

# David J Toms

## List of Publications by Year in descending order

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46  
papers

1,554  
citations

361413

20  
h-index

302126

39  
g-index

46  
all docs

46  
docs citations

46  
times ranked

384  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effective action for the Yukawa model in curved spacetime. Journal of High Energy Physics, 2018, 2018, 1.	4.7	10
2	Invariants of the heat equation for non-minimal operators. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 215401.	2.1	6
3	Bose-Einstein condensation in the three-sphere and in the infinite slab: Analytical results. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 3984-3996.	2.6	10
4	Quantum gravitational contributions to quantum electrodynamics. Nature, 2010, 468, 56-59.	27.8	70
5	Cosmological Constant and Quantum Gravitational Corrections to the Running Fine Structure Constant. Physical Review Letters, 2008, 101, 131301.	7.8	56
6	Ideal Fermi gases in harmonic oscillator potential traps. Annals of Physics, 2005, 320, 487-520.	2.8	9
7	The specific heat of a trapped Fermi gas: an analytical approach. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 267, 276-280.	2.1	6
8	Density of states for Bose-Einstein condensation in harmonic oscillator potentials. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 222, 148-151.	2.1	42
9	Bose-Einstein condensation in a general static homogeneous magnetic field: linebreak and the effective action: The nonrelativistic ideal gas. Physical Review D, 1995, 51, 1886-1894.	4.7	19
10	Weak field superconductivity for relativistic charged gases at high temperature. Physical Review D, 1995, 51, 1895-1902.	4.7	4
11	Bose-Einstein condensation for interacting scalar fields in curved spacetime. Physical Review D, 1995, 51, 6886-6900.	4.7	11
12	Bose-Einstein condensation of a charged relativistic ideal gas in a general homogeneous magnetic field. Physical Review D, 1994, 50, 6457-6468.	4.7	10
13	Effective-action approach to Bose-Einstein condensation and superconductivity of a charged ideal nonrelativistic Bose gas. Physical Review B, 1994, 50, 3120-3128.	3.2	16
14	Renormalization of interacting scalar field theory in three-dimensional curved spacetime. Physical Review D, 1994, 49, 6767-6777.	4.7	12
15	The canonical partition function for quons. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 195, 38-42.	2.1	13
16	Is there a phase transition in Maxwell-Chern-Simons theory?. Physical Review D, 1993, 48, 1808-1820.	4.7	8
17	No generalized statistics from dynamics in curved spacetime. Physical Review Letters, 1993, 71, 3240-3242.	7.8	12
18	Bose-Einstein condensation as symmetry breaking in curved spacetime and in spacetimes with boundaries. Physical Review D, 1993, 47, 2483-2496.	4.7	38

#	ARTICLE	IF	CITATIONS
19	Gauge-independent effective potential for minimally coupled quantum fields in curved space. <i>Physical Review D</i> , 1992, 46, 4413-4420.	4.7	10
20	Bose-Einstein condensation in relativistic systems in curved space as symmetry breaking. <i>Physical Review Letters</i> , 1992, 69, 1152-1155.	7.8	43
21	Effective action at finite temperature. <i>Physical Review D</i> , 1992, 46, 1671-1679.	4.7	47
22	Two-loop instabilities of gauge vacua and topological symmetry breaking on $R^n \tilde{\times} S^1$ . <i>Annals of Physics</i> , 1991, 210, 438-463.	2.8	5
23	Geometrical interpretation of the functional measure for supersymmetric gauge theories and of the gauge invariant effective action. <i>Annals of Physics</i> , 1991, 205, 70-109.	2.8	11
24	Gauge vacua in Yang-Mills-Chern-Simons theory on tori and projective spaces. <i>Physical Review D</i> , 1991, 43, 1956-1964.	4.7	8
25	Vacuum structure of Yang-Mills-Chern-Simons theory in three dimensions. <i>Physical Review Letters</i> , 1990, 64, 1639-1642.	7.8	10
26	Symmetry breaking around cosmic strings. <i>Classical and Quantum Gravity</i> , 1989, 6, 1343-1349.	4.0	5
27	Grassmannian Kaluza-Klein theory. <i>Classical and Quantum Gravity</i> , 1989, 6, 1033-1040.	4.0	8
28	Field-parametrization dependence of the effective action in scalar electrodynamics. <i>Physical Review D</i> , 1989, 39, 1735-1742.	4.7	11
29	Vacuum energy for massive forms in $R \times M \times S^N$ . <i>Classical and Quantum Gravity</i> , 1987, 4, 1357-1367.	4.0	5
30	Unique effective action in five-dimensional Kaluza-Klein theory. <i>Physical Review Letters</i> , 1987, 58, 296-298.	7.8	54
31	Functional measure for quantum field theory in curved spacetime. <i>Physical Review D</i> , 1987, 35, 3796-3803.	4.7	30
32	The conformal anomaly in higher dimensions. <i>Classical and Quantum Gravity</i> , 1986, 3, 431-442.	4.0	20
33	Stability of self-consistent higher-dimensional cosmological solutions. <i>Physical Review D</i> , 1985, 32, 1921-1927.	4.7	12
34	Boundary effects and the massless limit of the photon. <i>Physical Review D</i> , 1985, 31, 1363-1369.	4.7	9
35	Renormalization group and nonlocal terms in the curved-spacetime effective action: Weak-field results. <i>Physical Review D</i> , 1985, 32, 1409-1420.	4.7	55
36	Explicit curvature dependence of coupling constants. <i>Physical Review D</i> , 1985, 31, 2424-2438.	4.7	72

#	ARTICLE	IF	CITATIONS
37	New form for the coincidence limit of the Feynman propagator, or heat kernel, in curved spacetime. Physical Review D, 1985, 31, 953-956.	4.7	87
38	Effective Couplings of Grand Unified Theories in Curved Space-Time. Physical Review Letters, 1984, 52, 1269-1271.	7.8	29
39	Renormalization-group analysis of grand unified theories in curved spacetime. Physical Review D, 1984, 29, 1584-1608.	4.7	142
40	Background-field method and the renormalization of non-Abelian gauge theories in curved space-time. Physical Review D, 1983, 27, 1803-1813.	4.7	57
41	Vacuum stability and symmetry breaking in non-Minkowskian space-times. Physical Review D, 1982, 25, 2536-2547.	4.7	14
42	Dynamical symmetry breaking due to radiative corrections in cosmology. Physical Review D, 1982, 25, 1510-1518.	4.7	68
43	Renormalization of interacting scalar field theories in curved space-time. Physical Review D, 1982, 26, 2713-2729.	4.7	105
44	Scalar electrodynamics in a nonsimply connected space-time. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 77, 303-306.	2.1	23
45	Symmetry breaking and mass generation by space-time topology. Physical Review D, 1980, 21, 2805-2817.	4.7	146
46	Casimir effect and topological mass. Physical Review D, 1980, 21, 928-932.	4.7	116