David Hestenes

List of Publications by Year in descending order

47 papers	4,906 citations	257450 24 h-index	345221 36 g-index
51 all docs	51 docs citations	51 times ranked	1410 citing authors

#	Article	IF	Citations
1	The initial knowledge state of college physics students. American Journal of Physics, 1985, 53, 1043-1055.	0.7	726
2	Clifford Algebra to Geometric Calculus. , 1984, , .		687
3	Common sense concepts about motion. American Journal of Physics, 1985, 53, 1056-1065.	0.7	547
4	Toward a modeling theory of physics instruction. American Journal of Physics, 1987, 55, 440-454.	0.7	370
5	Modeling games in the Newtonian World. American Journal of Physics, 1992, 60, 732-748.	0.7	267
6	Interpreting the force concept inventory: A response to March 1995 critique by Huffman and Heller. Physics Teacher, 1995, 33, 502-502.	0.3	240
7	Space-Time Algebra. , 2015, , .		181
8	New Foundations for Classical Mechanics. , 1986, , .		168
9	Observables, operators, and complex numbers in the Dirac theory. Journal of Mathematical Physics, 1975, 16, 556-572.	1.1	135
10	Oersted Medal Lecture 2002: Reforming the mathematical language of physics. American Journal of Physics, 2003, 71, 104-121.	0.7	134
11	Real Spinor Fields. Journal of Mathematical Physics, 1967, 8, 798-808.	1.1	129
12	Spacetime physics with geometric algebra. American Journal of Physics, 2003, 71, 691-714.	0.7	124
13	The design of linear algebra and geometry. Acta Applicandae Mathematicae, 1991, 23, 65-93.	1.0	122
14	Modeling instruction in mechanics. American Journal of Physics, 1987, 55, 455-462.	0.7	89
15	Vectors, Spinors, and Complex Numbers in Classical and Quantum Physics. American Journal of Physics, 1971, 39, 1013-1027.	0.7	88
16	Local observables in the Dirac theory. Journal of Mathematical Physics, 1973, 14, 893-905.	1.1	88
17	Interpreting VASS Dimensions and Profiles for Physics Students. Science and Education, 1998, 7, 553-577.	2.7	71
18	A Unified Language for Mathematics and Physics. , 1986, , 1-23.		70

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19	Spin and uncertainty in the interpretation of quantum mechanics. American Journal of Physics, 1979, 47, 399-415.	0.7	69
20	Proper particle mechanics. Journal of Mathematical Physics, 1974, 15, 1768-1777.	1.1	68
21	Zitterbewegung in Quantum Mechanics. Foundations of Physics, 2010, 40, 1-54.	1.3	54
22	Space-time structure of weak and electromagnetic interactions. Foundations of Physics, 1982, 12, 153-168.	1.3	52
23	Proper dynamics of a rigid point particle. Journal of Mathematical Physics, 1974, 15, 1778-1786.	1.1	45
24	Entropy and Indistinguishability. American Journal of Physics, 1970, 38, 840-845.	0.7	43
25	Who needs physics education research!?. American Journal of Physics, 1998, 66, 465-467.	0.7	41
26	Old Wine in New Bottles: A New Algebraic Framework for Computational Geometry. , 2001, , 3-17.		40
27	Local Observables in Quantum Theory. American Journal of Physics, 1971, 39, 1028-1038.	0.7	34
28	Gauge Theory Gravity with Geometric Calculus. Foundations of Physics, 2005, 35, 903-970.	1.3	34
29	Clifford Algebra and the Interpretation of Quantum Mechanics. , 1986, , 321-346.		34
30	Multivector calculus. Journal of Mathematical Analysis and Applications, 1968, 24, 313-325.	1.0	31
31	Geometric Algebra. , 1987, , 1-43.		18
32	Curvature calculations with spacetime algebra. International Journal of Theoretical Physics, 1986, 25, 581-588.	1.2	17
33	Wherefore a science of teaching?. Physics Teacher, 1979, 17, 235-242.	0.3	15
34	Differential Forms in Geometric Calculus. , 1993, , 269-285.		12
35	How the Brain Works: The Next Great Scientific Revolution. , 1987, , 173-205.		10
36	The Genesis of Geometric Algebra: A Personal Retrospective. Advances in Applied Clifford Algebras, 2017, 27, 351-379.	1.0	7

#	Article	IF	Citations
37	Geometry of spinor regularization. Celestial Mechanics, 1983, 30, 171-179.	0.1	5
38	Spinor approach to gravitational motion and precession. International Journal of Theoretical Physics, 1986, 25, 589-598.	1.2	5
39	Grassmannâ€™s legacy. , 2011, , 243-260.		5
40	GAUGE GRAVITY AND ELECTROWEAK THEORY. , 2008, , .		5
41	Energyâ€“Momentum Complex in General Relativity and Gauge Theory. Advances in Applied Clifford Algebras, 2021, 31, 1.	1.0	3
42	Tutorial on Geometric Calculus. Advances in Applied Clifford Algebras, 2014, 24, 257-273.	1.0	2
43	Spacetime Geometry with Geometric Calculus. Advances in Applied Clifford Algebras, 2020, 30, 1.	1.0	2
44	A cardinal principle for neuropsychology, with implications for schizophrenia and mania. Behavioral and Brain Sciences, 1991, 14, 31-32.	0.7	1
45	Hunting for Snarks in Quantum Mechanics. , 2009, , .		1
46	The Kinematic Origin of Complex Wave Functions. , 1993, , 153-160.		1
47	Reply to â€™â€™Comment on â€™Spin and uncertainty in the interpretation of quantum mechanicsâ€™â€°â€™â€™. American Journal of Physics, 1981, 49, 497-497.	0.7	0