

# David J Jeffrey

## List of Publications by Year in descending order

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62  
papers

10,910  
citations

257101

24  
h-index

149479

56  
g-index

64  
all docs

64  
docs citations

64  
times ranked

7582  
citing authors

#	ARTICLE	IF	CITATIONS
1	Common Factors in Fraction-Free Matrix Decompositions. Mathematics in Computer Science, 2021, 15, 589-608.	0.2	1
2	An unwinding number pair for continuous expressions of integrals. Journal of Symbolic Computation, 2021, 105, 97-117.	0.5	0
3	Integrals of functions containing parameters. Mathematical Gazette, 2020, 104, 412-426.	0.0	0
4	Comprehensive LU Factors of Polynomial Matrices. Lecture Notes in Computer Science, 2020, , 80-88.	1.0	4
5	Comprehensive anti-derivatives and parametric continuity. ACM Communications in Computer Algebra, 2018, 52, 32-33.	0.2	0
6	Analytic Approximations to Nonlinear Boundary Value Problems Modeling Beam-Type Nano-Electromechanical Systems. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2017, 72, 201-206.	0.7	0
7	Branch Structure and Implementation of Lambert W. Mathematics in Computer Science, 2017, 11, 341-350.	0.2	3
8	Rapidly Convergent Integrals and Function Evaluation. Lecture Notes in Computer Science, 2017, , 270-274.	1.0	1
9	Exploring Rounding Errors in Matlab Using Extended Precision. Procedia Computer Science, 2014, 29, 1423-1432.	1.2	3
10	Multivalued Elementary Functions in Computer-Algebra Systems. Lecture Notes in Computer Science, 2014, , 157-167.	1.0	2
11	Algorithm 917. ACM Transactions on Mathematical Software, 2012, 38, 1-17.	1.6	73
12	Bernstein, Pick, Poisson and related integral expressions for LambertW. Integral Transforms and Special Functions, 2012, 23, 817-829.	0.8	9
13	Stieltjes and other integral representations for functions of Lambert $W$ . Integral Transforms and Special Functions, 2012, 23, 581-593.	0.8	16
14	An analytical approach for solving nonlinear boundary value problems in finite domains. Numerical Algorithms, 2011, 56, 93-106.	1.1	7
15	Approximate solutions to a parameterized sixth order boundary value problem. Computers and Mathematics With Applications, 2010, 59, 247-253.	1.4	16
16	A conjecture concerning a completely monotonic function. Computers and Mathematics With Applications, 2010, 60, 1360-1363.	1.4	5
17	D-dimensional Bose gases and the Lambert W function. Journal of Mathematical Physics, 2010, 51, 123303.	0.5	7
18	Comparison of homotopy analysis method and homotopy perturbation method through an evolution equation. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 4057-4064.	1.7	103

#	ARTICLE	IF	CITATIONS
19	Automatic computation of the complete root classification for a parametric polynomial. Journal of Symbolic Computation, 2009, 44, 1487-1501.	0.5	6
20	New travelling wave solutions to modified CH and DP equations. Computer Physics Communications, 2009, 180, 1429-1433.	3.0	2
21	An efficient analytical approach for solving fourth order boundary value problems. Computer Physics Communications, 2009, 180, 2034-2040.	3.0	28
22	The Lambert W function and quantum statistics. Journal of Mathematical Physics, 2009, 50, 102103.	0.5	50
23	Fraction-free matrix factors: new forms for LU and QR factors. Frontiers of Computer Science, 2008, 2, 67-80.	0.6	11
24	Automatic computation of the travelling wave solutions to nonlinear PDEs. Computer Physics Communications, 2008, 178, 700-712.	3.0	7
25	Algebraic properties of the Lambert $W$ function from a result of Rosenlicht and of Liouville. Integral Transforms and Special Functions, 2008, 19, 709-712.	0.8	16
26	Symbolic Computation Sequences and Numerical Analytic Geometry Applied to Multibody Dynamical Systems. , 2007, , 335-347.		0
27	A Symbolic-Numeric Approach to an Electric Field Problem. , 2007, , 349-359.		1
28	Rule-Based Simplification in Vector-Product Spaces. Lecture Notes in Computer Science, 2007, , 116-127.	1.0	0
29	A note on Laplace's equation inside a cylinder. Applied Mathematics Letters, 2005, 18, 55-59.	1.5	2
30	Implicit Reduced Involutive Forms and Their Application to Engineering Multibody Systems. Lecture Notes in Computer Science, 2005, , 31-43.	1.0	1
31	Polynomial transformations of Tschirnhaus, Bring and Jerrard. SIGSAM Bulletin: A Quarterly Publication of the Special Interest Group on Symbolic & Algebraic Manipulation, 2003, 37, 90-94.	0.3	8
32	Reasoning about the Elementary Functions of Complex Analysis. Annals of Mathematics and Artificial Intelligence, 2002, 36, 303-318.	0.9	19
33	According to Abramowitz and Stegun $\operatorname{arccoth}$ needn't be uncouth. SIGSAM Bulletin: A Quarterly Publication of the Special Interest Group on Symbolic & Algebraic Manipulation, 2000, 34, 58-65.	0.3	33
34	Some applications of the Lambert $W$ function to physics. Canadian Journal of Physics, 2000, 78, 823-831.	0.4	172
35	Approximate polynomial decomposition. , 1999, , .		14
36	Graphing elementary Riemann surfaces. SIGSAM Bulletin: A Quarterly Publication of the Special Interest Group on Symbolic & Algebraic Manipulation, 1998, 32, 11-17.	0.3	11

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37	Two Perturbation Calculations in Fluid Mechanics using Large-expression Management. Journal of Symbolic Computation, 1997, 23, 427-443.	0.5	8
38	Rectifying Transformations for the Integration of Rational Trigonometric Functions. Journal of Symbolic Computation, 1997, 24, 563-573.	0.5	5
39	On the LambertW function. Advances in Computational Mathematics, 1996, 5, 329-359.	0.8	4,751
40	The unwinding number. SIGSAM Bulletin: A Quarterly Publication of the Special Interest Group on Symbolic & Algebraic Manipulation, 1996, 30, 28-35.	0.3	35
41	The pressure moments for two rigid spheres in low-Reynolds-number flow. Physics of Fluids A, Fluid Dynamics, 1993, 5, 2317-2325.	1.6	61
42	Well - it isn't quite that simple. SIGSAM Bulletin: A Quarterly Publication of the Special Interest Group on Symbolic & Algebraic Manipulation, 1992, 26, 2-6.	0.3	26
43	The calculation of the low Reynolds number resistance functions for two unequal spheres. Physics of Fluids A, Fluid Dynamics, 1992, 4, 16-29.	1.6	126
44	Numerical evaluation of airy functions with complex arguments. Journal of Computational Physics, 1992, 99, 106-114.	1.9	13
45	The lubrication analysis for two spheres in a two-dimensional pure straining motion. Physics of Fluids A, Fluid Dynamics, 1991, 3, 1819-1821.	1.6	4
46	Solution of a hydrodynamic lubrication problem with Maple. Journal of Symbolic Computation, 1990, 9, 503-513.	0.5	3
47	Particle migration in suspensions by thermocapillary or electrophoretic motion. Journal of Fluid Mechanics, 1990, 212, 95.	1.4	72
48	Higher-order corrections to the axisymmetric interactions of nearly touching spheres. Physics of Fluids A, Fluid Dynamics, 1989, 1, 1740-1742.	1.6	5
49	Mobility functions for two unequal viscous drops in Stokes flow. II. Asymmetric motions. Physics of Fluids A, Fluid Dynamics, 1989, 1, 61-76.	1.6	36
50	Mobility functions for two unequal viscous drops in Stokes flow. I. Axisymmetric motions. Physics of Fluids, 1988, 31, 2445-2455.	1.4	52
51	The forces and couples acting on two nearly touching spheres in low-Reynolds-number flow. Zeitschrift Fur Angewandte Mathematik Und Physik, 1984, 35, 634-641.	0.7	62
52	Kinetic theories for granular flow: inelastic particles in Couette flow and slightly inelastic particles in a general flowfield. Journal of Fluid Mechanics, 1984, 140, 223-256.	1.4	2,583
53	Calculation of the resistance and mobility functions for two unequal rigid spheres in low-Reynolds-number flow. Journal of Fluid Mechanics, 1984, 139, 261-290.	1.4	698
54	Low-Reynolds-number flow between converging spheres. Mathematika, 1982, 29, 58-66.	0.3	81

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55	Aggregation of break-up of clay flocs in turbulent flow. <i>Advances in Colloid and Interface Science</i> , 1982, 17, 213-218.	7.0	16
56	The stress tensor in a granular flow at high shear rates. <i>Journal of Fluid Mechanics</i> , 1981, 110, 255-272.	1.4	432
57	Quasi-Stationary Approximations for the Size Distribution of Aerosols. <i>Journals of the Atmospheric Sciences</i> , 1981, 38, 2440-2443.	0.6	14
58	Heat transfer to a slowly moving fluid from a dilute fixed bed of heated spheres. <i>Journal of Fluid Mechanics</i> , 1980, 101, 403-421.	1.4	38
59	Streamline patterns and eddies in low-Reynolds-number flow. <i>Journal of Fluid Mechanics</i> , 1980, 96, 315-334.	1.4	79
60	The rheological properties of suspensions of rigid particles. <i>AIChE Journal</i> , 1976, 22, 417-432.	1.8	470
61	Group expansions for the bulk properties of a statistically homogeneous, random suspension. <i>Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences</i> , 1974, 338, 503-516.	1.5	41
62	Conduction through a random suspension of spheres. <i>Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences</i> , 1973, 335, 355-367.	1.5	561