

# Kenneth C Hall

## List of Publications by Year in descending order

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70  
papers

4,351  
citations

172457

29  
h-index

182427

51  
g-index

73  
all docs

73  
docs citations

73  
times ranked

1182  
citing authors

#	ARTICLE	IF	CITATIONS
1	Computation of Unsteady Nonlinear Flows in Cascades Using a Harmonic Balance Technique. AIAA Journal, 2002, 40, 879-886.	2.6	618
2	MODELING OFFLUID-STRUCTUREINTERACTION. Annual Review of Fluid Mechanics, 2001, 33, 445-490.	25.0	508
3	Proper Orthogonal Decomposition Technique for Transonic Unsteady Aerodynamic Flows. AIAA Journal, 2000, 38, 1853-1862.	2.6	315
4	Nonlinear Inviscid Aerodynamic Effects on Transonic Divergence, Flutter, and Limit-Cycle Oscillations. AIAA Journal, 2002, 40, 638-646.	2.6	251
5	Calculation of unsteady flows in turbomachinery using the linearized Euler equations. AIAA Journal, 1989, 27, 777-787.	2.6	205
6	Eigenanalysis of unsteady flows about airfoils, cascades, and wings. AIAA Journal, 1994, 32, 2426-2432.	2.6	196
7	Three-Dimensional Transonic Aeroelasticity Using Proper Orthogonal Decomposition-Based Reduced-Order Models. Journal of Aircraft, 2003, 40, 544-551.	2.4	156
8	Modeling Viscous Transonic Limit Cycle Oscillation Behavior Using a Harmonic Balance Approach. Journal of Aircraft, 2004, 41, 1266-1274.	2.4	118
9	Nonlinear Analysis of Unsteady Flows in Multistage Turbomachines Using Harmonic Balance. AIAA Journal, 2007, 45, 1047-1057.	2.6	112
10	Linearized Euler predictions of unsteady aerodynamic loads in cascades. AIAA Journal, 1993, 31, 540-550.	2.6	106
11	Eigenmode Analysis in Unsteady Aerodynamics: Reduced Order Models. Applied Mechanics Reviews, 1997, 50, 371-386.	10.1	99
12	A Time-Linearized Navier-Stokes Analysis of Stall Flutter. Journal of Turbomachinery, 2000, 122, 467-476.	1.7	97
13	Harmonic balance methods applied to computational fluid dynamics problems. International Journal of Computational Fluid Dynamics, 2013, 27, 52-67.	1.2	88
14	Minimum induced power requirements for flapping flight. Journal of Fluid Mechanics, 1996, 323, 285-315.	3.4	85
15	Limit Cycle Oscillations of a Cantilevered Wing in Low Subsonic Flow. AIAA Journal, 1999, 37, 364-371.	2.6	83
16	Computationally fast harmonic balance methods for unsteady aerodynamic predictions of helicopter rotors. Journal of Computational Physics, 2008, 227, 6206-6225.	3.8	81
17	Power Requirements for Large-Amplitude Flapping Flight. Journal of Aircraft, 1998, 35, 352-361.	2.4	68
18	Harmonic Balance Analysis of Limit Cycle Oscillations in Turbomachinery. AIAA Journal, 2011, 49, 1478-1487.	2.6	61

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19	Gust response analysis for cascades operating in nonuniform mean flows. <i>AIAA Journal</i> , 1991, 29, 1463-1471.	2.6	56
20	Nonlinear Frequency-Domain Analysis of Unsteady Flows in Turbomachinery with Multiple Excitation Frequencies. <i>AIAA Journal</i> , 2008, 46, 1912-1920.	2.6	55
21	Discrete Adjoint Approach for Modeling Unsteady Aerodynamic Design Sensitivities. <i>AIAA Journal</i> , 2005, 43, 1931-1936.	2.6	54
22	Using Automatic Differentiation to Create a Nonlinear Reduced-Order-Model Aerodynamic Solver. <i>AIAA Journal</i> , 2010, 48, 19-24.	2.6	51
23	Deforming grid variational principle for unsteady small disturbance flows in cascades. <i>AIAA Journal</i> , 1993, 31, 891-900.	2.6	48
24	Multistage Coupling for Unsteady Flows in Turbomachinery. <i>AIAA Journal</i> , 2005, 43, 624-632.	2.6	46
25	A novel harmonic balance analysis for the Van Der Pol oscillator. <i>International Journal of Non-Linear Mechanics</i> , 2007, 42, 2-12.	2.6	42
26	Reduced-Order Modeling of Unsteady Viscous Flow in a Compressor Cascade. <i>AIAA Journal</i> , 1998, 36, 1039-1048.	2.6	39
27	Compact Implementation Strategy for a Harmonic Balance Method Within Implicit Flow Solvers. <i>AIAA Journal</i> , 2013, 51, 1374-1381.	2.6	39
28	Theoretical Predictions of F-16 Fighter Limit Cycle Oscillations for Flight Flutter Testing. <i>Journal of Aircraft</i> , 2009, 46, 1667-1672.	2.4	33
29	Harmonic Balance Analysis of Blade Row Interactions in a Transonic Compressor. <i>Journal of Propulsion and Power</i> , 2010, 26, 335-343.	2.2	30
30	The effect of aerodynamic asymmetries on turbomachinery flutter. <i>Journal of Fluids and Structures</i> , 2013, 36, 1-17.	3.4	29
31	Sensitivity Analysis of Unsteady Inviscid Flow Through Turbomachinery Cascades. <i>AIAA Journal</i> , 2001, 39, 1047-1056.	2.6	25
32	A Harmonic Balance Approach for Modeling Three-Dimensional Nonlinear Unsteady Aerodynamics and Aeroelasticity. , 2002, , 1323.		25
33	Limit Cycle Oscillation of a Typical Airfoil in Transonic Flow. <i>Journal of Aircraft</i> , 2004, 41, 1067-1072.	2.4	23
34	Calculation of Three-Dimensional Unsteady Flows in Turbomachinery Using the Linearized Harmonic Euler Equations. , 1992, , .		22
35	Helicopter rotor lift distributions for minimum-induced power loss. <i>Journal of Aircraft</i> , 1994, 31, 837-845.	2.4	22
36	Aerodynamic Asymmetry Analysis of Unsteady Flows in Turbomachinery. <i>Journal of Turbomachinery</i> , 2010, 132, .	1.7	21

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37	Mach Number Influence on Reduced-Order Models of Inviscid Potential Flows in Turbomachinery. Journal of Fluids Engineering, Transactions of the ASME, 2002, 124, 977-987.	1.5	19
38	Parametric Study of Flutter for an Airfoil in Inviscid Transonic Flow. Journal of Aircraft, 2003, 40, 303-313.	2.4	19
39	The Effects of Aerodynamic Asymmetric Perturbations on Forced Response of Bladed Disks. Journal of Turbomachinery, 2009, 131, .	1.7	19
40	Static/Dynamic Correction Approach for Reduced-Order Modeling of Unsteady Aerodynamics. Journal of Aircraft, 2006, 43, 865-878.	2.4	18
41	Improved Flutter Boundary Prediction for an Isolated Two-Degree-of-Freedom Airfoil. Journal of Aircraft, 2009, 46, 2069-2076.	2.4	15
42	Eigenmode Analysis of Unsteady Flows about Airfoils. Journal of Computational Physics, 1998, 147, 568-593.	3.8	13
43	Eigenmode Analysis and Reduced-Order Modeling of Unsteady Transonic Potential Flow Around Airfoils. Journal of Aircraft, 2000, 37, 454-462.	2.4	13
44	The Effect of Unsteady Aerodynamic Asymmetric Perturbations on Flutter. , 2007, , 649.		13
45	A Reduced Order Model of Unsteady Flows in Turbomachinery. , 1994, , .		12
46	A Parametric Analysis of Reduced Order Models of Potential Flows in Turbomachinery Using Proper Orthogonal Decomposition. , 2001, , .		11
47	Improved Understanding of Transonic Flutter: A Three-Parameter Flutter Surface. Journal of Aircraft, 2004, 41, 911-917.	2.4	11
48	Stabilization of Explicit Flow Solvers Using a Proper-Orthogonal-Decomposition Technique. AIAA Journal, 2013, 51, 1095-1104.	2.6	11
49	The Effects of Aerodynamic Asymmetric Perturbations on Forced Response of Bladed Disks. , 2008, , .		10
50	A Numerical Model of the Onset of Stall Flutter in Cascades. , 1995, , .		9
51	Sensitivity analysis of the aeroacoustic response of turbomachinery blade rows. AIAA Journal, 1996, 34, 1545-1554.	2.6	9
52	Efficient Design Method for Non-Synchronous Vibrations Using Enforced Motion. , 2008, , .		9
53	A New Solution Method for Unsteady Flows Around Oscillating Bluff Bodies. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 37-44.	0.2	9
54	Probabilistic Flutter Analysis of a Mistuned Bladed Disks. , 2006, , 1145.		8

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55	Fast Estimation of Unsteady Flows in Turbomachinery at Multiple Interblade Phase Angles. AIAA Journal, 2006, 44, 2136-2142.	2.6	8
56	A Variational Method for Computing the Optimal Aerodynamic Performance of Conventional and Compound Helicopters. Journal of the American Helicopter Society, 2010, 55, 042006.	0.8	8
57	Simulation of Unsteady Turbomachinery Flows Using an Implicitly Coupled Nonlinear Harmonic Balance Method. , 2011, , .		8
58	Discrete Adjoint Method for Nonlinear Aeroelastic Sensitivities for Compressible and Viscous Flows. , 2013, , .		8
59	Unsteady Simulation of a 1.5 Stage Turbine Using an Implicitly Coupled Nonlinear Harmonic Balance Method. , 2012, , .		6
60	The Influence of Neighboring Blade Rows on the Unsteady Aerodynamic Response of Cascades. , 1995, , .		5
61	A Coupled Mode Analysis of Unsteady Multistage Flows in Turbomachinery. , 1997, , .		5
62	MULTISTAGE COUPLING FOR UNSTEADY FLOWS IN TURBOMACHINERY. , 2006, , 217-229.		5
63	A Time-Linearized Navier-Stokes Analysis of Stall Flutter. , 1999, , .		4
64	Aerodynamic Asymmetry Analysis of Unsteady Flows in Turbomachinery. , 2008, , .		4
65	A Linearized Euler Analysis of Unsteady Transonic Flows in Turbomachinery. , 1993, , .		3
66	Sensitivity analysis of unsteady aerodynamic loads in cascades. AIAA Journal, 1995, 33, 1604-1610.	2.6	3
67	Optimum Design of Compound Helicopters that Use Higher Harmonic Control. Journal of Aircraft, 2015, 52, 1444-1453.	2.4	3
68	Blade Vibration and Its Effect on the Optimal Performance of Helicopter Rotors. Journal of Aircraft, 2022, 59, 184-195.	2.4	3
69	Calculation of Unsteady Linearized Euler Flows in Cascades Using Harmonically Deforming Grids. , 1993, , 195-212.		1
70	Special Issue on the 17th ISROMAC Conference. Journal of Turbomachinery, 2019, 141, .	1.7	0