

Tim Colonius

List of Publications by Citations

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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.

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	Modal Analysis of Fluid Flows: An Overview. <i>AIAA Journal</i> , 2017 , 55, 4013-4041	2.1	508
252	Model reduction for compressible flows using POD and Galerkin projection. <i>Physica D: Nonlinear Phenomena</i> , 2004 , 189, 115-129	3.3	427
251	The immersed boundary method: A projection approach. <i>Journal of Computational Physics</i> , 2007 , 225, 2118-2137	4.1	385
250	Computational aeroacoustics: progress on nonlinear problems of sound generation. <i>Progress in Aerospace Sciences</i> , 2004 , 40, 345-416	8.8	347
249	On self-sustained oscillations in two-dimensional compressible flow over rectangular cavities. <i>Journal of Fluid Mechanics</i> , 2002 , 455, 315-346	3.7	336
248	Wave Packets and Turbulent Jet Noise. <i>Annual Review of Fluid Mechanics</i> , 2013 , 45, 173-195	2.2	332
247	Spectral proper orthogonal decomposition and its relationship to dynamic mode decomposition and resolvent analysis. <i>Journal of Fluid Mechanics</i> , 2018 , 847, 821-867	3.7	319
246	Sound generation in a mixing layer. <i>Journal of Fluid Mechanics</i> , 1997 , 330, 375-409	3.7	290
245	Instability waves in a subsonic round jet detected using a near-field phased microphone array. <i>Journal of Fluid Mechanics</i> , 2006 , 565, 197	3.7	259
244	Implementation of WENO schemes in compressible multicomponent flow problems. <i>Journal of Computational Physics</i> , 2006 , 219, 715-732	4.1	257
243	Three-dimensional flows around low-aspect-ratio flat-plate wings at low Reynolds numbers. <i>Journal of Fluid Mechanics</i> , 2009 , 623, 187-207	3.7	242
242	Boundary conditions for direct computation of aerodynamic sound generation. <i>AIAA Journal</i> , 1993 , 31, 1574-1582	2.1	237
241	Numerical Treatment of Polar Coordinate Singularities. <i>Journal of Computational Physics</i> , 2000 , 157, 787-795	4.95	219
240	MODELING ARTIFICIAL BOUNDARY CONDITIONS FOR COMPRESSIBLE FLOW. <i>Annual Review of Fluid Mechanics</i> , 2004 , 36, 315-345	2.2	218
239	Numerical simulations of non-spherical bubble collapse. <i>Journal of Fluid Mechanics</i> , 2009 , 629, 231-262	3.7	200
238	Instability wave models for the near-field fluctuations of turbulent jets. <i>Journal of Fluid Mechanics</i> , 2011 , 689, 97-128	3.7	187
237	A fast immersed boundary method using a nullspace approach and multi-domain far-field boundary conditions. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2008 , 197, 2131-2146	5.7	158

236	Cavitation bubble cluster activity in the breakage of kidney stones by lithotripter shockwaves. <i>Journal of Endourology</i> , 2003 , 17, 435-46	2.7	153
235	Wavepackets in the velocity field of turbulent jets. <i>Journal of Fluid Mechanics</i> , 2013 , 730, 559-592	3.7	146
234	Three-dimensional instabilities in compressible flow over open cavities. <i>Journal of Fluid Mechanics</i> , 2008 , 599, 309-339	3.7	143
233	Axisymmetric superdirectivity in subsonic jets. <i>Journal of Fluid Mechanics</i> , 2012 , 704, 388-420	3.7	130
232	Spectral analysis of jet turbulence. <i>Journal of Fluid Mechanics</i> , 2018 , 855, 953-982	3.7	127
231	Finite-volume WENO scheme for viscous compressible multicomponent flows. <i>Journal of Computational Physics</i> , 2014 , 274, 95-121	4.1	112
230	The scattering of sound waves by a vortex: numerical simulations and analytical solutions. <i>Journal of Fluid Mechanics</i> , 1994 , 260, 271-298	3.7	108
229	Wavepacket models for supersonic jet noise. <i>Journal of Fluid Mechanics</i> , 2014 , 742, 71-95	3.7	107
228	Shock-induced collapse of a gas bubble in shockwave lithotripsy. <i>Journal of the Acoustical Society of America</i> , 2008 , 124, 2011-20	2.2	104
227	Numerical experiments on vortex ring formation. <i>Journal of Fluid Mechanics</i> , 2001 , 430, 267-282	3.7	104
226	A General Deterministic Treatment of Derivatives in Particle Methods. <i>Journal of Computational Physics</i> , 2002 , 180, 686-709	4.1	90
225	Importance of the nozzle-exit boundary-layer state in subsonic turbulent jets. <i>Journal of Fluid Mechanics</i> , 2018 , 851, 83-124	3.7	83
224	Linear models for control of cavity flow oscillations. <i>Journal of Fluid Mechanics</i> , 2006 , 547, 317	3.7	78
223	Wave-Packet Models for Large-Scale Mixing Noise. <i>International Journal of Aeroacoustics</i> , 2010 , 9, 533-557	3.1	73
222	Acoustic resonance in the potential core of subsonic jets. <i>Journal of Fluid Mechanics</i> , 2017 , 825, 1113-1157	3.7	71
221	Modelling bubble clusters in compressible liquids. <i>Journal of Fluid Mechanics</i> , 2011 , 688, 352-389	3.7	71
220	Wavepackets and trapped acoustic modes in a turbulent jet: coherent structure education and global stability. <i>Journal of Fluid Mechanics</i> , 2017 , 825, 1153-1181	3.7	66
219	Turbulence and Sound-Field POD Analysis of a Turbulent Jet. <i>International Journal of Aeroacoustics</i> , 2009 , 8, 337-354	2.1	65

218	Guide to Spectral Proper Orthogonal Decomposition. <i>AIAA Journal</i> , 2020 , 58, 1023-1033	2.1	61
217	Transition to bluff-body dynamics in the wake of vertical-axis wind turbines. <i>Journal of Fluid Mechanics</i> , 2017 , 813, 346-381	3.7	59
216	Closed-Loop Control of Lift for Longitudinal Gust Suppression at Low Reynolds Numbers. <i>AIAA Journal</i> , 2011 , 49, 1721-1728	2.1	58
215	The free compressible viscous vortex. <i>Journal of Fluid Mechanics</i> , 1991 , 230, 45-73	3.7	57
214	A Vortex Particle Method for Two-Dimensional Compressible Flow. <i>Journal of Computational Physics</i> , 2002 , 179, 371-399	4.1	56
213	Discretely Nonreflecting Boundary Conditions for Linear Hyperbolic Systems. <i>Journal of Computational Physics</i> , 2000 , 157, 500-538	4.1	56
212	Numerical simulation of shock propagation in a polydisperse bubbly liquid. <i>International Journal of Multiphase Flow</i> , 2011 , 37, 596-608	3.6	51
211	Surging and plunging oscillations of an airfoil at low Reynolds number. <i>Journal of Fluid Mechanics</i> , 2015 , 763, 237-253	3.7	49
210	Unsteady effects in dense, high speed, particle laden flows. <i>International Journal of Multiphase Flow</i> , 2014 , 61, 1-13	3.6	49
209	A reduced-order model of diffusive effects on the dynamics of bubbles. <i>Physics of Fluids</i> , 2007 , 19, 12330-12344	4.1	49
208	Second-mode attenuation and cancellation by porous coatings in a high-speed boundary layer. <i>Journal of Fluid Mechanics</i> , 2013 , 726, 312-337	3.7	47
207	A high-order super-grid-scale absorbing layer and its application to linear hyperbolic systems. <i>Journal of Computational Physics</i> , 2009 , 228, 4200-4217	4.1	47
206	Jet-flap interaction tones. <i>Journal of Fluid Mechanics</i> , 2018 , 853, 333-358	3.7	45
205	An overview of simulation, modeling, and active control of flow/acoustic resonance in open cavities 2001 ,		45
204	Numerical simulations of the early stages of high-speed droplet breakup. <i>Shock Waves</i> , 2015 , 25, 399-414	4.6	43
203	A strongly-coupled immersed-boundary formulation for thin elastic structures. <i>Journal of Computational Physics</i> , 2017 , 336, 401-411	4.1	40
202	Effect of Tip Vortices in Low-Reynolds-Number Poststall Flow Control. <i>AIAA Journal</i> , 2009 , 47, 749-756	2.1	40
201	Numerically Nonreflecting Boundary and Interface Conditions for Compressible Flow and Aeroacoustic Computations. <i>AIAA Journal</i> , 1997 , 35, 1126-1133	2.1	38

200	Numerical simulation of the aerobreakup of a water droplet. <i>Journal of Fluid Mechanics</i> , 2018 , 835, 1108-1135	3.8	38
199	A fast immersed boundary method for external incompressible viscous flows using lattice Green's functions. <i>Journal of Computational Physics</i> , 2017 , 331, 257-279	4.1	37
198	An evaluation of linear instability waves as sources of sound in a supersonic turbulent jet. <i>Physics of Fluids</i> , 2002 , 14, 3593-3600	4.4	37
197	The impulse response of a high-speed jet forced with localized arc filament plasma actuators. <i>Physics of Fluids</i> , 2012 , 24, 125104	4.4	36
196	A cumulative shear mechanism for tissue damage initiation in shock-wave lithotripsy. <i>Ultrasound in Medicine and Biology</i> , 2007 , 33, 1495-503	3.5	36
195	The leading-edge vortex and quasisteady vortex shedding on an accelerating plate. <i>Physics of Fluids</i> , 2010 , 22, 033601	4.4	32
194	Supersonic Jet Noise from Round and Chevron Nozzles: Experimental Studies 2009 ,		32
193	A numerical investigation of unsteady bubbly cavitating nozzle flows. <i>Physics of Fluids</i> , 2002 , 14, 300-311	4.4	32
192	Numerical investigation of the flow past a cavity 1999 ,		32
191	Coriolis Effect on Dynamic Stall in a Vertical Axis Wind Turbine. <i>AIAA Journal</i> , 2016 , 54, 216-226	2.1	30
190	Shock-induced collapse of a bubble inside a deformable vessel. <i>European Journal of Mechanics, B/Fluids</i> , 2013 , 40, 64-74	2.4	30
189	Piezoelectric energy harvesting in internal fluid flow. <i>Sensors</i> , 2015 , 15, 26039-62	3.8	29
188	Large eddy simulation for jet noise: the importance of getting the boundary layer right 2015 ,		29
187	Acoustic Properties of Porous Coatings for Hypersonic Boundary-Layer Control. <i>AIAA Journal</i> , 2010 , 48, 267-274	2.1	29
186	Application of Lighthill's Equation to a Mach 1.92 Turbulent Jet. <i>AIAA Journal</i> , 2000 , 38, 368-370	2.1	29
185	Global modes and nonlinear analysis of inverted-flag flapping. <i>Journal of Fluid Mechanics</i> , 2018 , 857, 312-344	3.7	28
184	A Super-Grid-Scale Model for Simulating Compressible Flow on Unbounded Domains. <i>Journal of Computational Physics</i> , 2002 , 182, 191-212	4.1	27
183	Dynamical models for control of cavity oscillations 2001 ,		27

- 182 Optimal control of circular cylinder wakes using long control horizons. *Physics of Fluids*, **2015**, 27, 087105.4 26
- 181 Numerical Simulation of Flow over an Airfoil with a Cavity. *AIAA Journal*, **2011**, 49, 143-149 2.1 26
- 180 Model-based control of cavity oscillations. II - System identification and analysis **2002**, 26
- 179 POD based models of self-sustained oscillations in the flow past an open cavity **2000**, 26
- 178 Numerical Simulations of Heat Transfer in Taylor-Couette Flow. *Journal of Heat Transfer*, **1998**, 120, 65-71.8 26
- 177 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
- 176 A contact model for normal immersed collisions between a particle and a wall. *Journal of Fluid Mechanics*, **2012**, 691, 123-145 3.7 25
- 175 Shock propagation through a bubbly liquid in a deformable tube. *Journal of Fluid Mechanics*, **2011**, 671, 339-363 3.7 25
- 174 Acoustic saturation in bubbly cavitating flow adjacent to an oscillating wall. *Physics of Fluids*, **2000**, 12, 2752 4.4 25
- 173 High-frequency wavepackets in turbulent jets. *Journal of Fluid Mechanics*, **2017**, 830, 3.7 24
- 172 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
- 171 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
- 170 Lift Response of a Stalled Wing to Pulsatile Disturbances. *AIAA Journal*, **2009**, 47, 3031-3037 2.1 24
- 169 Low-Dimensional Models for Control of Leading-Edge Vortices: Equilibria and Linearized Models **2007**, 24
- 168 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
- 167 Generalized characteristic relaxation boundary conditions for unsteady compressible flow simulations. *Journal of Computational Physics*, **2013**, 248, 109-126 4.1 22
- 166 Stochastic and nonlinear forcing of wavepackets in a Mach 0.9 jet **2015**, 21
- 165 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

164	A parallel fast multipole method for elliptic difference equations. <i>Journal of Computational Physics</i> , 2014 , 278, 76-91	4.1	21
163	Data-assimilated low-order vortex modeling of separated flows. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	21
162	Compressible Large-Eddy Simulation of Separation Control on a Wall-Mounted Hump. <i>AIAA Journal</i> , 2010 , 48, 1098-1107	2.1	20
161	POD analysis of sound generation by a turbulent jet 2002 ,		20
160	An assessment of multicomponent flow models and interface capturing schemes for spherical bubble dynamics. <i>Journal of Computational Physics</i> , 2020 , 402, 109080	4.1	20
159	Eulerian-Lagrangian method for simulation of cloud cavitation. <i>Journal of Computational Physics</i> , 2018 , 371, 994-1017	4.1	20
158	Accurate computation of surface stresses and forces with immersed boundary methods. <i>Journal of Computational Physics</i> , 2016 , 321, 860-873	4.1	19
157	Effect of direct bubble-bubble interactions on linear-wave propagation in bubbly liquids. <i>Physical Review E</i> , 2014 , 90, 063010	2.4	19
156	Inlet conditions for wave packet models in turbulent jets based on eigenmode decomposition of large eddy simulation data. <i>Physics of Fluids</i> , 2013 , 25, 105107	4.4	19
155	Unsteadiness in Flow over a Flat Plate at Angle-of-Attack at Low Reynolds Numbers 2007 ,		19
154	Parabolized stability analysis of jets from serrated nozzles. <i>Journal of Fluid Mechanics</i> , 2016 , 789, 36-63	3.7	19
153	A fast lattice Green's function method for solving viscous incompressible flows on unbounded domains. <i>Journal of Computational Physics</i> , 2016 , 316, 360-384	4.1	19
152	Bubble cloud dynamics in an ultrasound field. <i>Journal of Fluid Mechanics</i> , 2019 , 862, 1105-1134	3.7	19
151	Comparative study of the dynamics of laser and acoustically generated bubbles in viscoelastic media. <i>Physical Review E</i> , 2019 , 99, 043103	2.4	17
150	Instability of Hypersonic Boundary Layer on a Wall with Resonating Micro-Cavities 2011 ,		17
149	Lift Enhancement for Low-Aspect-Ratio Wings with Periodic Excitation. <i>AIAA Journal</i> , 2010 , 48, 1785-1790	2.1	17
148	One-way spatial integration of hyperbolic equations. <i>Journal of Computational Physics</i> , 2015 , 300, 844-864	4.1	16
147	Modal decomposition of fluid-structure interaction with application to flag flapping. <i>Journal of Fluids and Structures</i> , 2018 , 81, 728-737	3.1	16

146	Three-Dimensional Instabilities of Compressible Flow over Open Cavities: Direct Solution of the BiGlobal Eigenvalue Problem 2004 ,		16
145	Near-surface dynamics of a gas bubble collapsing above a crevice. <i>Journal of Fluid Mechanics</i> , 2020 , 899,	3.7	16
144	Ensemble-Based State Estimator for Aerodynamic Flows. <i>AIAA Journal</i> , 2018 , 56, 2568-2578	2.1	15
143	Unsteady Lift Suppression with a Robust Closed Loop Controller. <i>Notes on Numerical Fluid Mechanics and Multidisciplinary Design</i> , 2010 , 19-30	0.3	15
142	Quasi-linear gradients for capillary liquid chromatography with mass and tandem mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2000 , 14, 432-8	2.2	14
141	On the formation and recurrent shedding of ligaments in droplet aerobreakup. <i>Journal of Fluid Mechanics</i> , 2020 , 904,	3.7	14
140	On a transitional and turbulent natural convection in spherical shells. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 64, 514-525	4.9	13
139	Simulation and Cryogenic Experiments of Natural Convection for the Titan Montgolfiere. <i>AIAA Journal</i> , 2012 , 50, 2483-2491	2.1	13
138	Unstructured Large Eddy Simulation Technology for Prediction and Control of Jet Noise 2010 ,		13
137	Parabolized stability equation models of large-scale jet mixing noise. <i>Procedia Engineering</i> , 2010 , 6, 64-73		13
136	Stability of Temporally Evolving Supersonic Boundary Layers over Micro-Cavities for Ultrasonic Absorptive Coatings 2008 ,		13
135	Lift-up, Kelvin-Helmholtz and Orr mechanisms in turbulent jets. <i>Journal of Fluid Mechanics</i> , 2020 , 896,	3.7	12
134	Large eddy simulation for jet noise: azimuthal decomposition and intermittency of the radiated sound 2016 ,		12
133	Low Reynolds Number Wing Response to an Oscillating Freestream With and Without Feed Forward Control 2009 ,		12
132	Unsteady Aerodynamic Forces on Small-Scale Wings: Experiments, Simulations, and Models 2008 ,		12
131	Statistical equilibrium of bubble oscillations in dilute bubbly flows. <i>Physics of Fluids</i> , 2008 , 20, 40902	4.4	12
130	Spatial Stability Analysis of Chevron Jet Profiles 2007 ,		12
129	Progress in Lithotripsy Research. <i>Acoustics Today</i> , 2006 , 2, 18	0	12

128	Vortex shedding in a two-dimensional diffuser: theory and simulation of separation control by periodic mass injection. <i>Journal of Fluid Mechanics</i> , 2004 , 520, 187-213	3.7	12
127	Flow around a NACA0018 airfoil with a cavity and its dynamical response to acoustic forcing. <i>Experiments in Fluids</i> , 2011 , 51, 493-509	2.5	11
126	Computational Modeling and Experiments of Natural Convection for a Titan Montgolfiere. <i>AIAA Journal</i> , 2010 , 48, 1007-1016	2.1	11
125	Simulation of the effects of cavitation and anatomy in the shock path of model lithotripters. <i>Urological Research</i> , 2010 , 38, 505-18		11
124	Interaction of Acoustic Disturbances with Micro-Cavities for Ultrasonic Absorptive Coatings 2008 ,		11
123	Inverse-Imaging Method for Detection of a Vortex in a Channel. <i>AIAA Journal</i> , 2003 , 41, 1743-1751	2.1	11
122	Experimental study of turbulent-jet wave packets and their acoustic efficiency. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	11
121	Energy shielding by cavitation bubble clouds in burst wave lithotripsy. <i>Journal of the Acoustical Society of America</i> , 2018 , 144, 2952	2.2	11
120	A critical assessment of the parabolized stability equations. <i>Theoretical and Computational Fluid Dynamics</i> , 2019 , 33, 359-382	2.3	10
119	Axisymmetric superdirectivity in subsonic jets 2011 ,		10
118	Direct Numerical Simulations of Three-Dimensional Cavity Flows 2007 ,		10
117	Nonlinear input/output analysis: application to boundary layer transition. <i>Journal of Fluid Mechanics</i> , 2021 , 911,	3.7	10
116	Large-eddy simulations of co-annular turbulent jet using a Voronoi-based mesh generation framework 2018 ,		10
115	A Source Term Approach for Generation of One-way Acoustic Waves in the Euler and Navier-Stokes equations. <i>Wave Motion</i> , 2017 , 75, 36-49	1.8	9
114	Decomposition of High Speed Jet Noise: Source Characteristics and Propagation Effects 2008 ,		9
113	Active Control of Noise from Hot Supersonic Jets. <i>AIAA Journal</i> , 2018 , 56, 933-948	2.1	9
112	Modeling and simulation of a fluttering cantilever in channel flow. <i>Journal of Fluids and Structures</i> , 2019 , 89, 174-190	3.1	8
111	Trapped acoustic waves in the potential core of subsonic jets 2016 ,		8

110	Spatial stability analysis of subsonic corrugated jets. <i>Journal of Fluid Mechanics</i> , 2019 , 876, 766-791	3.7	8
109	Modeling and experimental analysis of acoustic cavitation bubbles for Burst Wave Lithotripsy. <i>Journal of Physics: Conference Series</i> , 2015 , 656,	0.3	8
108	Acoustic field associated with parabolized stability equation models in turbulent jets 2013 ,		8
107	Wavepackets in the velocity field of turbulent jets 2012 ,		8
106	Parabolized Stability Equation Models for Turbulent Jets and Their Radiated Sound 2009 ,		8
105	Closed-Loop Control of Vortex Shedding on a Two-Dimensional Flat-Plate Airfoil at a Low Reynolds Number 2008 ,		8
104	Scattering of sound waves by a compressible vortex 1991 ,		8
103	Ambiguity in mean-flow-based linear analysis. <i>Journal of Fluid Mechanics</i> , 2020 , 900,	3.7	8
102	EnKF-based Dynamic Estimation of Separated Flows with a Low-Order Vortex Model 2018 ,		7
101	Parabolized stability equation models for predicting large-scale mixing noise of turbulent round jets 2011 ,		7
100	Towards Prediction and Control of Large Scale Turbulent Structure Supersonic Jet Noise 2009 ,		7
99	Parabolized stability equation models in turbulent supersonic jets 2012 ,		7
98	Alternate Designs of Ultrasonic Absorptive Coatings for Hypersonic Boundary Layer Control 2009 ,		7
97	Closed-Loop Control of Leading Edge Vorticity on a 3D Wing: Simulations and Low-Dimensional Models 2008 ,		7
96	Control of Flow Structure on a Semi-Circular Planform Wing 2008 ,		7
95	Spatial Stability Analysis of Subsonic Jets Modified for Low-Frequency Noise Reduction. <i>AIAA Journal</i> , 2015 , 53, 2335-2358	2.1	6
94	A Gaussian moment method and its augmentation via LSTM recurrent neural networks for the statistics of cavitating bubble populations. <i>International Journal of Multiphase Flow</i> , 2020 , 127, 103262	3.6	6
93	Super- and multi-directive acoustic radiation by linear global modes of a turbulent jet 2016 ,		6

92	Modeling Dynamic Lift Response to Actuation 2016,		6
91	A Vortex Sheet/Point Vortex Dynamical Model For Unsteady Separated Flows 2016,		6
90	Effects of Actuation Frequency on Flow Control Applied to a Wall-Mounted Hump. <i>AIAA Journal</i> , 2012 , 50, 1631-1634	2.1	6
89	Optimized Control of Vortex Shedding From an Inclined Flat Plate 2009,		6
88	Numerical Simulation of the Sound Radiated by a Turbulent Vortex Ring. <i>International Journal of Aeroacoustics</i> , 2009 , 8, 317-336	2.1	6
87	Three-Dimensional Linear Stability Analysis of Cavity Flows 2007,		6
86	Cavitation in shock wave lithotripsy: the critical role of bubble activity in stone breakage and kidney trauma		6
85	Enhancement of shock-capturing methods via machine learning. <i>Theoretical and Computational Fluid Dynamics</i> , 2020 , 34, 483-496	2.3	6
84	Optimal eddy viscosity for resolvent-based models of coherent structures in turbulent jets. <i>Journal of Fluid Mechanics</i> , 2021 , 917,	3.7	6
83	Eddy viscosity for resolvent-based jet noise models 2019,		6
82	Acoustic cavitation rheometry. <i>Soft Matter</i> , 2021 , 17, 2931-2941	3.6	6
81	A quantitative comparison of phase-averaged models for bubbly, cavitating flows. <i>International Journal of Multiphase Flow</i> , 2019 , 115, 137-143	3.6	5
80	A fast multi-resolution lattice Green's function method for elliptic difference equations. <i>Journal of Computational Physics</i> , 2020 , 407, 109270	4.1	5
79	Dynamics and Energy Extraction of a Surging and Plunging Airfoil at Low Reynolds Number 2013,		5
78	Hermite Methods for Aeroacoustics: Recent Progress 2011,		5
77	Feedback control of vortex shedding from an inclined flat plate. <i>Theoretical and Computational Fluid Dynamics</i> , 2011 , 25, 221-232	2.3	5
76	Large-Eddy Simulation of Separation Control for Compressible Flow Over a Wall-Mounted Hump 2008,		5
75	Identification of Jet Instability Waves and Design of a Microphone Array 2004,		5

74	Response of the Separated Flow over an Airfoil to a Short-Time Actuator Burst 2017 ,		4
73	Tonal dynamics and sound in subsonic turbulent jets 2016 ,		4
72	Sensitivity of wavepackets in jets to non-linear effects: the role of the critical layer 2015 ,		4
71	Improved Parabolization of the Euler Equations 2013 ,		4
70	Numerical Simulations of the Transient Flow Response of a 3D, Low-Aspect-Ratio Wing to Pulsed Actuation 2011 ,		4
69	Special issue on global flow instability and control. <i>Theoretical and Computational Fluid Dynamics</i> , 2011 , 25, 1-6	2.3	4
68	Inverse Technique for Vortex Imaging and Its Application to Feedback Flow Control 2003 ,		4
67	Transition of Chaotic Flow in a Radially Heated Taylor-Couette System. <i>Journal of Heat Transfer</i> , 1999 , 121, 574-582	1.8	4
66	A Reduced-Order Model of Heat Transfer Effects on the Dynamics of Bubbles 2002 ,		4
65	One Way Navier-Stokes and resolvent analysis for modeling coherent structures in a supersonic turbulent jet 2017 ,		4
64	Optimized Waveforms for Feedback Control of Vortex Shedding. <i>Notes on Numerical Fluid Mechanics and Multidisciplinary Design</i> , 2010 , 391-404	0.3	4
63	Resolvent-based jet noise models: a projection approach 2020 ,		4
62	Amplitude Scaling of Wave Packets in Turbulent Jets. <i>AIAA Journal</i> , 2021 , 59, 559-568	2.1	4
61	Feedback Control of High-Lift State for A Low-Aspect-Ratio Wing 2010 ,		3
60	Numerical Simulations of Natural and Actuated Flow over a 3-D, Low-Aspect-Ratio Airfoil 2010 ,		3
59	Numerically nonreflecting boundary and interface conditions 1996 ,		3
58	Numerical Simulation of Sound Radiated from a Turbulent Vortex Ring 2004 ,		3
57	Numerical Investigation of Bubble Cloud Dynamics in Shock Wave Lithotripsy 2002 , 389		3

56	Continued development of the one-way Euler equations: application to jets 2014 ,		3
55	Lock-On to a High-Lift State with Oscillatory Forcing in a Three-Dimensional Wake Flow. <i>Notes on Numerical Fluid Mechanics and Multidisciplinary Design</i> , 2010 , 81-93	0.3	3
54	Characterizing viscoelastic materials via ensemble-based data assimilation of bubble collapse observations. <i>Journal of the Mechanics and Physics of Solids</i> , 2021 , 152,	5	3
53	Experimental observations and numerical modeling of lipid-shell microbubbles with calcium-adhering moieties for minimally-invasive treatment of urinary stones. <i>Proceedings of Meetings on Acoustics</i> , 2018 , 35,	1	3
52	A Bias-aware EnKF Estimator for Aerodynamic Flows 2018 ,		3
51	MFC: An open-source high-order multi-component, multi-phase, and multi-scale compressible flow solver. <i>Computer Physics Communications</i> , 2021 , 266,	4.2	3
50	Wavepacket intermittency and its role in turbulent jet noise 2017 ,		2
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