Antony Jameson

List of Publications by Year
in descending order

122 papers	8,589 citations	186265 28 h-index	161849 54 g-index
127 all docs	127 docs citations	127 times ranked	2082 citing authors

#	Article	IF	Citations
1	Test cases for inverse aerodynamic design. Computers and Fluids, 2021, 223, 104923.	2.5	1
2	Future Directions in Computational Fluid Dynamics. , 2017, , .		23
3	Aerodynamic Topology Optimization: Some Observations on Hysteresis in Separated Flows. , 2017, , .		4
4	Origins and Further Development of the Jameson–Schmidt–Turkel Scheme. AIAA Journal, 2017, 55, 1487-1510.	2.6	68
5	Evaluation of Fully Implicit Runge Kutta Schemes for Unsteady Flow Calculations. Journal of Scientific Computing, 2017, 73, 819-852.	2.3	23
6	Multi-GPU, Implicit Time Stepping for High-order Methods on Unstructured Grids. , 2016, , .		6
7	Application of Dual Time Stepping to Fully Implicit Runge Kutta Schemes for Unsteady Flow Calculations. , 2015, , .		8
8	Computational Aerodynamics: Solvers and Shape Optimization. Journal of Heat Transfer, 2013, 135, .	2.1	12
9	Design of free-surface interfaces using RANS equations. , 2013, , .		2
10	Shape Sensitivity of Free-Surface Interfaces Using a Level Set Methodology. , 2012, , .		6
11	Adjoint-Based Aerodynamic Optimization of Supersonic Biplane Airfoils. Journal of Aircraft, 2012, 49, 802-814.	2.4	32
12	Robust Airfoil Optimization Using Maximum Expected Value and Expected Maximum Value Approaches. AIAA Journal, 2012, 50, 1905-1919.	2.6	9
13	Adjoint based aerodynamic optimization of supersonic biplane airfoils. , 2011, , .		4
14	Robust Optimal Control using Polynomial Chaos and Adjoints for Systems with Uncertain Inputs. , 2011, , .		5
15	Further Studies of Mesh Refinement - Are Shock-Free Airfoils Truly Shock Free?. , 2011, , .		0
16	EFFICIENT RELAXATION METHODS FOR HIGH-ORDER DISCRETIZATION OF STEADY PROBLEMS. Advances in Computational Fluid Dynamics, 2011, , 363-390.	0.1	5
17	A Systematic Study on the Impact of Dimensionality for a Two-Dimensional Aerodynamic Optimization Model Problem. , 2011, , .		40
18	50 years of transonic aircraft design. Progress in Aerospace Sciences, 2011, 47, 308-318.	12.1	31

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19	Design of Adjoint-Based Laws for Wing Flutter Control. Journal of Aircraft, 2011, 48, 331-335.	2.4	9
20	A hybrid multilevel method for high-order discretization of the Euler equations on unstructured meshes. Journal of Computational Physics, 2010, 229, 3938-3956.	3.8	10
21	Bodies Having Minimum Pressure Drag in Supersonic Flow: Investigating Nonlinear Effects. Journal of Aircraft, 2010, 47, 1451-1454.	2.4	4
22	Aerodynamic-Structural Design Studies of Low-Sweep Transonic Wings. Journal of Aircraft, 2010, 47, 505-514.	2.4	16
23	Enhancement of Class of Adjoint Design Methods via Optimization of Parameters. AIAA Journal, 2010, 48, 1072-1076.	2.6	21
24	In Pursuit of Grid Convergence for Two-Dimensional Euler Solutions. Journal of Aircraft, 2010, 47, 1152-1166.	2.4	94
25	Comparative Study of Three-Dimensional Wing Drag Minimization by Different Optimization Techniques. Journal of Aircraft, 2009, 46, 526-541.	2.4	29
26	Multicloud: Multigrid convergence with a meshless operator. Journal of Computational Physics, 2009, 228, 5237-5250.	3.8	30
27	Design of Adjoint Based Laws for Wing Flutter Control. , 2009, , .		2
28	Efficient Algorithms for High-Order Discretizations of the Euler and Navier-Stokes Equations. , 2009, , .		0
29	NLF Airfoil and Wing Design by Adjoint Method and Automatic Transition Prediction. , 2009, , .		9
30	Natural-Laminar-Flow Airfoil and Wing Design by Adjoint Method and Automatic Transition Prediction. , 2009, , .		23
31	A p-Multigrid Spectral Difference Method For Viscous Compressible Flow Using 2D Quadrilateral Meshes. , 2009, , .		12
32	Monotonicity preserving multigrid time stepping schemes for conservation laws. Computing and Visualization in Science, 2008, 11, 41-58.	1.2	4
33	Aerodynamic-Structural Design Studies of Low-Sweep Transonic Wings. , 2008, , .		2
34	Comparative Study of 3D Wing Drag Minimization by Different Optimization Techniques. , 2008, , .		19
35	Time Spectral Method for Rotorcraft Flow. , 2008, , .		12
36	A Pilot Project in Preparation of an Aerodynamic Optimization Workshop with Lessons Learned. , 2008, , .		5

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37	Time Spectral Method for Rotorcraft Flow with Vorticity Confinement. , 2008, , .		15
38	Multicloud Convergence Acceleration for Complex Applications on Arbitrary Grids. , 2008, , .		0
39	Continuous Adjoint Method for Unstructured Grids. AIAA Journal, 2008, 46, 1226-1239.	2.6	37
40	An Investigation of the Attainable Efficiency of Flight at Mach One or Just Beyond. , 2007, , .		2
41	Multi-Point Aero-Structural Optimization of Wings Including Planform Variations. , 2007, , .		36
42	An improved gas-kinetic BGK finite-volume method for three-dimensional transonic flow. Journal of Computational Physics, 2007, 220, 856-878.	3.8	74
43	Optimal Control of LCOs in Aero-Structural Systems. , 2006, , .		10
44	Aerodynamic Shape Optimization for the World's Fastest P-51. , 2006, , .		0
45	Aerodynamic Simulation and Shape Optimization in High Speed Flow. , 2006, , .		0
46	Feedback Control of Aerodynamic Flows. , 2006, , .		2
47	Active Flutter Control using an Adjoint Method. , 2006, , .		6
48	An adjoint method for the calculation of remote sensitivities in supersonic flow. International Journal of Computational Fluid Dynamics, 2006, 20, 61-74.	1.2	4
49	Advances in Aerodynamic Shape Optimization. , 2006, , 687-698.		5
50	An Analysis of Bodies Having Minimum Pressure Drag in Supersonic Flow: Exploring the Nonlinear Domain. , 2006, , 675-680.		1
51	Exploring the Limits of Shock-free Transonic Airfoil Design. , 2005, , .		11
52	Enhancement of Adjoint Design Methods via Optimization of Adjoint Parameters. , 2005, , .		7
53	Multipoint Wing Planform Optimization via Control Theory. , 2005, , .		17
54	Multi-Element High-Lift Configuration Design Optimization Using Viscous Continuous Adjoint Method. Journal of Aircraft, 2004, 41, 1082-1097.	2.4	66

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55	Aero-Structural Wing Planform Optimization. , 2004, , .		15
56	Efficient Aerodynamic Shape Optimization. , 2004, , .		32
57	Aero-Structural Wing Planform Optimization Using the Navier-Stokes Equations. , 2004, , .		16
58	Case Studies in Aero-Structural Wing Planform and Section Optimization. , 2004, , .		5
59	Bodies Having Minimum Pressure Drag in Supersonic Flow: Investigating Nonlinear Effects. , 2004, , .		3
60	Development of Computational Techniques for Transonic Flows: An Historical Perspective. Fluid Mechanics and Its Applications, 2003, , 183-194.	0.2	2
61	Fast preconditioned multigrid solution of the Euler and Navier-Stokes equations for steady, compressible flows. International Journal for Numerical Methods in Fluids, 2003, 43, 537-553.	1.6	19
62	Aerodynamic Design and Optimization. , 2003, , .		15
63	Viscous Aerodynamic Shape Optimization of Wings Including Planform Variables. , 2003, , .		48
64	Reduction of the Adjoint Gradient Formula in the Continuous Limit. , 2003, , .		29
65	Reduction of the Adjoint Gradient Formula for Aerodynamic Shape Optimization Problems. AIAA Journal, 2003, 41, 2114-2129.	2.6	47
66	Optimum Transonic Wing Design Using Control Theory. Fluid Mechanics and Its Applications, 2003, , 253-264.	0.2	1
67	Sonic Boom Reduction Using an Adjoint Method for Supersonic Transport Aircraft Configurations. Fluid Mechanics and Its Applications, 2003, , 355-362.	0.2	9
68	Optimal Control of Unsteady Flows Using a Time Accurate Method. , 2002, , .		40
69	Aerodynamic Shape Optimization Using Unstructured Grid Methods. , 2002, , .		14
70	Studies of the continuous and discrete adjoint approaches to viscous automatic aerodynamic shape optimization. , 2001, , .		76
71	How many steps are required to solve the Euler equations of steady, compressible flow - In search of a fast solution algorithm. , 2001, , .		58
72	Computational fluid dynamics for aerodynamic design - Its current and future impact. , 2001, , .		46

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73	A perspective on computational algorithms for aerodynamic analysis and design. Progress in Aerospace Sciences, 2001, 37, 197-243.	12.1	80
74	A Vertex-Centroid (V-C) Scheme for the Gas-Dynamics Equations. , 2001, , 37-52.		2
75	An adjoint method for the calculation of non-collocated sensitivities in supersonic flow. , 2001, , 921-925.		7
76	Analysis and design of two-dimensional sails. , 2001, , 737-738.		0
77	A comparison of the continuous and discrete adjoint approach to automatic aerodynamic optimization. , 2000, , .		166
78	Two-dimensional high-lift aerodynamic optimization using the continuous adjoint method. , 2000, , .		18
79	Aerodynamic shape optimization techniques based on control theory. Lecture Notes in Mathematics, 2000, , 151-221.	0.2	18
80	Re-Engineering the Design Process Through Computation. Journal of Aircraft, 1999, 36, 36-50.	2.4	74
81	Constrained Multipoint Aerodynamic Shape Optimization Using an Adjoint Formulation and Parallel Computers, Part 2. Journal of Aircraft, 1999, 36, 61-74.	2.4	136
82	Constrained Multipoint Aerodynamic Shape Optimization Using an Adjoint Formulation and Parallel Computers, Part 1. Journal of Aircraft, 1999, 36, 51-60.	2.4	230
83	A gradient accuracy study for the adjoint-based Navier-Stokes design method. , 1999, , .		30
84	An Efficient Multigrid Algorithm for Compressible Reactive Flows. Journal of Computational Physics, 1998, 144, 484-516.	3.8	15
85	Aerodynamic shape optimization techniques based on control theory. , 1998, , .		50
86	Three-dimensional computations of time-dependent incompressible flows with an implicit multigrid-driven algorithm on parallel computers. , 1997, , 430-437.		3
87	ANALYSIS AND IMPLEMENTATION OF THE GAS-KINETIC BGK SCHEME FOR COMPUTATIONAL GAS DYNAMICS. International Journal for Numerical Methods in Fluids, 1997, 25, 21-49.	1.6	17
88	Positive schemes and shock modelling for compressible flows. International Journal for Numerical Methods in Fluids, 1995, 20, 743-776.	1.6	83
89	Effect of artificial diffusion schemes on multigrid convergence. , 1995, , .		12
90	Optimum aerodynamic design using CFD and control theory. , 1995, , .		254

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91	Computational methods for aerodynamic design. , 1995, , 71-85.		0
92	Static shape control for adaptive wings. AIAA Journal, 1994, 32, 1895-1901.	2.6	95
93	Fully-implicit time-marching aeroelastic solutions. , 1994, , .		132
94	Computational algorithms for aerodynamic analysis and design. Applied Numerical Mathematics, 1993, 13, 383-422.	2.1	58
95	Artificial diffusion, upwind biasing, limiters and their effect on accuracy and multigrid convergence in transonic and hypersonic flows. , 1993, , .		109
96	Multigrid Navier-Stokes calculations for three-dimensional cascades. AIAA Journal, 1993, 31, 1785-1791.	2.6	42
97	Multigrid Navier-Stokes calculations for three dimensional cascades. , 1992, , .		8
98	Time dependent calculations using multigrid, with applications to unsteady flows past airfoils and wings. , 1991, , .		890
99	Airfoils admitting non-unique solutions of the Euler equations. , 1991, , .		38
100	Aerodynamic Design via Control Theory. Lecture Notes in Engineering, 1989, , 377-401.	0.1	19
101	Computational transonics. Communications on Pure and Applied Mathematics, 1988, 41, 507-549.	3.1	52
102	Aerodynamic design via control theory. Journal of Scientific Computing, 1988, 3, 233-260.	2.3	1,509
103	Lower-upper Symmetric-Gauss-Seidel method for the Euler and Navier-Stokes equations. AIAA Journal, 1988, 26, 1025-1026.	2.6	1,063
104	Lower-upper implicit schemes with multiple grids for the Euler equations. AIAA Journal, 1987, 25, 929-935.	2.6	483
105	Successes and challenges in computational aerodynamics. , 1987, , .		50
106	Lower-upper implicit scheme for high-speed inlet analysis. AIAA Journal, 1987, 25, 1052-1053.	2.6	16
107	Multigrid solution of the Euler equations using implicit schemes. AIAA Journal, 1986, 24, 1737-1743.	2.6	149
108	Conditions for the construction of multi-point total variation diminishing difference schemes. Applied Numerical Mathematics, 1986, 2, 335-345.	2.1	23

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109	Multigrid algorithms for compressible flow calculations. Lecture Notes in Mathematics, 1986, , 166-201.	0.2	114
110	Transonic flow calculations for aircraft. , 1985, , 156-242.		50
111	An adaptive multigrid method for the euler equations. , 1985, , 92-97.		10
112	Automatic adaptive grid refinement for the Euler equations. AIAA Journal, 1985, 23, 561-568.	2.6	149
113	Remarks on the Development of a Multiblock Three-Dimensional Euler Code for out of Core and Multiprocessor Calculations. , 1985, , 53-66.		4
114	Solution of the Euler equations for two dimensional transonic flow by a multigrid method. Applied Mathematics and Computation, 1983, 13, 327-355.	2.2	416
115	Progress in Finite-Volume Calculations for Wing-Fuselage Combinations. AIAA Journal, 1980, 18, 1281-1288.	2.6	78
116	Numerical Calculation of Transonic Potential Flow about Wing-Body Combinations. AIAA Journal, 1979, 17, 175-181.	2.6	56
117	Numerical calculation of transonic flow past a swept wing by a finite volume method. , 1979, , 125-148.		1
118	Accelerated Iterative Calculation of Transonic Nacelle Flowfields. AIAA Journal, 1977, 15, 1474-1480.	2.6	34
119	Numerical Computation of Transonic Flows with Shock Waves. , 1976, , 384-414.		23
120	NUMERICAL SOLUTION OF NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS OF MIXED TYPE**Work supported by NASA under Grants NGR 33-016-167 and NGR 33-016-201 and by ERDA under Contract AT(11-1)-3077.. , 1976, , 275-320.		13
121	Iterative solution of transonic flows over airfoils and wings, including flows at mach 1. Communications on Pure and Applied Mathematics, 1974, 27, 283-309.	3.1	340
122	Three dimensional flows around airfoils with shocks. Lecture Notes in Computer Science, 1974, , 185-212.	1.3	5