LuÃ-s Fernando Figueira da Silva

List of Publications by Year
in descending order

49 papers	665 citations	686830 13 h-index	580395 25 g-index
49 all docs	49 docs citations	49 times ranked	395 citing authors

#	Article	IF	Citations
1	Stabilization of an oblique detonation wave by a wedge: a parametric numerical study. Combustion and Flame, 2000, 121, 152-166.	2.8	121
2	Onset of oblique detonation waves: Comparison between experimental and numerical results for hydrogen-air mixtures. Proceedings of the Combustion Institute, 1996, 26, 3023-3031.	0.3	93
3	A comparative experimental study of turbulent non premixed flames stabilized by a bluff-body burner. Experimental Thermal and Fluid Science, 2015, 63, 20-33.	1.5	34
4	Revisited Flamelet Model for Nonpremixed Combustion in Supersonic Turbulent Flows. Combustion and Flame, 1998, 114, 577-584.	2.8	33
5	Lagrangian Mixing Models for Turbulent Combustion: Review and Prospects. Flow, Turbulence and Combustion, 2015, 94, 643-689.	1.4	30
6	Application of the method of manufactured solutions to the verification of a pressure-based finite-volume numerical scheme. Computers and Fluids, 2011, 51, 85-99.	1.3	28
7	Some Specific Aspects of Combustion in Supersonic H2-Air Laminar Mixing Layers. Combustion Science and Technology, 1993, 89, 317-333.	1.2	26
8	Unstructured Adaptive Grid Flow Simulations of Inert and Reactive Gas Mixtures. Journal of Computational Physics, 2000, 160, 522-540.	1.9	24
9	Partially stirred reactor: study of the sensitivity of the Monte-Carlo simulation to the number of stochastic particles with the use of a semi-analytic, steady-state, solution to the pdf equation. Combustion and Flame, 2002, 129, 164-178.	2.8	19
10	Numerical Study of Detonation Stabilization by Finite Length Wedges. AIAA Journal, 2006, 44, 353-361.	1.5	19
11	Influence of synthetic inlet turbulence on the prediction of low Mach number flows. Computers and Fluids, 2015, 106, 135-153.	1.3	17
12	Measurements and modeling of PAH soot precursors in coflow ethylene/air laminar diffusion flames. Fuel, 2019, 236, 452-460.	3.4	17
13	Emissions and Thermodynamic Performance Simulation of an Industrial Gas Turbine. Journal of Propulsion and Power, 2011, 27, 78-93.	1.3	15
14	Numerical study of wedge supported oblique shock wave-oblique detonation wave transitions. Revista Brasileira De Ciencias Mecanicas/Journal of the Brazilian Society of Mechanical Sciences, 2002, 24, 149-157.	0.1	14
15	Numerical study of ignition within hydrogen-air supersonic boundary layers. AIAA Journal, 1993, 31, 884-890.	1.5	13
16	Computational Study of Submerged Air Inlet Performance Improvement Using Vortex Generators. Journal of Aircraft, 2007, 44, 1574-1587.	1.7	12
17	Large Eddy Simulation of Turbulent Premixed Combustion at Moderate DamkÃ¶hler Numbers Stabilized in a High-Speed Flow. Combustion Science and Technology, 2011, 183, 645-664.	1.2	11
18	On the predictability of chemical kinetics for the description of the combustion of simple fuels. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2011, 33, 492-505.	0.8	11

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19	Comparative study of thermal radiation properties models in turbulent non-premixed sooting combustion. Numerical Heat Transfer; Part A: Applications, 2016, 69, 166-179.	1.2	10
20	Soot Pyrometry by Emission Measurements at Different Wavelengths in Laminar Axisymmetric Flames. Combustion Science and Technology, 2022, 194, 1643-1660.	1.2	8
21	Three-wavelength broadband soot pyrometry technique for axisymmetric flames. Optics Letters, 2021, 46, 2654.	1.7	8
22	Stabilization of Supersonic Combustion by a Free Recirculating Bubble: A Numerical Study. AIAA Journal, 1997, 35, 1782-1784.	1.5	7
23	Evaluation of adaptive mesh refinement and coarsening for the computation of compressible flows on unstructured meshes. International Journal for Numerical Methods in Fluids, 2005, 49, 999-1014.	0.9	7
24	Study of stochastic mixing models for combustion in turbulent flows. Proceedings of the Combustion Institute, 2009, 32, 1595-1603.	2.4	7
25	Assessment of a transient homogeneous reactor through in situ adaptive tabulation. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2014, 36, 377-391.	0.8	7
26	Characterization of multi-jet turbulent flames in cross flow using stereo-PIV and OH-PLIF. Fire Safety Journal, 2015, 78, 44-54.	1.4	7
27	Study of the Turbulent Velocity Field in the Near Wake of a Bluff Body. Flow, Turbulence and Combustion, 2016, 97, 715-728.	1.4	7
28	Non-premixed combustion in supersonic turbulent flows - A numerical study for co-flowing H2-air jets. , 1999, , .		6
29	Candle flame soot sizing by planar time-resolved laser-induced incandescence. Scientific Reports, 2020, 10, 11364.	1.6	6
30	The influence of equivalence ratio and SorÃªt effecton the ignition of hydrogen-air mixtures in supersonic boundary layers. Proceedings of the Combustion Institute, 1994, 25, 29-36.	0.3	4
31	Study of the Influence of Aircraft Geometry on the Computed Flowfield During Thrust Reversers Operation. , 2006, , .		4
32	Order of accuracy study of unstructured grid finite volume upwind schemes. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2010, 32, 78-93.	0.8	4
33	Turbulent non-premixed ethanolâ€“air flame experimental study using laser diagnostics. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2013, 35, 177-188.	0.8	4
34	Study of mass consistency LES/FDF techniques for chemically reacting flows. Combustion Theory and Modelling, 2015, 19, 465-494.	1.0	4
35	Computational assessment of methane-air reduced chemical kinetic mechanisms for soot production studies. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2016, 38, 2225-2244.	0.8	4
36	Soot modeling in turbulent diffusion flames: review and prospects. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2021, 43, 1.	0.8	4

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37	Modelling of a turbulent lean premixed combustor using a Reynolds-averaged Navierâ€“Stokes approach. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	3
38	On the development of an unstructured grid solver for inert and reactive high speed flow simulations. Revista Brasileira De Ciencias Mecanicas/Journal of the Brazilian Society of Mechanical Sciences, 1999, 21, 564-579.	0.1	3
39	Boundary layer ignition of hydrogen-air mixtures in supersonic flows. Journal of Thermal Science, 1994, 3, 43-48.	0.9	2
40	On the Non-Equilibrium Behavior of Fuel-Rich Hydrocarbon/Air Combustion Within Perfectly Stirred Reactors. Combustion Science and Technology, 2017, 189, 732-746.	1.2	2
41	Reduced Order Model of Laminar Premixed Inverted Conical Flames. , 2020, , .		2
42	CRFlowLib â€" Chemically Reacting Flow Library. Software Impacts, 2022, 11, 100206.	0.8	2
43	Premixed flame heat release-based optimum global single-step chemistry for H$$_2$$, CH$$_4$$, and C$$_3$$H$$_8$$ mixtures with air. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022, 44, 1.	0.8	2
44	Modelling of pulsating inverted conical flames: a numerical instability analysis. Combustion Theory and Modelling, 0, , 1-29.	1.0	2
45	EXPERIMENTAL STUDY OF A LEAN PREMIXED TURBULENT SWIRLING FLAME STABILIZATION. , 2017, , .		1
46	EXPERIMENTAL STUDY OF THE INFLUENCE OF THE SWIRL NUMBER ON LEAN PREMIXED COMBUSTION REGIMES. , 2018, , .		1
47	Numerical Study of the Subsonic Flow Around NLR7301 Airfoil Using a Non-Linear Turbulence Model. , 2005, , .		0
48	On the admissibility of stencils for first order polynomial reconstruction on three-dimensional unstructured meshes. Computers and Fluids, 2006, 35, 349-352.	1.3	0
49	Experimental study of the influence of the swirl number on lean premixed combustion regimes. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	0