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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.

87 papers	2,562 citations	31 h-index	48 g-index
100 ext. papers	3,178 ext. citations	3.6 avg, IF	5.88 L-index

#	Paper	IF	Citations
87	Applications of the dynamic mode decomposition. <i>Theoretical and Computational Fluid Dynamics</i> , 2011 , 25, 249-259	2.3	278
86	Triggering in the horizontal Rijke tube: non-normality, transient growth and bypass transition. <i>Journal of Fluid Mechanics</i> , 2011 , 667, 272-308	3.7	137
85	Sensitivity and Nonlinearity of Thermoacoustic Oscillations. <i>Annual Review of Fluid Mechanics</i> , 2018 , 50, 661-689	2.2	120
84	STRUCTURE AND DYNAMICS OF CRYOGENIC FLAMES AT SUPERCRITICAL PRESSURE. <i>Combustion Science and Technology</i> , 2006 , 178, 161-192	1.5	107
83	Density ratio effects on reacting bluff-body flow field characteristics. <i>Journal of Fluid Mechanics</i> , 2012 , 706, 219-250	3.7	85
82	Nonlinear self-excited thermoacoustic oscillations of a ducted premixed flame: bifurcations and routes to chaos. <i>Journal of Fluid Mechanics</i> , 2014 , 761, 399-430	3.7	83
81	Nonlinear dynamics of a self-excited thermoacoustic system subjected to acoustic forcing. <i>Proceedings of the Combustion Institute</i> , 2015 , 35, 3229-3236	5.9	73
80	The effect of confinement on the stability of two-dimensional shear flows. <i>Journal of Fluid Mechanics</i> , 2006 , 565, 171	3.7	67
79	Coherent structures in a swirl injector at Re = 4800 by nonlinear simulations and linear global modes. <i>Journal of Fluid Mechanics</i> , 2016 , 792, 620-657	3.7	67
78	Azimuthal instabilities in annular combustors: standing and spinning modes. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2013 , 469, 20130232	2.4	59
77	Lock-in and quasiperiodicity in hydrodynamically self-excited flames: Experiments and modelling. <i>Proceedings of the Combustion Institute</i> , 2013 , 34, 947-954	5.9	58
76	Sensitivity analysis of a time-delayed thermo-acoustic system via an adjoint-based approach. <i>Journal of Fluid Mechanics</i> , 2013 , 719, 183-202	3.7	56
75	The stability of ducted compound flows and consequences for the geometry of coaxial injectors. <i>Journal of Fluid Mechanics</i> , 2003 , 482, 257-269	3.7	56
74	Structural sensitivity of spiral vortex breakdown. <i>Journal of Fluid Mechanics</i> , 2013 , 720, 558-581	3.7	55
73	Lock-in and quasiperiodicity in a forced hydrodynamically self-excited jet. <i>Journal of Fluid Mechanics</i> , 2013 , 726, 624-655	3.7	48
72	The local and global stability of confined planar wakes at intermediate Reynolds number. <i>Journal of Fluid Mechanics</i> , 2011 , 686, 218-238	3.7	47
71	Triggering in a Thermoacoustic System with Stochastic Noise. <i>International Journal of Spray and Combustion Dynamics</i> , 2011 , 3, 225-241	1.3	42

70	Nonlinear thermoacoustics of ducted premixed flames: The influence of perturbation convection speed. <i>Combustion and Flame</i> , 2013 , 160, 2856-2865	5.3	41
69	Phase trapping and slipping in a forced hydrodynamically self-excited jet. <i>Journal of Fluid Mechanics</i> , 2013 , 735,	3.7	41
68	The effect of confinement on the stability of viscous planar jets and wakes. <i>Journal of Fluid Mechanics</i> , 2010 , 656, 309-336	3.7	39
67	Forcing of self-excited round jet diffusion flames. <i>Proceedings of the Combustion Institute</i> , 2009 , 32, 1191-1198	5.1	39
66	Forced synchronization of periodic and aperiodic thermoacoustic oscillations: lock-in, bifurcations and open-loop control. <i>Journal of Fluid Mechanics</i> , 2018 , 838, 690-714	3.7	37
65	The planar X-junction flow: stability analysis and control. <i>Journal of Fluid Mechanics</i> , 2014 , 753, 1-28	3.7	37
64	Adjoint algorithms for the Navier-Stokes equations in the low Mach number limit. <i>Journal of Computational Physics</i> , 2012 , 231, 1900-1916	4.1	36
63	Modal Stability Theory. <i>Applied Mechanics Reviews</i> , 2014 , 66,	8.6	34
62	Weakly nonlinear analysis of thermoacoustic instabilities in annular combustors. <i>Journal of Fluid Mechanics</i> , 2016 , 805, 52-87	3.7	34
61	The two classes of primary modal instability in laminar separation bubbles. <i>Journal of Fluid Mechanics</i> , 2013 , 734,	3.7	33
60	Non-normality and nonlinearity in thermoacoustic instabilities. <i>International Journal of Spray and Combustion Dynamics</i> , 2016 , 8, 119-146	1.3	32
59	The full impulse response of two-dimensional jet/wake flows and implications for confinement. <i>Journal of Fluid Mechanics</i> , 2007 , 590, 163-185	3.7	32
58	Frequency domain and time domain analysis of thermoacoustic oscillations with wave-based acoustics. <i>Journal of Fluid Mechanics</i> , 2015 , 775, 387-414	3.7	31
57	The effect of confinement on the stability of non-swirling round jet/wake flows. <i>Journal of Fluid Mechanics</i> , 2008 , 605, 227-252	3.7	31
56	Global modes, receptivity, and sensitivity analysis of diffusion flames coupled with duct acoustics. <i>Journal of Fluid Mechanics</i> , 2014 , 752, 237-265	3.7	29
55	The effect of the flame phase on thermoacoustic instabilities. <i>Combustion and Flame</i> , 2018 , 187, 165-184	5.3	26
54	The extinction limits of a hydrogen counterflow diffusion flame above liquid oxygen. <i>Combustion and Flame</i> , 2003 , 135, 87-96	5.3	26
53	Stability analysis of thermo-acoustic nonlinear eigenproblems in annular combustors. Part II. Uncertainty quantification. <i>Journal of Computational Physics</i> , 2016 , 325, 411-421	4.1	25

52	Experimental sensitivity analysis and control of thermoacoustic systems. <i>Journal of Fluid Mechanics</i> , 2016 , 787,	3.7	24
51	Second-order perturbation of global modes and implications for spanwise wavy actuation. <i>Journal of Fluid Mechanics</i> , 2014 , 755, 314-335	3.7	23
50	Nonlinear Phenomena in Thermoacoustic Systems With Premixed Flames. <i>Journal of Engineering for Gas Turbines and Power</i> , 2013 , 135,	1.7	23
49	Matrix-free continuation of limit cycles for bifurcation analysis of large thermoacoustic systems. <i>Journal of Computational Physics</i> , 2013 , 240, 225-247	4.1	22
48	Edge Diffusion Flame Stabilization Behind a Step over a Liquid Reactant. <i>Journal of Propulsion and Power</i> , 2003 , 19, 332-341	1.8	22
47	Nonlinear hydrodynamic and thermoacoustic oscillations of a bluff-body stabilised turbulent premixed flame. <i>Combustion Theory and Modelling</i> , 2016 , 20, 131-153	1.5	21
46	Matrix-free continuation of limit cycles and their bifurcations for a ducted premixed flame. <i>Journal of Fluid Mechanics</i> , 2014 , 759, 1-27	3.7	21
45	The effect of surface tension on the stability of unconfined and confined planar jets and wakes. <i>Journal of Fluid Mechanics</i> , 2009 , 633, 71-97	3.7	21
44	Weakly nonlinear analysis of thermoacoustic bifurcations in the Rijke tube. <i>Journal of Fluid Mechanics</i> , 2016 , 805, 523-550	3.7	21
43	The structural sensitivity of open shear flows calculated with a local stability analysis. <i>European Journal of Mechanics, B/Fluids</i> , 2015 , 49, 426-437	2.4	20
42	Stability analysis of thermo-acoustic nonlinear eigenproblems in annular combustors. Part I. Sensitivity. <i>Journal of Computational Physics</i> , 2016 , 325, 395-410	4.1	19
41	Flame Double Input Describing Function analysis. <i>Combustion and Flame</i> , 2016 , 171, 87-102	5.3	18
40	Linear stability and adjoint sensitivity analysis of thermoacoustic networks with premixed flames. <i>Combustion and Flame</i> , 2016 , 165, 97-108	5.3	17
39	Self-sustained hydrodynamic oscillations in lifted jet diffusion flames: origin and control. <i>Journal of Fluid Mechanics</i> , 2015 , 775, 201-222	3.7	17
38	Finding thermoacoustic limit cycles for a ducted Burke-Schumann flame. <i>Proceedings of the Combustion Institute</i> , 2013 , 34, 911-920	5.9	17
37	Adjoint-Based Linear Analysis in Reduced-Order Thermo-Acoustic Models. <i>International Journal of Spray and Combustion Dynamics</i> , 2014 , 6, 225-246	1.3	16
36	Triggering in Thermoacoustics. <i>International Journal of Spray and Combustion Dynamics</i> , 2012 , 4, 217-237	1.3	15
35	Local stability analysis and eigenvalue sensitivity of reacting bluff-body wakes. <i>Journal of Fluid Mechanics</i> , 2016 , 788, 549-575	3.7	12

34	Adjoint-based sensitivity analysis of low-order thermoacoustic networks using a wave-based approach. <i>Journal of Computational Physics</i> , 2017 , 341, 163-181	4.1	11
33	G-equation modelling of thermoacoustic oscillations of partially premixed flames. <i>International Journal of Spray and Combustion Dynamics</i> , 2017 , 9, 260-276	1.3	11
32	State-space realization of a describing function. <i>Nonlinear Dynamics</i> , 2015 , 82, 9-28	5	9
31	Experimental sensitivity analysis via a secondary heat source in an oscillating thermoacoustic system. <i>International Journal of Spray and Combustion Dynamics</i> , 2017 , 9, 230-240	1.3	9
30	Absolute and Convective Instability in Gas Turbine Fuel Injectors 2012 ,		9
29	Sensitivity analysis of thermoacoustic instability with adjoint Helmholtz solvers. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	9
28	Multiple-scale thermo-acoustic stability analysis of a coaxial jet combustor. <i>Proceedings of the Combustion Institute</i> , 2017 , 36, 3863-3871	5.9	8
27	A Theoretical Approach for Passive Control of Thermoacoustic Oscillations: Application to Ducted Flames. <i>Journal of Engineering for Gas Turbines and Power</i> , 2013 , 135,	1.7	8
26	Transient Growth and Triggering in the Horizontal Rijke Tube. <i>International Journal of Spray and Combustion Dynamics</i> , 2011 , 3, 209-223	1.3	8
25	Sensitivity of the Rayleigh criterion in thermoacoustics. <i>Journal of Fluid Mechanics</i> , 2020 , 882,	3.7	8
24	Obtaining Bifurcation Diagrams With a Thermoacoustic Network Model 2012 ,		7
23	Propagation speed of inertial waves in cylindrical swirling flows. <i>Journal of Fluid Mechanics</i> , 2019 , 879, 85-120	3.7	6
22	Data Assimilation and Optimal Calibration in Nonlinear Models of Flame Dynamics. <i>Journal of Engineering for Gas Turbines and Power</i> , 2019 , 141,	1.7	6
21	Combined state and parameter estimation in level-set methods. <i>Journal of Computational Physics</i> , 2019 , 399, 108950	4.1	5
20	Stability Criteria for Standing and Spinning Waves in Annular Combustors 2015 ,		5
19	Artificial limbs can enable artificially fast running. <i>Journal of Applied Physiology</i> , 2010 , 108, 1016; author reply 1019-20	3.7	5
18	Bayesian Machine Learning for the Prognosis of Combustion Instabilities From Noise. <i>Journal of Engineering for Gas Turbines and Power</i> , 2021 , 143,	1.7	5
17	The effect of damköhler number on the stand-off distance of cross-flow flames. <i>Combustion Theory and Modelling</i> , 2003 , 7, 563-577	1.5	4

16	Thermoacoustic stabilization of a longitudinal combustor using adjoint methods. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	4
15	Early detection of thermoacoustic instabilities in a cryogenic rocket thrust chamber using combustion noise features and machine learning. <i>Chaos</i> , 2021 , 31, 063128	3.3	4
14	A data-driven kinematic model of a ducted premixed flame. <i>Proceedings of the Combustion Institute</i> , 2021 , 38, 6231-6239	5.9	4
13	Passive control of global instability in low-density jets. <i>European Journal of Mechanics, B/Fluids</i> , 2018 , 72, 311-319	2.4	4
12	Adjoint-based shape optimization of the microchannels in an inkjet printhead. <i>Journal of Fluid Mechanics</i> , 2019 , 871, 113-138	3.7	3
11	Experimental sensitivity analysis of a linearly stable thermoacoustic system via a pulsed forcing technique. <i>Experiments in Fluids</i> , 2017 , 58, 1	2.5	3
10	Assimilation of Experimental Data to Create a Quantitatively Accurate Reduced-Order Thermoacoustic Model. <i>Journal of Engineering for Gas Turbines and Power</i> , 2021 , 143,	1.7	2
9	Adjoint Methods for Elimination of Thermoacoustic Oscillations in a Model Annular Combustor via Small Geometry Modifications 2018 ,		2
8	High Fidelity Model for Self-sustained Oscillations in Heated Jets 2020 ,		1
7	Experimental Sensitivity Analysis and the Equivalence of Pulsed Forcing and Feedback Control in Thermoacoustic Systems 2017 ,		1
6	Adjoint Sensitivity Analysis of Hydrodynamic Stability in a Gas Turbine Fuel Injector 2015 ,		1
5	Bypass Transition to Sustained Thermoacoustic Oscillations in a Linearly Stable Rijke Tube 2010 ,		1
4	A theoretical approach to the passive control of spiral vortex breakdown 2012 ,		1
3	Shape sensitivity of eigenvalues in hydrodynamic stability, with physical interpretation for the flow around a cylinder. <i>European Journal of Mechanics, B/Fluids</i> , 2020 , 80, 80-91	2.4	1
2	Flow Simulations Including Iron Nanoparticle Nucleation, Growth and Evaporation for Floating Catalyst CNT Production. <i>Catalysts</i> , 2020 , 10, 1383	4	1
1	The planar X-junction flow: stability analysis and control [CORRIGENDUM]. <i>Journal of Fluid Mechanics</i> , 2014 , 753, 560-560	3.7	