Luca Magri

List of Publications by Year in descending order

50 papers	789 citations	471509 17 h-index	552781 26 g-index
52 all docs	52 docs citations	52 times ranked	304 citing authors

#	Article	IF	Citations
1	A Hybrid Adjoint Network Model for Thermoacoustic Optimization. Journal of Engineering for Gas Turbines and Power, 2022, 144, .	1.1	0
2	Gradient-free optimization of chaotic acoustics with reservoir computing. Physical Review Fluids, 2022, 7, .	2.5	11
3	A physical model for indirect noise in non-isentropic nozzles: transfer functions and stability. Journal of Fluid Mechanics, 2022, 935, .	3.4	6
4	Automatic-differentiated Physics-Informed Echo State Network (API-ESN). Lecture Notes in Computer Science, 2021, , 323-329.	1.3	1
5	Using adjoint-based optimization to enhance ignition in non-premixed jets. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20200472.	2.1	4
6	A data-driven kinematic model of a ducted premixed flame. Proceedings of the Combustion Institute, 2021, 38, 6231-6239.	3.9	9
7	Compositional and entropy indirect noise generated in subsonic non-isentropic nozzles. Journal of Fluid Mechanics, 2021, 910, .	3.4	12
8	Short- and long-term predictions of chaotic flows and extreme events: a physics-constrained reservoir computing approach. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20210135.	2.1	16
9	Robust Optimization and Validation of Echo State Networks for learning chaotic dynamics. Neural Networks, 2021, 142, 252-268.	5.9	33
10	Stability, sensitivity and optimisation of chaotic acoustic oscillations. Journal of Fluid Mechanics, 2020, 882, .	3.4	21
11	Sensitivity of the Rayleigh criterion in thermoacoustics. Journal of Fluid Mechanics, 2020, 882, .	3.4	20
12	Physics-informed echo state networks. Journal of Computational Science, 2020, 47, 101237.	2.9	27
13	Degenerate perturbation theory in thermoacoustics: high-order sensitivities and exceptional points. Journal of Fluid Mechanics, 2020, 903, .	3.4	8
14	Optimisation of chaotically perturbed acoustic limit cycles. Nonlinear Dynamics, 2020, 100, 1641-1657.	5.2	4
15	Learning Ergodic Averages in Chaotic Systems. Lecture Notes in Computer Science, 2020, , 124-132.	1.3	4
16	Learning Hidden States in a Chaotic System: A Physics-Informed Echo State Network Approach. Lecture Notes in Computer Science, 2020, , 117-123.	1.3	3
17	Physics-Informed Data-Driven Prediction of Turbulent Reacting Flows with Lyapunov Analysis and Sequential Data Assimilation. , 2020, , 177-196.		1
18	Flow Inhomogeneities in a Realistic Aeronautical Gas-Turbine Combustor: Formation, Evolution, and Indirect Noise. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	17

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19	Effects of Asymmetry on Thermoacoustic Modes in Annular Combustors: A Higher-Order Perturbation Study. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	23
20	Physics-Informed Echo State Networks for Chaotic Systems Forecasting. Lecture Notes in Computer Science, 2019, , 192-198.	1.3	19
21	Combined state and parameter estimation in level-set methods. Journal of Computational Physics, 2019, 399, 108950.	3.8	11
22	Adjoint characteristic decomposition of one-dimensional waves. Journal of Computational Physics, 2019, 388, 454-461.	3.8	0
23	Adjoint Methods as Design Tools in Thermoacoustics. Applied Mechanics Reviews, 2019, 71, .	10.1	39
24	Thermoacoustic Modes of Quasi-One-Dimensional Combustors in the Region of Marginal Stability. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	13
25	Data Assimilation and Optimal Calibration in Nonlinear Models of Flame Dynamics. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	9
26	Data Assimilation and Optimal Calibration in Nonlinear Models of Flame Dynamics. , 2019, , .		0
27	Effects of Nozzle Helmholtz Number on Indirect Combustion Noise by Compositional Perturbations. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	10
28	Methods for the Calculation of Thermoacoustic Stability Boundaries and Monte Carlo-Free Uncertainty Quantification. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	14
29	Flow Inhomogeneities in a Realistic Aeronautical Gas-Turbine Combustor: Formation, Evolution and Indirect Noise. , 2018, , .		1
30	Exceptional points in the thermoacoustic spectrum. Journal of Sound and Vibration, 2018, 433, 124-128.	3.9	30
31	Effects of Asymmetry on Thermoacoustic Modes in Annular Combustors: A Higher-Order Perturbation Study. , 2018, , .		1
32	Thermoacoustic Modes of Quasi-1D Combustors in the Region of Marginal Stability. , 2018, , .		0
33	Uncertainty Quantification of Growth Rates of Thermoacoustic Instability by an Adjoint Helmholtz Solver. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	1.1	34
34	Adjoint-based sensitivity analysis of low-order thermoacoustic networks using a wave-based approach. Journal of Computational Physics, 2017, 341, 163-181.	3.8	17
35	Effects of Nozzle Helmholtz Number on Indirect Combustion Noise by Compositional Perturbations. , 2017, , .		2
36	Methods for the Calculation of Thermoacoustic Stability Margins and Monte Carlo-Free Uncertainty Quantification. , 2017, , .		2

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37	On indirect noise in multicomponent nozzle flows. Journal of Fluid Mechanics, 2017, 828, .	3.4	26
38	Lyapunov exponent as a metric for assessing the dynamic content and predictability of large-eddy simulations. Physical Review Fluids, 2017, 2, .	2.5	33
39	Compositional inhomogeneities as a source of indirect combustion noise. Journal of Fluid Mechanics, 2016, 799, .	3.4	58
40	Stability analysis of thermo-acoustic nonlinear eigenproblems in annular combustors. Part I. Sensitivity. Journal of Computational Physics, 2016, 325, 395-410.	3.8	27
41	Stability analysis of thermo-acoustic nonlinear eigenproblems in annular combustors. Part II. Uncertainty quantification. Journal of Computational Physics, 2016, 325, 411-421.	3.8	40
42	Uncertainty Quantification of Growth Rates of Thermoacoustic Instability by an Adjoint Helmholtz Solver. , 2016, , .		8
43	Adjoint-Based Linear Analysis in Reduced-Order Thermo-Acoustic Models. International Journal of Spray and Combustion Dynamics, 2014, 6, 225-246.	1.0	19
44	Global modes, receptivity, and sensitivity analysis of diffusion flames coupled with duct acoustics. Journal of Fluid Mechanics, 2014, 752, 237-265.	3.4	33
45	On the use of the theory of dynamical systems for transient problems. Nonlinear Dynamics, 2013, 74, 373-380.	5.2	8
46	Non-normality in combustionâ€“acoustic interaction in diffusion flames: a critical revision. Journal of Fluid Mechanics, 2013, 733, 681-683.	3.4	12
47	Sensitivity analysis of a time-delayed thermo-acoustic system via an adjoint-based approach. Journal of Fluid Mechanics, 2013, 719, 183-202.	3.4	81
48	A Theoretical Approach for Passive Control of Thermoacoustic Oscillations: Application to Ducted Flames. Journal of Engineering for Gas Turbines and Power, 2013, 135, .	1.1	11
49	A Novel Theoretical Approach to Passive Control of Thermo-Acoustic Oscillations: Application to Ducted Heat Sources. , 2013, , .		0
50	Example of a non-smooth Hopf bifurcation in an aero-elastic system. Mechanics Research Communications, 2012, 40, 26-33.	1.8	7