜â€˜Proposed Aharonov-Casher effect: Another example of an Aharonov-Bohm effect arising from a classical lagâ€™â€™. Physical Review A, 1988, 37, 4052-4055.	2.5	128
14	Measurement of the SchrÃ¶dinger wave of a single particle. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 178, 38-42.	2.1	123
15	Torque and force on a magnetic dipole. American Journal of Physics, 1990, 58, 978-983.	0.7	116
16	On schizophrenic experiences of the neutron or why we should believe in the manyâ€worlds interpretation of quantum theory. International Studies in the Philosophy of Science, 1998, 12, 245-261.	0.2	114
17	How to ascertain the values ofsigmax,ïƒy, andïƒzof a spin-1/2particle. Physical Review Letters, 1987, 58, 1385-1387.	7.8	110
18	The Two-State Vector Formalism: An Updated Review. , 2008, , 399-447.		99

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19	Quantum Gambling. Physical Review Letters, 1999, 82, 3356-3359.	7.8	89
20	Weak-measurement elements of reality. Foundations of Physics, 1996, 26, 895-906.	1.3	86
21	Role of potentials in the Aharonov-Bohm effect. Physical Review A, 2012, 86, .	2.5	83
22	Error prevention scheme with four particles. Physical Review A, 1996, 54, R1745-R1748.	2.5	77
23	Surprising quantum effects. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 124, 199-203.	2.1	74
24	Measurements, errors, and negative kinetic energy. Physical Review A, 1993, 48, 4084-4090.	2.5	74
25	Multiple-time states and multiple-time measurements in quantum mechanics. Physical Review A, 2009, 79, .	2.5	72
26	Weak value controversy. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160395.	3.4	71
27	Quantum-mechanical realization of a Popescu-Rohrlich box. Physical Review A, 2007, 75, .	2.5	64
28	The Reality in Bohmian Quantum Mechanics or Can You Kill with an Empty Wave Bullet?. Foundations of Physics, 2005, 35, 299-312.	1.3	62
29	Weak value beyond conditional expectation value of the pointer readings. Physical Review A, 2017, 96, .	2.5	59
30	Instantaneous Measurement of Nonlocal Variables. Physical Review Letters, 2003, 90, 010402.	7.8	58
31	Measurement process in relativistic quantum theory. Physical Review D, 1986, 34, 1805-1813.	4.7	56
32	Lorentz-invariant â€˜â€˜elements of realityâ€™â€™ and the joint measurability of commuting observables. Physical Review Letters, 1993, 70, 3369-3372.	7.8	52
33	Variations on the Theme of the Greenberger-Horne-Zeilinger Proof. Foundations of Physics, 1999, 29, 615-630.	1.3	51
34	Nonlocal variables with product-state eigenstates. Journal of Physics A, 2001, 34, 6881-6889.	1.6	50
35	Comment on â€œProtocol for Direct Counterfactual Quantum Communicationâ€• Physical Review Letters, 2014, 112, .	7.8	49
36	The meaning of protective measurements. Foundations of Physics, 1996, 26, 117-126.	1.3	44

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37	Determining the quantum expectation value by measuring a single photon. Nature Physics, 2017, 13, 1191-1194.	16.7	43
38	Causality constraints on nonlocal quantum measurements. Physical Review A, 1994, 49, 4331-4338.	2.5	42
39	The Meaning of the Interaction-Free Measurements. Foundations of Physics, 2003, 33, 491-510.	1.3	42
40	Universality of local weak interactions and its application for interferometric alignment. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2881-2890.	7.1	42
41	Nonlocality of a Single Photon Revisited Again. Physical Review Letters, 1995, 75, 2063-2063.	7.8	41
42	The three-box paradox revisited. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 2873-2882.	2.1	39
43	Quantum theory and determinism. Quantum Studies: Mathematics and Foundations, 2014, 1, 5-38.	0.9	39
44	The Two-State Vector Formalism of Quantum Mechanics. , 2002, , 369-412.		38
45	Aharonov-Bohm and Berry Phases for a Quantum Cloud of Charge. Physical Review Letters, 1994, 73, 918-921.	7.8	36
46	Probability in the Many-Worlds Interpretation of Quantum Mechanics. The Frontiers Collection, 2012, , 299-311.	0.2	35
47	Modification of counterfactual communication protocols that eliminates weak particle traces. Physical Review A, 2019, 99, .	2.5	33
48	On a proposed postulate of state-reduction. Physics Letters, Section A: General, Atomic and Solid State Physics, 1989, 139, 1-4.	2.1	28
49	Tests of Bell inequalities. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 286, 241-244.	2.1	27
50	Weak measurement of photon polarization. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 143, 357-361.	2.1	24
51	Comment on â€œPast of a quantum particle revisitedâ€. Physical Review A, 2019, 99, .	2.5	22
52	In defence of the self-location uncertainty account of probability in the many-worlds interpretation. Studies in History and Philosophy of Science Part B - Studies in History and Philosophy of Modern Physics, 2019, 66, 14-23.	1.4	21
53	Goldenberg and Vaidman Reply:. Physical Review Letters, 1996, 77, 3265-3265.	7.8	20
54	Reply to â€œComment on â€˜Role of potentials in the Aharonov-Bohm effectâ€™â€‰â€. Physical Review A, 2015, 92, .	2.5	20

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55	Practical quantum bit commitment protocol. Quantum Information Processing, 2012, 11, 769-775.	2.2	18
56	Position measurements in the de Broglieâ€“Bohm interpretation of quantum mechanics. Annals of Physics, 2012, 327, 2522-2542.	2.8	17
57	When Photons Are Lying about Where They Have Been. Entropy, 2018, 20, 538.	2.2	17
58	Time-Symmetrized Counterfactuals in Quantum Theory. Foundations of Physics, 1999, 29, 755-765.	1.3	15
59	Correcting quantum errors with the Zeno effect. Physical Review A, 2004, 69, .	2.5	15
60	Response: Commentary: â€œAsking photons where they have beenâ€• without telling them what to say. Frontiers in Physics, 2015, 3, .	2.1	15
61	Analysis of counterfactuality of counterfactual communication protocols. Physical Review A, 2019, 99, .	2.5	14
62	Measurements of Nonlocal Variables and Demonstration of the Failure of the Product Rule for a Pre- and Postselected Pair of Photons. Physical Review Letters, 2019, 122, 100405.	7.8	14
63	On the Two-State Vector Reformulation of Quantum Mechanics. Physica Scripta, 1998, T76, 85.	2.5	13
64	On the Paradoxical Aspects of New Quantum Experiments. PSA Proceedings of the Biennial Meeting of the Philosophy of Science Association, 1994, 1994, 210-217.	0.1	13
65	A quantum time machine. Foundations of Physics, 1991, 21, 947-958.	1.3	12
66	Validity of the Aharonov-Bergmann-Lebowitz rule. Physical Review A, 1998, 57, 2251-2253.	2.5	12
67	The classical limit of quantum optics: not what it seems at first sight. New Journal of Physics, 2013, 15, 093006.	2.9	12
68	Comment on â€œParadox of photons disconnected trajectories being located by means of â€˜weak measurementsâ€™ in the nested Machâ€“Zehnder interferometerâ€•(JETP Letters 105, 152 (2017)). JETP Letters, 2017, 105, 473-474.	1.4	12
69	Protective Measurementsa. Annals of the New York Academy of Sciences, 1995, 755, 361-373.	3.8	11
70	The Meaning of Elements of Reality and Quantum Counterfactuals: Reply to Kastner. Foundations of Physics, 1999, 29, 865-876.	1.3	11
71	Peculiar features of entangled states with postselection. Physical Review A, 2013, 87, .	2.5	11
72	Applications of a simple quantum mechanical formula. American Journal of Physics, 1996, 64, 1059-1060.	0.7	10

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73	Qubits versus Bits for Measuring an Integral of a Classical Field. Physical Review Letters, 2004, 92, 217902.	7.8	9
74	All is Î¨. Journal of Physics: Conference Series, 2016, 701, 012020.	0.4	9
75	Protective Measurements of Two-State Vectors. Boston Studies in the Philosophy and History of Science, 1997, , 1-8.	0.9	9
76	Time-Symmetrized Quantum Theory. Fortschritte Der Physik, 1998, 46, 729-739.	4.4	8
77	Backward evolving quantum states. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 3275-3284.	2.1	8
78	Anomalous weak values via a single photon detection. Light: Science and Applications, 2021, 10, 106.	16.6	8
79	Teleportation: Dream or reality?. , 1999, , .		7
80	Measurements of non local weak values. Journal of Physics: Conference Series, 2009, 174, 012004.	0.4	7
81	Three approaches for analyzing the counterfactuality of counterfactual protocols. Physical Review A, 2021, 104, .	2.5	7
82	Derivations of the Born Rule. Jerusalem Studies in Philosophy and History of Science, 2020, , 567-584.	0.8	7
83	Interference and transmission of quantum fluxons through a Josephson ring. Physical Review A, 1995, 52, 3541-3545.	2.5	6
84	Negative Kinetic Energy between Past and Future State Vectorsa. Annals of the New York Academy of Sciences, 1995, 755, 394-399.	3.8	6
85	NONLOCAL MEASUREMENTS IN THE TIME-SYMMETRIC QUANTUM MECHANICS. International Journal of Modern Physics B, 2006, 20, 1528-1535.	2.0	6
86	Comment on â€œNon-representative Quantum Mechanical Weak Valuesâ€• Foundations of Physics, 2017, 47, 467-470.	1.3	6
87	Quantum Nonlocality. Entropy, 2019, 21, 447.	2.2	6
88	Time Symmetry and the Manyâ€Worlds Interpretation. , 2010, , 582-596.		6
89	Footprints of quantum pigeons. Physical Review Research, 2020, 2, .	3.6	6
90	Strict bounds on the Franson inequality. Physical Review A, 1998, 57, 1583-1585.	2.5	5

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91	Are interaction-free measurements interaction free?. Optics and Spectroscopy (English Translation of) Tj ETQq1 1 0.784314 rgBT /Ove	0.6	5
92	Evolution stopped in its tracks. Nature, 2008, 451, 137-138.	27.8	5
93	Neutrons and photons inside a nested Mach-Zehnder interferometer. Physical Review A, 2020, 101, .	2.5	5
94	Counterfactuals in Quantum Mechanics. , 2009, , 132-136.		5
95	Ontology of the Wave Function and the Many-Worlds Interpretation. , 2019, , 93-106.		5
96	Weak Value and Weak Measurements. , 2009, , 840-842.		4
97	How the Many Worlds Interpretation Brings Common Sense to Paradoxical Quantum Experiments. , 2020, , 40-60.		4
98	Protective measurement of the wave function of a single system. , 0, , 15-27.		3
99	Comment on â€œTime asymmetry in quantum mechanics: a retrodiction paradoxâ€• Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 203, 148-149.	2.1	3
100	Instantaneous measurements of nonlocal variables. Journal of Modern Optics, 2003, 50, 943-949.	1.3	3
101	Two-State Vector Formalism. , 2009, , 802-806.		3
102	Quantum Phases: 50 years of the Aharonov--Bohm effect and 25 years of the Berry phase. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 350301.	2.1	3
103	On some speculations about the state reductions of photons. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 171, 438-440.	2.1	2
104	Continuous input nonlocal games. Natural Computing, 2013, 12, 5-8.	3.0	2
105	The Bell Inequality and the Many-Worlds Interpretation. , 0, , 195-203.		2
106	There is No New Problem for Quantum Mechanics. Foundations of Physics, 2020, 50, 1728-1734.	1.3	2
107	Protective Measurementâ€”A New Quantum Measurement Paradigm: Detailed Description of the First Realization. Applied Sciences (Switzerland), 2021, 11, 4260.	2.5	2
108	Protective Measurements. NATO ASI Series Series B: Physics, 1995, , 355-356.	0.2	2

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109	The Predictability of the Results of Measurements of Noncommuting Variables. Annals of the New York Academy of Sciences, 1986, 480, 620-621.	3.8	1
110	Measurement of an integral of a classical field with a single quantum particle. Physical Review A, 2005, 71, .	2.5	1
111	Intellectually delicious. Nature Physics, 2010, 6, 160-161.	16.7	1
112	David Wallace, The Emergent Multiverse: Quantum Theory According to the Everett Interpretation. Oxford: Oxford University Press, 2012, Â£40 (hardback) ISBN: 978-0-199-54696-1. British Journal for the Philosophy of Science, 2015, 66, 465-468.	2.3	1
113	Failed attempt to escape from the quantum pigeon conundrum. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 399, 127287.	2.1	1
114	An Impossible Necklace. , 2002, , 221-223.		1
115	Instantaneous measurements of nonlocal variables. Journal of Modern Optics, 2003, 50, 943-949.	1.3	1
116	Interaction-Free Measurements (Elitzurâ€"Vaidman, EV IFM). , 2009, , 317-322.		1
117	Nonlocal Measurements and Teleportation of Quantum States. , 1995, , 347-356.		1
118	QUANTUM TIME MACHINE. , 1991, , .		0
119	Is it possible to know about something without ever interacting with it?. New Astronomy Reviews, 1993, 37, 253-256.	0.3	0
120	There is no classical analog of a quantum time-translation machine. Physical Review A, 1995, 52, 4297-4298.	2.5	0
121	Interplay of Aharonov-Bohm and Berry Phases for a Quantum Cloud of Chargea. Annals of the New York Academy of Sciences, 1995, 755, 882-887.	3.8	0
122	Sleeping Beauty in Quantumland. NeuroQuantology, 2013, 11, .	0.2	0
123	Preface to Volume 2, Issue 1 of Quantum Studies: Mathematics and Foundations. Quantum Studies: Mathematics and Foundations, 2015, 2, 1-3.	0.9	0
124	Weak measurements: From measuring incompatible observables and testing quantum contextuality to protective measurements. , 2017, , .		0
125	Quantum Reports: A New Journal for a Broad Audience. Quantum Reports, 2018, 1, 1-2.	1.3	0
126	MEASUREMENTS OF NONLOCAL VARIABLES. , 2003, , .		0

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127	Paradoxes of the Aharonov-Bohm and the Aharonov-Casher Effects. , 2014, , 247-255.		0
128	Weak Measurements. NATO ASI Series Series B: Physics, 1995, , 357-373.	0.2	0
129	Protective measurements: extracting the expectation value by measuring a single particle. , 2018, , .		0
130	Counterfactual communication. , 2019, , .		0