

# Daniel J Bodony

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

80  
papers

1,356  
citations

18  
h-index

35  
g-index

104  
ext. papers

1,697  
ext. citations

3.1  
avg, IF

5.06  
L-index

#	Paper	IF	Citations
80	Stability analyses of compressible flat plate boundary layer flow over a mechanically compliant wall. <i>Theoretical and Computational Fluid Dynamics</i> , <b>2022</b> , 36, 141	2.3	0
79	Data-driven sensor placement for fluid flows. <i>Theoretical and Computational Fluid Dynamics</i> , <b>2021</b> , 35, 709-729	2.3	0
78	Fluid-Thermal-Structural Interactions in Ramp-Induced Shock-Wave Boundary-Layer Interactions at Mach 6 <b>2021</b> ,		2
77	Heterogeneous computing with OpenMP and Hydra. <i>Concurrency Computation Practice and Experience</i> , <b>2020</b> , 32, e5728	1.4	1
76	Boundary-consistent B-spline filtering schemes and application to high-fidelity simulations of turbulence. <i>Journal of Computational Physics</i> , <b>2020</b> , 419, 109680	4.1	
75	Improved eigenvectors for Pulliam-Chaussee diagonalized approximate-factorization algorithm. <i>Journal of Computational Physics</i> , <b>2020</b> , 412, 109443	4.1	
74	Jump Relations of Certain Hypersingular Stokes Kernels on Regular Surfaces. <i>SIAM Journal on Applied Mathematics</i> , <b>2020</b> , 80, 2226-2248	1.8	1
73	Direct Simulation of Fluid-Structure Interaction in a Hypersonic Compression-Ramp Flow. <i>AIAA Journal</i> , <b>2020</b> , 58, 4848-4865	2.1	4
72	Hypersonic Fluid-Structure Interactions in Compression Corner Shock-Wave/Boundary-Layer Interaction. <i>AIAA Journal</i> , <b>2020</b> , 58, 4090-4105	2.1	15
71	Unsteady Surface and Flowfield Measurements in Ramp-Induced Turbulent and Transitional Shock-Wave Boundary-Layer Interactions at Mach 6 <b>2019</b> ,		8
70	Machine learning-assisted early ignition prediction in a complex flow. <i>Combustion and Flame</i> , <b>2019</b> , 206, 451-466	5.3	8
69	Multi-rate time integration on overset meshes. <i>Journal of Computational Physics</i> , <b>2019</b> , 396, 325-346	4.1	1
68	Adjoint-based sensitivity and ignition threshold mapping in a turbulent mixing layer. <i>Combustion Theory and Modelling</i> , <b>2019</b> , 23, 147-179	1.5	3
67	Analysis of degenerate mechanisms triggering finite-amplitude thermo-acoustic oscillations in annular combustors. <i>Journal of Fluid Mechanics</i> , <b>2019</b> , 881, 384-419	3.7	2
66	Reduced-order control using low-rank dynamic mode decomposition. <i>Theoretical and Computational Fluid Dynamics</i> , <b>2019</b> , 33, 603-623	2.3	4
65	Accelerating Scientific Applications on Heterogeneous Systems with HybridOMP. <i>Lecture Notes in Computer Science</i> , <b>2019</b> , 174-187	0.9	
64	Direct Simulation of Fluid-Structure Interaction in Compression Ramp with Embedded Compliant Panel <b>2019</b> ,		1

63	Time-stable overset grid method for hyperbolic problems using summation-by-parts operators. <i>Journal of Computational Physics</i> , <b>2018</b> , 361, 199-230	4.1	10
62	Global mode-based control of laminar and turbulent high-speed jets. <i>Comptes Rendus - Mecanique</i> , <b>2018</b> , 346, 978-996	2.1	0
61	Low-Rank Dynamic Mode Decomposition using Riemannian Manifold Optimization <b>2018</b> ,		3
60	Adjoint-based sensitivity analysis of ignition in a turbulent reactive shear layer <b>2017</b> ,		5
59	Improving the memory access locality of hybrid MPI applications <b>2017</b> ,		6
58	Effects of the turbulent grazing flow over the impedance prediction of a single-orifice Helmholtz resonator <b>2016</b> ,		1
57	Direct numerical investigation of acoustic liners with single and multiple orifices grazed by a Mach 0.5 boundary layer <b>2016</b> ,		1
56	Adjoint-based sensitivity analysis of localized ignition in a non-premixed hydrogen-air mixing layer <b>2016</b> ,		3
55	Determination of the wingsnap sonation mechanism of the golden-collared manakin ( <i>Manacus vitellinus</i> ). <i>Journal of Experimental Biology</i> , <b>2016</b> , 219, 1524-34	3	15
54	Acoustic receptivity simulations of flow past a flat plate with elliptic leading edge. <i>Journal of Fluid Mechanics</i> , <b>2016</b> , 800,	3.7	4
53	Actuator selection and placement for localized feedback flow control. <i>Journal of Fluid Mechanics</i> , <b>2016</b> , 809, 775-792	3.7	6
52	Numerical investigation of a honeycomb liner grazed by laminar and turbulent boundary layers. <i>Journal of Fluid Mechanics</i> , <b>2016</b> , 792, 936-980	3.7	50
51	A practical discrete-adjoint method for high-fidelity compressible turbulence simulations. <i>Journal of Computational Physics</i> , <b>2015</b> , 285, 173-192	4.1	19
50	Coupled Structural-Acoustic Response of a Duct-Mounted Elastic Plate with Grazing Flow. <i>AIAA Journal</i> , <b>2014</b> , 52, 178-194	2.1	13
49	Direct numerical simulation and analytical modeling of locally reacting, single degree of freedom acoustic liners with turbulent grazing flow <b>2014</b> ,		2
48	Adjoint-based control of loud events in a turbulent jet. <i>Journal of Fluid Mechanics</i> , <b>2014</b> , 741, 28-59	3.7	30
47	Evaluation of actuator disk theory for predicting indirect combustion noise. <i>Journal of Sound and Vibration</i> , <b>2013</b> , 332, 821-838	3.9	26
46	Impedance Prediction of Three-Dimensional Honeycomb Liners with Laminar/Turbulent Boundary Layers using DNS <b>2013</b> ,		4

45	Interaction of a Mach 2.25 turbulent boundary layer with a fluttering panel using direct numerical simulation. <i>Physics of Fluids</i> , <b>2013</b> , 25, 110806	4.4	38
44	Aeroelastic response of a panel under high speed turbulent boundary layers using direct numerical simulation <b>2013</b> ,		4
43	Numerical investigation and modelling of acoustically excited flow through a circular orifice backed by a hexagonal cavity. <i>Journal of Fluid Mechanics</i> , <b>2012</b> , 693, 367-401	3.7	56
42	Energy stable numerical methods for hyperbolic partial differential equations using overlapping domain decomposition. <i>Journal of Computational Physics</i> , <b>2012</b> , 231, 5243-5265	4.1	13
41	Fluid-Thermal Response of Spherical Dome Under a Mach 6.59 Laminar Boundary Layer. <i>AIAA Journal</i> , <b>2012</b> , 50, 2791-2808	2.1	30
40	Direct Numerical Simulation of Three-Dimensional Honeycomb Liners with Turbulent Boundary Layer <b>2012</b> ,		4
39	On the linearity of the quieting of high speed mixing layers by heating <b>2012</b> ,		2
38	Effect of Large-Eddy Simulation Fidelity on Predicted Mechanisms of Jet Noise Reduction. <i>Journal of Propulsion and Power</i> , <b>2012</b> , 28, 259-268	1.8	6
37	Mechanisms of Jet Noise Reduction and Their Impact on Large-Eddy Simulations (invited) <b>2011</b> ,		1
36	Impedance Predictions of 3D Honeycomb Liner with Circular Apertures by DNS <b>2011</b> ,		5
35	Adjoint-Based Optimal Control of a Mach 1.3 Turbulent Jet for Noise Reduction <b>2011</b> ,		1
34	Development and Validation of a First Principles Fluid-Thermal Multi-Physics Solver for Hypersonic Boundary Layer Heat Transfer Problems <b>2011</b> ,		7
33	Aeroacoustics Control of a Turbulent Mach 1.3 Jet Using Adjoint-Based Optimization <b>2011</b> ,		2
32	Structural-acoustic response of an elastic plate with plane wave in a duct: Comparison of theory with numerical simulation <b>2011</b> ,		1
31	Numerical simulation of flow-induced sound generation from an orifice in a low Mach number ducted flow <b>2011</b> ,		1
30	Direct Numerical Simulation of Three Dimensional Honeycomb Liner with Circular Apertures <b>2011</b> ,		4
29	Numerical Simulation of Two-Dimensional Acoustic Liners with High-Speed Grazing Flow. <i>AIAA Journal</i> , <b>2011</b> , 49, 365-382	2.1	48
28	Wave propagation in gaseous small-scale channel flows. <i>Shock Waves</i> , <b>2011</b> , 21, 547-557	1.6	22

27	Provably stable overset grid methods for computational aeroacoustics. <i>Journal of Sound and Vibration</i> , <b>2011</b> , 330, 4161-4179	3.9	21
26	A High-Order, Overset-Mesh Algorithm for Adjoint-Based Optimization for Aeroacoustics Control <b>2010</b> ,		8
25	A Collision Detection Approach To Chimera Grid Assembly for High Fidelity Simulations of Turbofan Noise <b>2010</b> ,		5
24	Accuracy of the Simultaneous-Approximation-Term Boundary Condition for Time-Dependent Problems. <i>Journal of Scientific Computing</i> , <b>2010</b> , 43, 118-133	2.3	46
23	Aeroacoustic predictions in complex geometries. <i>Procedia Engineering</i> , <b>2010</b> , 6, 234-243		8
22	Reprint of:Aeroacoustic predictions in complex geometries. <i>Procedia IUTAM</i> , <b>2010</b> , 1, 234-243		4
21	A Toolkit for Parallel Overset Grid Assembly Targeting Large-Scale Moving Body Aerodynamic Simulations <b>2010</b> , 385-401		7
20	Scattering of an entropy disturbance into sound by a symmetric thin body. <i>Physics of Fluids</i> , <b>2009</b> , 21, 096101	4.4	13
19	Characteristic Boundary Conditions for Non-Orthogonal, Moving Meshes <b>2009</b> ,		1
18	LES Investigation of a Mach 1.3 Jet With and Without Plasma Actuators <b>2009</b> ,		16
17	Heating Effects on the Structure of Noise Sources of High-Speed Jets <b>2009</b> ,		4
16	Numerical Modeling of Plasma Actuators in High Speed Jets <b>2009</b> ,		7
15	Radiation of noise in turbulent non-premixed flames. <i>Proceedings of the Combustion Institute</i> , <b>2009</b> , 32, 1545-1553	5.9	49
14	Current Status of Jet Noise Predictions Using Large-Eddy Simulation. <i>AIAA Journal</i> , <b>2008</b> , 46, 364-380	2.1	186
13	Low-frequency sound sources in high-speed turbulent jets. <i>Journal of Fluid Mechanics</i> , <b>2008</b> , 617, 231-253	3.7	34
12	Transport of disturbance energy in hot and cold turbulent jets <b>2007</b> ,		1
11	Noise Radiation Predictions from Jet Instability Waves Using a Hybrid Nonlinear PSE-Acoustic Analogy Approach <b>2007</b> ,		11
10	Numerical Investigation of the Acoustic Behavior of a Multi-Perforated Liner <b>2007</b> ,		14

9	Investigating Broadband Shock-Associated Noise of Axisymmetric Jets Using Large-Eddy Simulation <b>2006,</b>		13
8	Review of the current status of jet noise predictions using large-eddy simulation (invited) <b>2006,</b>		35
7	Prediction of Combustion-Generated Noise in Non-Premixed Turbulent Jet Flames Using LES <b>2006,</b>		7
6	Analysis of sponge zones for computational fluid mechanics. <i>Journal of Computational Physics</i> , <b>2006</b> , 212, 681-702	4.1	143
5	On using large-eddy simulation for the prediction of noise from cold and heated turbulent jets. <i>Physics of Fluids</i> , <b>2005</b> , 17, 085103	4.4	169
4	Generation of Low Frequency Sound in Turbulent Jets <b>2005,</b>		9
3	Jet Noise Prediction of Cold and Hot Subsonic Jets Using Large-eddy Simulation <b>2004,</b>		29
2	A Statistical Subgrid Scale Noise Model: Formulation <b>2003,</b>		8
1	Spatial Scale Decomposition of Shear Layer Turbulence and the Sound Sources Associated with the Missing Scales in a Large-Eddy Simulation <b>2002,</b>		14