

# Kenneth C Hall

## List of Publications by Year in descending order

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Version: 2024-02-01

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  | Blade Vibration and Its Effect on the Optimal Performance of Helicopter Rotors. Journal of Aircraft, 2022, 59, 184-195.  | 2.4 | 3         |
| 2  | Special Issue on the 17th ISROMAC Conference. Journal of Turbomachinery, 2019, 141, .  | 1.7 | 0         |
| 3  | Optimum Design of Compound Helicopters that Use Higher Harmonic Control. Journal of Aircraft, 2015, 52, 1444-1453.   | 2.4 | 3         |
| 4  | Compact Implementation Strategy for a Harmonic Balance Method Within Implicit Flow Solvers. AIAA Journal, 2013, 51, 1374-1381.   | 2.6 | 39        |
| 5  | Harmonic balance methods applied to computational fluid dynamics problems. International Journal of Computational Fluid Dynamics, 2013, 27, 52-67.                             | 1.2 | 88        |
| 6  | Stabilization of Explicit Flow Solvers Using a Proper-Orthogonal-Decomposition Technique. AIAA Journal, 2013, 51, 1095-1104.   | 2.6 | 11        |
| 7  | The effect of aerodynamic asymmetries on turbomachinery flutter. Journal of Fluids and Structures, 2013, 36, 1-17.   | 3.4 | 29        |
| 8  | Discrete Adjoint Method for Nonlinear Aeroelastic Sensitivities for Compressible and Viscous Flows. , 2013, , .  |     | 8         |
| 9  | Unsteady Simulation of a 1.5 Stage Turbine Using an Implicitly Coupled Nonlinear Harmonic Balance Method. , 2012, , .  |     | 6         |
| 10 | Harmonic Balance Analysis of Limit Cycle Oscillations in Turbomachinery. AIAA Journal, 2011, 49, 1478-1487.  | 2.6 | 61        |
| 11 | Simulation of Unsteady Turbomachinery Flows Using an Implicitly Coupled Nonlinear Harmonic Balance Method. , 2011, , .   |     | 8         |
| 12 | Aerodynamic Asymmetry Analysis of Unsteady Flows in Turbomachinery. Journal of Turbomachinery, 2010, 132, .  | 1.7 | 21        |
| 13 | 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         |
| 14 | Using Automatic Differentiation to Create a Nonlinear Reduced-Order-Model Aerodynamic Solver. AIAA Journal, 2010, 48, 19-24.   | 2.6 | 51        |
| 15 | Harmonic Balance Analysis of Blade Row Interactions in a Transonic Compressor. Journal of Propulsion and Power, 2010, 26, 335-343.   | 2.2 | 30        |
| 16 | Improved Flutter Boundary Prediction for an Isolated Two-Degree-of-Freedom Airfoil. Journal of Aircraft, 2009, 46, 2069-2076.  | 2.4 | 15        |
| 17 | Theoretical Predictions of F-16 Fighter Limit Cycle Oscillations for Flight Flutter Testing. Journal of Aircraft, 2009, 46, 1667-1672.   | 2.4 | 33        |
| 18 | The Effects of Aerodynamic Asymmetric Perturbations on Forced Response of Bladed Disks. Journal of Turbomachinery, 2009, 131, .  | 1.7 | 19        |

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|----|--|-----|-----------|
| 19 | Computationally fast harmonic balance methods for unsteady aerodynamic predictions of helicopter rotors. <i>Journal of Computational Physics</i> , 2008, 227, 6206-6225. | 3.8 | 81        |
| 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 | Efficient Design Method for Non-Synchronous Vibrations Using Enforced Motion. , 2008, , .  |     | 9         |
| 22 | The Effects of Aerodynamic Asymmetric Perturbations on Forced Response of Bladed Disks. , 2008, , .  |     | 10        |
| 23 | Aerodynamic Asymmetry Analysis of Unsteady Flows in Turbomachinery. , 2008, , .  |     | 4         |
| 24 | A New Solution Method for Unsteady Flows Around Oscillating Bluff Bodies. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , 2008, , 37-44.            | 0.2 | 9         |
| 25 | Nonlinear Analysis of Unsteady Flows in Multistage Turbomachines Using Harmonic Balance. <i>AIAA Journal</i> , 2007, 45, 1047-1057.                                      | 2.6 | 112       |
| 26 | The Effect of Unsteady Aerodynamic Asymmetric Perturbations on Flutter. , 2007, , 649.   |     | 13        |
| 27 | 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        |
| 28 | Static/Dynamic Correction Approach for Reduced-Order Modeling of Unsteady Aerodynamics. <i>Journal of Aircraft</i> , 2006, 43, 865-878.                                  | 2.4 | 18        |
| 29 | Probabilistic Flutter Analysis of a Mistuned Bladed Disks. , 2006, , 1145.   |     | 8         |
| 30 | Fast Estimation of Unsteady Flows in Turbomachinery at Multiple Interblade Phase Angles. <i>AIAA Journal</i> , 2006, 44, 2136-2142.                                      | 2.6 | 8         |
| 31 | MULTISTAGE COUPLING FOR UNSTEADY FLOWS IN TURBOMACHINERY. , 2006, , 217-229.   |     | 5         |
| 32 | Multistage Coupling for Unsteady Flows in Turbomachinery. <i>AIAA Journal</i> , 2005, 43, 624-632.   | 2.6 | 46        |
| 33 | Discrete Adjoint Approach for Modeling Unsteady Aerodynamic Design Sensitivities. <i>AIAA Journal</i> , 2005, 43, 1931-1936.   | 2.6 | 54        |
| 34 | Limit Cycle Oscillation of a Typical Airfoil in Transonic Flow. <i>Journal of Aircraft</i> , 2004, 41, 1067-1072.  | 2.4 | 23        |
| 35 | Modeling Viscous Transonic Limit Cycle Oscillation Behavior Using a Harmonic Balance Approach. <i>Journal of Aircraft</i> , 2004, 41, 1266-1274.                         | 2.4 | 118       |
| 36 | Improved Understanding of Transonic Flutter: A Three-Parameter Flutter Surface. <i>Journal of Aircraft</i> , 2004, 41, 911-917.  | 2.4 | 11        |

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|----|---|------|-----------|
| 37 | Three-Dimensional Transonic Aeroelasticity Using Proper Orthogonal Decomposition-Based Reduced-Order Models. <i>Journal of Aircraft</i> , 2003, 40, 544-551.                      | 2.4  | 156       |
| 38 | Parametric Study of Flutter for an Airfoil in Inviscid Transonic Flow. <i>Journal of Aircraft</i> , 2003, 40, 303-313.  | 2.4  | 19        |
| 39 | Nonlinear Inviscid Aerodynamic Effects on Transonic Divergence, Flutter, and Limit-Cycle Oscillations. <i>AIAA Journal</i> , 2002, 40, 638-646.                                   | 2.6  | 251       |
| 40 | A Harmonic Balance Approach for Modeling Three-Dimensional Nonlinear Unsteady Aerodynamics and Aeroelasticity. , 2002, , 1323.  |      | 25        |
| 41 | Mach Number Influence on Reduced-Order Models of Inviscid Potential Flows in Turbomachinery. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2002, 124, 977-987. | 1.5  | 19        |
| 42 | Computation of Unsteady Nonlinear Flows in Cascades Using a Harmonic Balance Technique. <i>AIAA Journal</i> , 2002, 40, 879-886.  | 2.6  | 618       |
| 43 | MODELING OFFLUID-STRUCTUREINTERACTION. <i>Annual Review of Fluid Mechanics</i> , 2001, 33, 445-490.   | 25.0 | 508       |
| 44 | Sensitivity Analysis of Unsteady Inviscid Flow Through Turbomachinery Cascades. <i>AIAA Journal</i> , 2001, 39, 1047-1056.  | 2.6  | 25        |
| 45 | A Parametric Analysis of Reduced Order Models of Potential Flows in Turbomachinery Using Proper Orthogonal Decomposition. , 2001, , .   |      | 11        |
| 46 | Eigenmode Analysis and Reduced-Order Modeling of Unsteady Transonic Potential Flow Around Airfoils. <i>Journal of Aircraft</i> , 2000, 37, 454-462.                               | 2.4  | 13        |
| 47 | A Time-Linearized Navier-Stokes Analysis of Stall Flutter. <i>Journal of Turbomachinery</i> , 2000, 122, 467-476.   | 1.7  | 97        |
| 48 | Proper Orthogonal Decomposition Technique for Transonic Unsteady Aerodynamic Flows. <i>AIAA Journal</i> , 2000, 38, 1853-1862.  | 2.6  | 315       |
| 49 | A Time-Linearized Navier-Stokes Analysis of Stall Flutter. , 1999, , .  |      | 4         |
| 50 | Limit Cycle Oscillations of a Cantilevered Wing in Low Subsonic Flow. <i>AIAA Journal</i> , 1999, 37, 364-371.  | 2.6  | 83        |
| 51 | Eigenmode Analysis of Unsteady Flows about Airfoils. <i>Journal of Computational Physics</i> , 1998, 147, 568-593.  | 3.8  | 13        |
| 52 | Reduced-Order Modeling of Unsteady Viscous Flow in a Compressor Cascade. <i>AIAA Journal</i> , 1998, 36, 1039-1048.   | 2.6  | 39        |
| 53 | Power Requirements for Large-Amplitude Flapping Flight. <i>Journal of Aircraft</i> , 1998, 35, 352-361.   | 2.4  | 68        |
| 54 | Eigenmode Analysis in Unsteady Aerodynamics: Reduced Order Models. <i>Applied Mechanics Reviews</i> , 1997, 50, 371-386.  | 10.1 | 99        |

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|----|--|-----|-----------|
| 55 | A Coupled Mode Analysis of Unsteady Multistage Flows in Turbomachinery. , 1997, , .  |     | 5         |
| 56 | Minimum induced power requirements for flapping flight. Journal of Fluid Mechanics, 1996, 323, 285-315.                      | 3.4 | 85        |
| 57 | Sensitivity analysis of the aeroacoustic response of turbomachinery blade rows. AIAA Journal, 1996, 34, 1545-1554.           | 2.6 | 9         |
| 58 | A Numerical Model of the Onset of Stall Flutter in Cascades. , 1995, , .   |     | 9         |
| 59 | Sensitivity analysis of unsteady aerodynamic loads in cascades. AIAA Journal, 1995, 33, 1604-1610.                           | 2.6 | 3         |
| 60 | The Influence of Neighboring Blade Rows on the Unsteady Aerodynamic Response of Cascades. , 1995, , .                        |     | 5         |
| 61 | A Reduced Order Model of Unsteady Flows in Turbomachinery. , 1994, , .   |     | 12        |
| 62 | Eigenanalysis of unsteady flows about airfoils, cascades, and wings. AIAA Journal, 1994, 32, 2426-2432.                      | 2.6 | 196       |
| 63 | Helicopter rotor lift distributions for minimum-induced power loss. Journal of Aircraft, 1994, 31, 837-845.                  | 2.4 | 22        |
| 64 | A Linearized Euler Analysis of Unsteady Transonic Flows in Turbomachinery. , 1993, , .                                       |     | 3         |
| 65 | Linearized Euler predictions of unsteady aerodynamic loads in cascades. AIAA Journal, 1993, 31, 540-550.                     | 2.6 | 106       |
| 66 | Deforming grid variational principle for unsteady small disturbance flows in cascades. AIAA Journal, 1993, 31, 891-900.      | 2.6 | 48        |
| 67 | Calculation of Unsteady Linearized Euler Flows in Cascades Using Harmonically Deforming Grids. , 1993, , 195-212.            |     | 1         |
| 68 | Calculation of Three-Dimensional Unsteady Flows in Turbomachinery Using the Linearized Harmonic Euler Equations. , 1992, , . |     | 22        |
| 69 | Gust response analysis for cascades operating in nonuniform mean flows. AIAA Journal, 1991, 29, 1463-1471.                   | 2.6 | 56        |
| 70 | Calculation of unsteady flows in turbomachinery using the linearized Euler equations. AIAA Journal, 1989, 27, 777-787.       | 2.6 | 205       |