Basil Hiley

List of Publications by Year
in descending order

41 papers	1,079 citations	567281 15 h-index	414414 32 g-index
44 all docs	44 docs citations	44 times ranked	278 citing authors

#	Article	IF	Citations
1	Quantum interference and the quantum potential. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1979, 52, 15-28.	0.2	282
2	A quantum potential description of one-dimensional time-dependent scattering from square barriers and square wells. Foundations of Physics, 1982, 12, 27-48.	1.3	159
3	On a quantum algebraic approach to a generalized phase space. Foundations of Physics, 1981, 11, 179-203.	1.3	54
4	Unbroken Quantum Realism, from Microscopic to Macroscopic Levels. Physical Review Letters, 1985, 55, 2511-2514.	7.8	51
5	Welcher Weg Experiments from the Bohm Perspective. AIP Conference Proceedings, 2006, , .	0.4	46
6	Clifford Algebras and the Dirac-Bohm Quantum Hamilton-Jacobi Equation. Foundations of Physics, 2012, 42, 192-208.	1.3	41
7	On a new mode of description in physics. International Journal of Theoretical Physics, 1970, 3, 171-183.	1.2	38
8	The implicate order, algebras, and the spinor. Foundations of Physics, 1980, 10, 7-31.	1.3	36
9	The de Broglie pilot wave theory and the further development of new insights arising out of it. Foundations of Physics, 1982, 12, 1001-1016.	1.3	36
10	Imprints of the Quantum World in Classical Mechanics. Foundations of Physics, 2011, 41, 1415-1436.	1.3	36
11	Delayed-choice experiments and the Bohm approach. Physica Scripta, 2006, 74, 336-348.	2.5	35
12	Bohm's quantum potential as an internal energy. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 1224-1227.	2.1	34
13	Weak Values: Approach through the Clifford and Moyal Algebras. Journal of Physics: Conference Series, 2012, 361, 012014.	0.4	23
14	Feynman Paths and Weak Values. Entropy, 2018, 20, 367.	2.2	18
15	Nonlocality and polarization correlations of annihilation quanta. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1976, 35, 137-144.	0.2	16
16	On the Relationship Between the Wigner-Moyal andÂBohm Approaches to Quantum Mechanics: AÂStepÂtoÂaÂMore General Theory?. Foundations of Physics, 2010, 40, 356-367.	1.3	16
17	On the relationship between the Wignerâ€“Moyal approach and the quantum operator algebra of von Neumann. Journal of Computational Electronics, 2015, 14, 869-878.	2.5	15
18	Geometric interpretation of the Pauli spinor. American Journal of Physics, 1981, 49, 152-157.	0.7	13

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19	On the relativistic invariance of a quantum theory based on beables. Foundations of Physics, 1991, 21, 243-250.	1.3	12
20	What is Erased in the Quantum Erasure?. Foundations of Physics, 2006, 36, 1869-1883.	1.3	12
21	Fermi's ansatz and Bohm's quantum potential. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 2363-2366.	2.1	12
22	Quantum Trajectories: Real or Surreal?. Entropy, 2018, 20, 353.	2.2	11
23	Weak measurement and its experimental realisation. Journal of Physics: Conference Series, 2014, 504, 012016.	0.4	10
24	Emergent Quantum Mechanics: David Bohm Centennial Perspectives. Entropy, 2019, 21, 113.	2.2	9
25	Elements of reality, Lorentz invariance, and the product rule. Foundations of Physics, 1996, 26, 1-15.	1.3	8
26	Clifford Algebras in Symplectic Geometry and Quantum Mechanics. Foundations of Physics, 2013, 43, 424-439.	1.3	6
27	Statistical mechanics and the ontological interpretation. Foundations of Physics, 1996, 26, 823-846.	1.3	5
28	Active interpretation of the Lorentz â€˜â€˜boostsâ€™â€™ as a physical explanation of different time rates. American Journal of Physics, 1985, 53, 720-723.	0.7	4
29	A Unified Algebraic Approach to Quantum Theory. Foundations of Physics Letters, 1998, 11, 371-377.	0.6	4
30	Structure Process, Weak Values and Local Momentum. Journal of Physics: Conference Series, 2016, 701, 012010.	0.4	4
31	Observing quantum trajectories: From Mottâ€™s problem to quantum Zeno effect and back. Annals of Physics, 2016, 374, 190-211.	2.8	4
32	Weak measurement, the energyâ€“momentum tensor and the Bohm approach. , 0, , 68-90.		2
33	Hamiltonian flows, short-time propagators and the quantum Zeno effect. Journal of Physics: Conference Series, 2014, 504, 012027.	0.4	2
34	Algebraic Quantum Mechanics and Pregeometry. AIP Conference Proceedings, 2006, , .	0.4	1
35	The Algebraic Way. , 2016, , 1-25.		1
36	The role of geometric and dynamical phases in the Diracâ€“Bohm picture. Annals of Physics, 2022, 438, 168759.	2.8	1

#	Article	IF	Citations
37	Some Personal Reflections on Quantum Nonlocality and the Contributions of John Bell. , 0, , 344-362.		0
38	Stapp, Bohm and the Algebra of Process. Activitas Nervosa Superior, 2019, 61, 102-107.	0.4	0
39	Quantum Eraser. , 2009, , 546-549.		0
40	Quantum Mechanics: Harbinger of a Non-commutative Probability Theory?. Lecture Notes in Computer Science, 2014, , 6-21.	1.3	0
41	Aspects of Algebraic Quantum Theory: A Tribute to Hans Primas. , 2016, , 111-125.		0