Tim Colonius

List of Publications by Year in Descending Order

253 papers	9,781 citations	47 h-index	93 g-index
274 ext. papers	12,355 ext. citations	3.3 avg, IF	6.85 L-index

#	Paper	IF	Citations
253	Multi-resolution lattice Green's function method for incompressible flows. *Journal of Computational Physics*, **2022**, 110845	4.1	
252	Resolvent-based modeling of turbulent jet noise. *Journal of the Acoustical Society of America*, **2021**, 150, 2421	2.2	0
251	Dynamics of an inverted cantilever plate at moderate angle of attack. *Journal of Fluid Mechanics*, **2021**, 909,	3.7	1
250	Flutter instability in an internal flow energy harvester. *Journal of Fluid Mechanics*, **2021**, 915,	3.7	1
249	Optimal eddy viscosity for resolvent-based models of coherent structures in turbulent jets. *Journal of Fluid Mechanics*, **2021**, 917,	3.7	6
248	An empirical correlation between lift and the properties of leading-edge vortices. *Theoretical and Computational Fluid Dynamics*, **2021**, 35, 437	2.3	1
247	Characterizing viscoelastic materials via ensemble-based data assimilation of bubble collapse observations. *Journal of the Mechanics and Physics of Solids*, **2021**, 152,	5	3
246	Dynamics and decay of a spherical region of turbulence in free space. *Journal of Fluid Mechanics*, **2021**, 907,	3.7	1
245	Nonlinear input/output analysis: application to boundary layer transition. *Journal of Fluid Mechanics* , **2021**, 911,	3.7	10
244	Amplitude Scaling of Wave Packets in Turbulent Jets. *AIAA Journal*, **2021**, 59, 559-568	2.1	4
243	MFC: An open-source high-order multi-component, multi-phase, and multi-scale compressible flow solver. *Computer Physics Communications*, **2021**, 266,	4.2	3
242	Acoustic cavitation rheometry. *Soft Matter*, **2021**, 17, 2931-2941	3.6	6
241	Real-time supersonic jet noise predictions from near-field sensors with a wavepacket model.. *Journal of the Acoustical Society of America*, **2021**, 150, 4297	2.2	0
240	A Gaussian moment method and its augmentation via LSTM recurrent neural networks for the statistics of cavitating bubble populations. *International Journal of Multiphase Flow*, **2020**, 127, 103262	3.6	6
239	Lift-up, Kelvin–Helmholtz and Orr mechanisms in turbulent jets. *Journal of Fluid Mechanics*, **2020**, 896,	3.7	12
238	Flow state estimation in the presence of discretization errors. *Journal of Fluid Mechanics*, **2020**, 890,	3.7	2
237	Guide to Spectral Proper Orthogonal Decomposition. *AIAA Journal*, **2020**, 58, 1023-1033	2.1	61

236	A fast multi-resolution lattice Green's function method for elliptic difference equations. *Journal of Computational Physics*, **2020**, 407, 109270	4.1	5
235	Role of Coherent Structures in Turbulent Premixed Flame Acoustics. *AIAA Journal*, **2020**, 58, 2635-2642	2.1	2
234	Simulation of humpback whale bubble-net feeding models. *Journal of the Acoustical Society of America*, **2020**, 147, 1126	2.2	1
233	Immersed Boundary Projection Methods. *Computational Methods in Engineering & the Sciences*, **2020**, 3-43	0.3	
232	Enhancement of shock-capturing methods via machine learning. *Theoretical and Computational Fluid Dynamics*, **2020**, 34, 483-496	2.3	6
231	An assessment of multicomponent flow models and interface capturing schemes for spherical bubble dynamics. *Journal of Computational Physics*, **2020**, 402, 109080	4.1	20
230	Resolvent-based jet noise models: a projection approach **2020**,		4
229	On the formation and recurrent shedding of ligaments in droplet aerobreakup. *Journal of Fluid Mechanics*, **2020**, 904,	3.7	14
228	Near-surface dynamics of a gas bubble collapsing above a crevice. *Journal of Fluid Mechanics*, **2020**, 899,	3.7	16
227	QBMMlib: A library of quadrature-based moment methods. *SoftwareX*, **2020**, 12, 100615	2.7	0
226	Ambiguity in mean-flow-based linear analysis. *Journal of Fluid Mechanics*, **2020**, 900,	3.7	8
225	A critical assessment of the parabolized stability equations. *Theoretical and Computational Fluid Dynamics*, **2019**, 33, 359-382	2.3	10
224	Modeling and simulation of a fluttering cantilever in channel flow. *Journal of Fluids and Structures*, **2019**, 89, 174-190	3.1	8
223	Comparative study of the dynamics of laser and acoustically generated bubbles in viscoelastic media. *Physical Review E*, **2019**, 99, 043103	2.4	17
222	A quantitative comparison of phase-averaged models for bubbly, cavitating flows. *International Journal of Multiphase Flow*, **2019**, 115, 137-143	3.6	5
221	Spatial stability analysis of subsonic corrugated jets. *Journal of Fluid Mechanics*, **2019**, 876, 766-791	3.7	8
220	High-speed video microscopy and numerical modeling of bubble dynamics near a surface of urinary stone. *Journal of the Acoustical Society of America*, **2019**, 146, 516	2.2	21
219	Eddy viscosity for resolvent-based jet noise models **2019**,		6

218	Streaks and coherent structures in jets from round and serrated nozzles **2019**,		2
217	Bubble cloud dynamics in an ultrasound field. *Journal of Fluid Mechanics*, **2019**, 862, 1105-1134	3.7	19
216	EnKF-based Dynamic Estimation of Separated Flows with a Low-Order Vortex Model **2018**,		7
215	Modal decomposition of fluid–structure interaction with application to flag flapping. *Journal of Fluids and Structures*, **2018**, 81, 728-737	3.1	16
214	Importance of the nozzle-exit boundary-layer state in subsonic turbulent jets. *Journal of Fluid Mechanics*, **2018**, 851, 83-124	3.7	83
213	Jet–flap interaction tones. *Journal of Fluid Mechanics*, **2018**, 853, 333-358	3.7	45
212	Ensemble-Based State Estimator for Aerodynamic Flows. *AIAA Journal*, **2018**, 56, 2568-2578	2.1	15
211	On the lift-optimal aspect ratio of a revolving wing at low Reynolds number. *Journal of the Royal Society Interface*, **2018**, 15,	4.1	23
210	Data-assimilated low-order vortex modeling of separated flows. *Physical Review Fluids*, **2018**, 3,	2.8	21
209	Active Control of Noise from Hot Supersonic Jets. *AIAA Journal*, **2018**, 56, 933-948	2.1	9
208	Numerical simulation of the aerobreakup of a water droplet. *Journal of Fluid Mechanics*, **2018**, 835, 1108-1135	3.7	38
207	Experimental observations and numerical modeling of lipid-shell microbubbles with calcium-adhering moieties for minimally-invasive treatment of urinary stones. *Proceedings of Meetings on Acoustics*, **2018**, 35,	1	3
206	Modeling and numerical simulation of the bubble cloud dynamics in an ultrasound field for burst wave lithotripsy. *Proceedings of Meetings on Acoustics*, **2018**, 35,	1	2
205	Energy shielding by cavitation bubble clouds in burst wave lithotripsy. *Journal of the Acoustical Society of America*, **2018**, 144, 2952	2.2	11
204	Spectral analysis of jet turbulence. *Journal of Fluid Mechanics*, **2018**, 855, 953-982	3.7	127
203	Global modes and nonlinear analysis of inverted-flag flapping. *Journal of Fluid Mechanics*, **2018**, 857, 312-344	3.7	28
202	Eulerian-Lagrangian method for simulation of cloud cavitation. *Journal of Computational Physics*, **2018**, 371, 994-1017	4.1	20
201	Spectral proper orthogonal decomposition and its relationship to dynamic mode decomposition and resolvent analysis. *Journal of Fluid Mechanics*, **2018**, 847, 821-867	3.7	319

200	A Bias-aware EnKF Estimator for Aerodynamic Flows **2018**,		3
199	Large-eddy simulations of co-annular turbulent jet using a Voronoi-based mesh generation framework **2018**,		10
198	Amplitude scaling of turbulent-jet wavepackets **2018**,		1
197	Wavepacket intermittency and its role in turbulent jet noise **2017**,		2
196	Stability of wall-bounded fows using one-way spatial integration of Navier-Stokes equations **2017**,		1
195	Transition to bluff-body dynamics in the wake of vertical-axis wind turbines. *Journal of Fluid Mechanics*, **2017**, 813, 346-381	3.7	59
194	A strongly-coupled immersed-boundary formulation for thin elastic structures. *Journal of Computational Physics*, **2017**, 336, 401-411	4.1	40
193	An EnKF-based Flow State Estimator for Aerodynamic Flows **2017**,		2
192	Response of the Separated Flow over an Airfoil to a Short-Time Actuator Burst **2017**,		4
191	Immersed Boundary Lattice Green Function methods for External Aerodynamics **2017**,		1
190	A fast immersed boundary method for external incompressible viscous flows using lattice Green's functions. *Journal of Computational Physics*, **2017**, 331, 257-279	4.1	37
189	High-frequency wavepackets in turbulent jets. *Journal of Fluid Mechanics*, **2017**, 830,	3.7	24
188	A Source Term Approach for Generation of One-way Acoustic Waves in the Euler and Navier-Stokes equations. *Wave Motion*, **2017**, 75, 36-49	1.8	9
187	Wavepackets and trapped acoustic modes in a turbulent jet: coherent structure eduction and global stability. *Journal of Fluid Mechanics*, **2017**, 825, 1153-1181	3.7	66
186	Acoustic resonance in the potential core of subsonic jets. *Journal of Fluid Mechanics*, **2017**, 825, 1113-1152	3.7	71
185	Modal Analysis of Fluid Flows: An Overview. *AIAA Journal*, **2017**, 55, 4013-4041	2.1	508
184	Experimental study of turbulent-jet wave packets and their acoustic efficiency. *Physical Review Fluids*, **2017**, 2,	2.8	11
183	One Way Navier-Stokes and resolvent analysis for modeling coherent structures in a supersonic turbulent jet **2017**,		4

182	Evaluation of PSE as a Model for Supersonic Jet Using Transfer Functions **2017**,		2
181	Accurate computation of surface stresses and forces with immersed boundary methods. *Journal of Computational Physics*, **2016**, 321, 860-873	4.1	19
180	Design and experimental evaluation of flextensional-cantilever based piezoelectric transducers for flow energy harvesting **2016**,		2
179	Numerical Investigation of Self-Starting Capability of Vertical-Axis Wind Turbines at Low Reynolds Numbers **2016**,		1
178	Super- and multi-directive acoustic radiation by linear global modes of a turbulent jet **2016**,		6
177	Trapped acoustic waves in the potential core of subsonic jets **2016**,		8
176	Tonal dynamics and sound in subsonic turbulent jets **2016**,		4
175	Large eddy simulation for jet noise: azimuthal decomposition and intermittency of the radiated sound **2016**,		12
174	High-frequency wavepackets in turbulent jets **2016**,		1
173	Modeling Dynamic Lift Response to Actuation **2016**,		6
172	A Vortex Sheet/Point Vortex Dynamical Model For Unsteady Separated Flows **2016**,		6
171	Coriolis Effect on Dynamic Stall in a Vertical Axis Wind Turbine. *AIAA Journal*, **2016**, 54, 216-226	2.1	30
170	Parabolized Stability Analysis of Jets Issuing from Serrated Nozzles. *Lecture Notes in Mechanical Engineering*, **2016**, 211-215	0.4	
169	Parabolized stability analysis of jets from serrated nozzles. *Journal of Fluid Mechanics*, **2016**, 789, 36-63	3.7	19
168	A fast lattice Green's function method for solving viscous incompressible flows on unbounded domains. *Journal of Computational Physics*, **2016**, 316, 360-384	4.1	19
167	Leading Edge Vortex Development on Pitching and Surging Airfoils: A Study of Vertical Axis Wind Turbines. *Springer Proceedings in Physics*, **2016**, 581-587	0.2	0
166	Spatial Stability Analysis of Subsonic Jets Modified for Low-Frequency Noise Reduction. *AIAA Journal*, **2015**, 53, 2335-2358	2.1	6
165	Surging and plunging oscillations of an airfoil at low Reynolds number. *Journal of Fluid Mechanics*, **2015**, 763, 237-253	3.7	49

164	Linear Stability Implications of Mean Flow Variations in Turbulent Jets Issuing from Serrated Nozzles **2015**,		2
163	One-way spatial integration of hyperbolic equations. *Journal of Computational Physics*, **2015**, 300, 844-864	2.1	16
162	Stochastic and nonlinear forcing of wavepackets in a Mach 0.9 jet **2015**,		21
161	A study of linear wavepacket models for subsonic turbulent jets using local eigenmode decomposition of PIV data. *European Journal of Mechanics, B/Fluids*, **2015**, 49, 308-321	2.4	25
160	Optimal control of circular cylinder wakes using long control horizons. *Physics of Fluids*, **2015**, 27, 087105	4.4	26
159	Modeling and experimental analysis of acoustic cavitation bubbles for Burst Wave Lithotripsy. *Journal of Physics: Conference Series*, **2015**, 656,	0.3	8
158	Piezoelectric energy harvesting in internal fluid flow. *Sensors*, **2015**, 15, 26039-62	3.8	29
157	Fluid flow nozzle energy harvesters **2015**,		2
156	Sensitivity of wavepackets in jets to non-linear effects: the role of the critical layer **2015**,		4
155	Large eddy simulation for jet noise: the importance of getting the boundary layer right **2015**,		29
154	Numerical simulations of the early stages of high-speed droplet breakup. *Shock Waves*, **2015**, 25, 399-414	1.6	43
153	Simulation and Modeling of Turbulent Jet Noise. *ERCOFTAC Series*, **2015**, 305-310	0.1	
152	The Effects of Shock Strength on Droplet Breakup **2015**, 1535-1540		
151	Unsteady effects in dense, high speed, particle laden flows. *International Journal of Multiphase Flow* , **2014**, 61, 1-13	3.6	49
150	Finite-volume WENO scheme for viscous compressible multicomponent flows. *Journal of Computational Physics*, **2014**, 274, 95-121	4.1	112
149	A parallel fast multipole method for elliptic difference equations. *Journal of Computational Physics*, **2014**, 278, 76-91	4.1	21
148	Effect of direct bubble-bubble interactions on linear-wave propagation in bubbly liquids. *Physical Review E*, **2014**, 90, 063010	2.4	19
147	Flow energy piezoelectric bimorph nozzle harvester **2014**,		1

146	Wavepacket models for supersonic jet noise. *Journal of Fluid Mechanics*, **2014**, 742, 71-95	3.7	107
145	Continued development of the one-way Euler equations: application to jets **2014**,		3
144	Wavepackets in the velocity field of turbulent jets. *Journal of Fluid Mechanics*, **2013**, 730, 559-592	3.7	146
143	Second-mode attenuation and cancellation by porous coatings in a high-speed boundary layer. *Journal of Fluid Mechanics*, **2013**, 726, 312-337	3.7	47
142	On a transitional and turbulent natural convection in spherical shells. *International Journal of Heat and Mass Transfer*, **2013**, 64, 514-525	4.9	13
141	Generalized characteristic relaxation boundary conditions for unsteady compressible flow simulations. *Journal of Computational Physics*, **2013**, 248, 109-126	4.1	22
140	Shock-induced collapse of a bubble inside a deformable vessel. *European Journal of Mechanics, B/Fluids*, **2013**, 40, 64-74	2.4	30
139	Wave Packets and Turbulent Jet Noise. *Annual Review of Fluid Mechanics*, **2013**, 45, 173-195	22	332
138	Wavepacket eduction in turbulent jets based on eigenmode decomposition of PIV data **2013**,		1
137	Acoustic field associated with parabolized stability equation models in turbulent jets **2013**,		8
136	Dynamics and Energy Extraction of a Surging and Plunging Airfoil at Low Reynolds Number **2013**,		5
135	Inlet conditions for wave packet models in turbulent jets based on eigenmode decomposition of large eddy simulation data. *Physics of Fluids*, **2013**, 25, 105107	4.4	19
134	Improved Parabolization of the Euler Equations **2013**,		4
133	Toward Active Control of Noise from Hot Supersonic Jets **2013**,		1
132	Shock Propagation in Polydisperse Bubbly Liquids **2013**, 141-175		0
131	A contact model for normal immersed collisions between a particle and a wall. *Journal of Fluid Mechanics*, **2012**, 691, 123-145	3.7	25
130	Effects of Actuation Frequency on Flow Control Applied to a Wall-Mounted Hump. *AIAA Journal*, **2012**, 50, 1631-1634	2.1	6
129	Simulation and Cryogenic Experiments of Natural Convection for the Titan Montgolfiere. *AIAA Journal*, **2012**, 50, 2483-2491	2.1	13

128	The impulse response of a high-speed jet forced with localized arc filament plasma actuators. *Physics of Fluids*, **2012**, 24, 125104	4.4	36
127	Axisymmetric superdirectivity in subsonic jets. *Journal of Fluid Mechanics*, **2012**, 704, 388-420	3.7	130
126	Effects of Target Compliance on a High-Speed Droplet Impact. *Solid State Phenomena*, **2012**, 187, 137-140	0.4	2
125	Wavepackets in the velocity field of turbulent jets **2012**,		8
124	Parabolized stability equation models in turbulent supersonic jets **2012**,		7
123	An Analysis of Dispersion and Dissipation Properties of Hermite Methods and its Application to Direct Numerical Simulation of Jet Noise **2012**,		1
122	Numerical Simulation of Flow over an Airfoil with a Cavity. *AIAA Journal*, **2011**, 49, 143-149	2.1	26
121	Modelling bubble clusters in compressible liquids. *Journal of Fluid Mechanics*, **2011**, 688, 352-389	3.7	71
120	Axisymmetric superdirectivity in subsonic jets **2011**,		10
119	Parabolized stability equation models for predicting large-scale mixing noise of turbulent round jets **2011**,		7
118	Numerical Simulations of the Transient Flow Response of a 3D, Low-Aspect-Ratio Wing to Pulsed Actuation **2011**,		4
117	Instability of Hypersonic Boundary Layer on a Wall with Resonating Micro-Cavities **2011**,		17
116	Hermite Methods for Aeroacoustics: Recent Progress **2011**,		5
115	Instability wave models for the near-field fluctuations of turbulent jets. *Journal of Fluid Mechanics*, **2011**, 689, 97-128	3.7	187
114	Control of vortex shedding on two- and three-dimensional aerofoils. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2011**, 369, 1525-39	3	24
113	Flow around a NACA0018 airfoil with a cavity and its dynamical response to acoustic forcing. *Experiments in Fluids*, **2011**, 51, 493-509	2.5	11
112	Feedback control of vortex shedding from an inclined flat plate. *Theoretical and Computational Fluid Dynamics*, **2011**, 25, 221-232	2.3	5
111	Special issue on global flow instability and control. *Theoretical and Computational Fluid Dynamics*, **2011**, 25, 1-6	2.3	4

110	Numerical simulation of shock propagation in a polydisperse bubbly liquid. *International Journal of Multiphase Flow*, **2011**, 37, 596-608	3.6	51
109	Reply by the Authors to G. E. Dorrington. *AIAA Journal*, **2011**, 49, 877-878	2.1	1
108	Shock propagation through a bubbly liquid in a deformable tube. *Journal of Fluid Mechanics*, **2011**, 671, 339-363	3.7	25
107	Closed-Loop Control of Lift for Longitudinal Gust Suppression at Low Reynolds Numbers. *AIAA Journal*, **2011**, 49, 1721-1728	2.1	58
106	Erratum on Effect of Tip Vortices in Low-Reynolds-Number Poststall Flow Control. *AIAA Journal*, **2010**, 48, 702-702	2.1	1
105	Lift Enhancement for Low-Aspect-Ratio Wings with Periodic Excitation. *AIAA Journal*, **2010**, 48, 1785-1790	2.1	17
104	Compressible Large-Eddy Simulation of Separation Control on a Wall-Mounted Hump. *AIAA Journal*, **2010**, 48, 1098-1107	2.1	20
103	Computational Modeling and Experiments of Natural Convection for a Titan Montgolfiere. *AIAA Journal*, **2010**, 48, 1007-1016	2.1	11
102	The leading-edge vortex and quasisteady vortex shedding on an accelerating plate. *Physics of Fluids* , **2010**, 22, 033601	4.4	32
101	Wave-Packet Models for Large-Scale Mixing Noise. *International Journal of Aeroacoustics*, **2010**, 9, 533-557	2.1	73
100	Unstructured Large Eddy Simulation Technology for Prediction and Control of Jet Noise **2010**,		13
99	Feedback Control of High-Lift State for A Low-Aspect-Ratio Wing **2010**,		3
98	An Integrated RANS-PSE-Wave Packet Tool for the Prediction of Subsonic and Supersonic Jet Noise **2010**,		1
97	Numerical Simulations of Natural and Actuated Flow over a 3-D, Low-Aspect-Ratio Airfoil **2010**,		3
96	Closed Loop Control of a Wing's Lift for Gust Suppression **2010**,		1
95	Acoustic Properties of Porous Coatings for Hypersonic Boundary-Layer Control. *AIAA Journal*, **2010**, 48, 267-274	2.1	29
94	Simulation of the effects of cavitation and anatomy in the shock path of model lithotripters. *Urological Research*, **2010**, 38, 505-18		11
93	Reprint of: Development of Arbitrary-Order Hermite Methods for Simulation and Analysis of Turbulent Jet Noise. *Procedia IUTAM*, **2010**, 1, 19-27		

92	Development of arbitrary-order hermite methods for simulation and analysis of turbulent jet noise. *Procedia Engineering*, **2010**, 6, 19-27		
91	Parabolized stability equation models of large-scale jet mixing noise. *Procedia Engineering*, **2010**, 6, 64-73		13
90	Reprint of: Parabolized stability equation models of large-scale jet mixing noise. *Procedia IUTAM*, **2010**, 1, 64-73		
89	Unsteady Lift Suppression with a Robust Closed Loop Controller. *Notes on Numerical Fluid Mechanics and Multidisciplinary Design*, **2010**, 19-30	0.3	15
88	Optimized Waveforms for Feedback Control of Vortex Shedding. *Notes on Numerical Fluid Mechanics and Multidisciplinary Design*, **2010**, 391-404	0.3	4
87	Lock-On to a High-Lift State with Oscillatory Forcing in a Three-Dimensional Wake Flow. *Notes on Numerical Fluid Mechanics and Multidisciplinary Design*, **2010**, 81-93	0.3	3
86	Improvement of acoustic theory of ultrasonic waves in dilute bubbly liquids. *Journal of the Acoustical Society of America*, **2009**, 126, EL69-74	2.2	24
85	Lift Response of a Stalled Wing to Pulsatile Disturbances. *AIAA Journal*, **2009**, 47, 3031-3037	2.1	24
84	Effect of Tip Vortices in Low-Reynolds-Number Poststall Flow Control. *AIAA Journal*, **2009**, 47, 749-756	2.1	40
83	Towards Prediction and Control of Large Scale Turbulent Structure Supersonic Jet Noise **2009**,		7
82	Three-dimensional flows around low-aspect-ratio flat-plate wings at low Reynolds numbers. *Journal of Fluid Mechanics*, **2009**, 623, 187-207	3.7	242
81	Numerical simulations of non-spherical bubble collapse. *Journal of Fluid Mechanics*, **2009**, 629, 231-262	3.7	200
80	A high-order super-grid-scale absorbing layer and its application to linear hyperbolic systems. *Journal of Computational Physics*, **2009**, 228, 4200-4217	4.1	47
79	Computational Modeling and Experiments of Natural Convection for a Titan Montgolfiere **2009**,		2
78	Supersonic Jet Noise from Round and Chevron Nozzles: Experimental Studies **2009**,		32
77	Parabolized Stability Equation Models for Turbulent Jets and Their Radiated Sound **2009**,		8
76	Optimized Control of Vortex Shedding From an Inclined Flat Plate **2009**,		6
75	Alternate Designs of Ultrasonic Absorptive Coatings for Hypersonic Boundary Layer Control **2009**,		7

74	Low Reynolds Number Wing Response to an Oscillating Freestream With and Without Feed Forward Control **2009**,		12
73	Turbulence and Sound-Field POD Analysis of a Turbulent Jet. *International Journal of Aeroacoustics*, **2009**, 8, 337-354	2.1	65
72	Numerical Simulation of the Sound Radiated by a Turbulent Vortex Ring. *International Journal of Aeroacoustics*, **2009**, 8, 317-336	2.1	6
71	Three-dimensional instabilities in compressible flow over open cavities. *Journal of Fluid Mechanics*, **2008**, 599, 309-339	3.7	143
70	Decomposition of High Speed Jet Noise: Source Characteristics and Propagation Effects **2008**,		9
69	Interaction of Acoustic Disturbances with Micro-Cavities for Ultrasonic Absorptive Coatings **2008**,		11
68	Control of a Semi-Circular Planform Wing in a "Gusting" Unsteady Freestream Flow: I-Experimental Issues **2008**,		1
67	Closed-Loop Control of Leading Edge Vorticity on a 3D Wing: Simulations and Low-Dimensional Models **2008**,		7
66	Stability of Temporally Evolving Supersonic Boundary Layers over Micro-Cavities for Ultrasonic Absorptive Coatings **2008**,		13
65	Unsteady Aerodynamic Forces on Small-Scale Wings: Experiments, Simulations, and Models **2008**,		12
64	Large-Eddy Simulation of Separation Control for Compressible Flow Over a Wall-Mounted Hump **2008**,		5
63	Control of Flow Structure on a Semi-Circular Planform Wing **2008**,		7
62	Closed-Loop Control of Vortex Shedding on a Two-Dimensional Flat-Plate Airfoil at a Low Reynolds Number **2008**,		8
61	Statistical equilibrium of bubble oscillations in dilute bubbly flows. *Physics of Fluids*, **2008**, 20, 40902	4.4	12
60	Shock-induced collapse of a gas bubble in shockwave lithotripsy. *Journal of the Acoustical Society of America*, **2008**, 124, 2011-20	2.2	104
59	A fast immersed boundary method using a nullspace approach and multi-domain far-field boundary conditions. *Computer Methods in Applied Mechanics and Engineering*, **2008**, 197, 2131-2146	5.7	158
58	The immersed boundary method: A projection approach. *Journal of Computational Physics*, **2007**, 225, 2118-2137	4.1	385
57	A cumulative shear mechanism for tissue damage initiation in shock-wave lithotripsy. *Ultrasound in Medicine and Biology*, **2007**, 33, 1495-503	3.5	36

56	Three-Dimensional Linear Stability Analysis of Cavity Flows **2007**,		6
55	Direct Numerical Simulations of Three-Dimensional Cavity Flows **2007**,		10
54	Spatial Stability Analysis of Chevron Jet Profiles **2007**,		12
53	Low-Dimensional Models for Control of Leading-Edge Vortices: Equilibria and Linearized Models **2007**,		24
52	Unsteadiness in Flow over a Flat Plate at Angle-of-Attack at Low Reynolds Numbers **2007**,		19
51	A reduced-order model of diffusive effects on the dynamics of bubbles. *Physics of Fluids*, **2007**, 19, 123302	4.4	49
50	Implementation of WENO schemes in compressible multicomponent flow problems. *Journal of Computational Physics*, **2006**, 219, 715-732	4.1	257
49	Instability waves in a subsonic round jet detected using a near-field phased microphone array. *Journal of Fluid Mechanics*, **2006**, 565, 197	3.7	259
48	Linear models for control of cavity flow oscillations. *Journal of Fluid Mechanics*, **2006**, 547, 317	3.7	78
47	Progress in Lithotripsy Research. *Acoustics Today*, **2006**, 2, 18	0	12
46	Linear Stability Analysis of Chevron Jet Profiles **2006**, 497		2
45	Model reduction for compressible flows using POD and Galerkin projection. *Physica D: Nonlinear Phenomena*, **2004**, 189, 115-129	3.3	427
44	Computational aeroacoustics: progress on nonlinear problems of sound generation. *Progress in Aerospace Sciences*, **2004**, 40, 345-416	8.8	347
43	MODELINGARTIFICIALBOUNDARYCONDITIONS FORCOMPRESSIBLEFLOW. *Annual Review of Fluid Mechanics*, **2004**, 36, 315-345	22	218
42	Vortex shedding in a two-dimensional diffuser: theory and simulation of separation control by periodic mass injection. *Journal of Fluid Mechanics*, **2004**, 520, 187-213	3.7	12
41	Three-Dimensional Instabilities of Compressible Flow over Open Cavities: Direct Solution of hte BiGlobal Eivenvalue Problem **2004**,		16
40	Numerical Simulation of Sound Radiated from a Turbulent Vortex Ring **2004**,		3
39	Identification of Jet Instability Waves and Design of a Microphone Array **2004**,		5

38	On the Noise Generated by Shear-Layer Instabilities in Turbulent Jets **2003**,		2
37	Inverse Technique for Vortex Imaging and Its Application to Feedback Flow Control **2003**,		4
36	Cavitation bubble cluster activity in the breakage of kidney stones by lithotripter shockwaves. *Journal of Endourology*, **2003**, 17, 435-46	2.7	153
35	Inverse-Imaging Method for Detection of a Vortex in a Channel. *AIAA Journal*, **2003**, 41, 1743-1751	2.1	11
34	A Vortex Particle Method for Two-Dimensional Compressible Flow. *Journal of Computational Physics*, **2002**, 179, 371-399	4.1	56
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