Antonio L SÃ¡nchez

List of Publications by Year
in descending order

61 papers	1,257 citations	471509 17 h-index	377865 34 g-index
61 all docs	61 docs citations	61 times ranked	788 citing authors

#	Article	IF	Citations
1	A three-step reduced mechanism for MILD combustion. Combustion Science and Technology, 2023, 195, 3875-3881.	2.3	0
2	Vortex breakdown in variable-density gaseous swirling jets. Journal of Fluid Mechanics, 2022, 936, .	3.4	7
3	A one-dimensional model for the pulsating flow of cerebrospinal fluid in the spinal canal. Journal of Fluid Mechanics, 2022, 939, .	3.4	9
4	Unexpected performance of systematically derived one-step chemistry in describing rich hydrogen-air pulsating flames. Combustion and Flame, 2022, 241, 112068.	5.2	4
5	Viscoacoustic squeeze-film force on a rigid disk undergoing small axial oscillations. Journal of Fluid Mechanics, 2022, 933, .	3.4	7
6	Numerical description of axisymmetric blue whirls over liquid-fuel pools. Proceedings of the Combustion Institute, 2021, 38, 2041-2048.	3.9	9
7	Stability of laminar flames on upper and lower inclined fuel surfaces. Proceedings of the Combustion Institute, 2021, 38, 4515-4523.	3.9	2
8	Residual streaming flows in buoyancy-driven cross-shore exchange. Journal of Fluid Mechanics, 2021, 920, .	3.4	2
9	Modelling and direct numerical simulation of flow and solute dispersion in the spinal subarachnoid space. Applied Mathematical Modelling, 2021, 94, 516-533.	4.2	9
10	Lubrication analysis of peristaltic motion in non-axisymmetric annular tubes. Journal of Fluid Mechanics, 2021, 921, .	3.4	5
11	Transmantle Pressure Computed from MR Imaging Measurements of Aqueduct Flow and Dimensions. American Journal of Neuroradiology, 2021, 42, 1815-1821.	2.4	3
12	Hysteresis in the Vaporization-Controlled Inertial Regime of Nonpremixed Counterflow Spray Combustion. Combustion Science and Technology, 2020, 192, 433-456.	2.3	3
13	A model for the oscillatory flow in the cerebral aqueduct. Journal of Fluid Mechanics, 2020, 899, .	3.4	9
14	A model for the constant-density boundary layer surrounding fire whirls. Journal of Fluid Mechanics, 2020, 900, .	3.4	5
15	Taylor-diffusion-controlled combustion in ducts. Combustion Theory and Modelling, 2020, 24, 1054-1069.	1.9	6
16	Influences of stoichiometry on steadily propagating triple flames in counterflows. Proceedings of the Combustion Institute, 2019, 37, 1971-1977.	3.9	20
17	Acoustic Response of Near-Equilibrium Diffusion Flames with Large Activation Energies. AIAA Journal, 2019, 57, 2933-2945.	2.6	2
18	A one-step reduced mechanism for near-limit hydrogen combustion with general stoichiometry. Combustion and Flame, 2019, 208, 1-4.	5.2	15

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19	Accuracies of reduced mechanisms for predicting acoustic combustion instabilities. Combustion and Flame, 2019, 209, 405-407.	5.2	6
20	Explanations of influences of differential diffusion on flame-temperature variations in usual and inverse jet flames. Combustion and Flame, 2019, 200, 262-264.	5.2	3
21	Acoustic Response of Near-Equilibrium Diffusion Flames with Large Activation Energies. , 2019, , .		0
22	Subject-Specific Studies of CSF Bulk Flow Patterns in the Spinal Canal: Implications for the Dispersion of Solute Particles in Intrathecal Drug Delivery. American Journal of Neuroradiology, 2019, 40, 1242-1249.	2.4	13
23	Swirling flow induced by jets and plumes. Acta Mechanica, 2019, 230, 2221-2231.	2.1	3
24	Observed dependence of characteristics of liquid-pool fires on swirl magnitude. Combustion and Flame, 2019, 205, 1-6.	5.2	26
25	On the dispersion of a drug delivered intrathecally in the spinal canal. Journal of Fluid Mechanics, 2019, 861, 679-720.	3.4	21
26	Effects of differential diffusion on nonpremixed-flame temperature. Proceedings of the Combustion Institute, 2019, 37, 1757-1766.	3.9	6
27	On the bulk motion of the cerebrospinal fluid in the spinal canal. Journal of Fluid Mechanics, 2018, 841, 203-227.	3.4	40
28	The acoustic response of Burkeâ€"Schumann counterflow flames. Combustion and Flame, 2018, 192, 25-34.	5.2	5
29	On the critical conditions for pool-fire puffing. Combustion and Flame, 2018, 192, 426-438.	5.2	19
30	A novel formulation for unsteady counterflow flames using a thermal-conductivity-weighted coordinate. Combustion Theory and Modelling, 2018, 22, 185-201.	1.9	8
31	Conductive Heating of a Confined Gas. SIAM Journal on Applied Mathematics, 2018, 78, 1913-1930.	1.8	0
32	Aerodynamics of planar counterflowing jets. Journal of Fluid Mechanics, 2017, 821, 1-30.	3.4	16
33	Large-activation-energy analysis of gaseous reacting flow in pipes. Combustion and Flame, 2017, 178, 217-224.	5.2	1
34	Non-Boussinesq stability analysis of natural-convection gaseous flow on inclined hot plates. International Journal of Heat and Mass Transfer, 2017, 109, 949-957.	4.8	4
35	Aerodynamics of axisymmetric counterflowing jets. Combustion and Flame, 2017, 177, 137-143.	5.2	11
36	Thermal explosions in spherical vessels at large Rayleigh numbers. International Journal of Heat and Mass Transfer, 2017, 115, 1042-1053.	4.8	3

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37	The large-activation-energy analysis of extinction of counterflow diffusion flames with non-unity Lewis numbers of the fuel. Combustion and Flame, 2017, 175, 91-106.	5.2	21
38	The slowly reacting mode of combustion of gaseous mixtures in spherical vessels. Part 2: Buoyancy-induced motion and its effect on the explosion limits. Combustion Theory and Modelling, 2016, 20, 1029-1045.	1.9	3
39	Diffusion-flame flickering as a hydrodynamic global mode. Journal of Fluid Mechanics, 2016, 798, 997-1014.	3.4	23
40	The slowly reacting mode of combustion of gaseous mixtures in spherical vessels. Part 1: Transient analysis and explosion limits. Combustion Theory and Modelling, 2016, 20, 1010-1028.	1.9	5
41	A multipurpose reduced chemical-kinetic mechanism for methanol combustion. Combustion Theory and Modelling, 2016, 20, 613-631.	1.9	19
42	Diffusion-flame ignition by shock-wave impingement on a supersonic mixing layer. Journal of Fluid Mechanics, 2015, 784, 74-108.	3.4	30
43	Regimes of Spray Vaporization and Combustion in Counterflow Configurations. Combustion Science and Technology, 2015, 187, 103-131.	2.3	14
44	Ignition, Liftoff, and Extinction of Gaseous Diffusion Flames. Annual Review of Fluid Mechanics, 2015, 47, 293-314.	25.0	53
45	The role of separation of scales in the description of spray combustion. Proceedings of the Combustion Institute, 2015, 35, 1549-1577.	3.9	73
46	Linear theory for the interaction of small-scale turbulence with overdriven detonations. Physics of Fluids, 2014, 26, 116101.	4.0	11
47	Recent advances in understanding of flammability characteristics ofÂhydrogen. Progress in Energy and Combustion Science, 2014, 41, 1-55.	31.2	318
48	The chemistry involved in the third explosion limit of H2â€"O2 mixtures. Combustion and Flame, 2014, 161, 111-117.	5.2	45
49	On the heat transferred to the air surrounding a semi-infinite inclined hot plate. Journal of Fluid Mechanics, 2013, 732, 304-315.	3.4	3
50	Coupling-function formulation for monodisperse spray diffusion flames with infinitely fast chemistry. Fuel Processing Technology, 2013, 107, 81-92.	7.2	11
51	Dynamics of thermal ignition of spray flames in mixing layers. Journal of Fluid Mechanics, 2013, 734, 387-423.	3.4	24
52	One-step reduced kinetics for lean hydrogenâ€"air deflagration. Combustion and Flame, 2009, 156, 985-996.	5.2	68
53	The hydrogenâ€"air burning rate near the lean flammability limit. Combustion Theory and Modelling, 2009, 13, 741-761.	1.9	32
54	Fronts in high-temperature laminar gas jets. Journal of Fluid Mechanics, 2006, 547, 257.	3.4	10

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55	A simple one-step chemistry model for partially premixed hydrocarbon combustion. Combustion and Flame, 2006, 147, 32-38.	5.2	145
56	The quasi-cylindrical description of submerged laminar swirling jets. Physics of Fluids, 2004, 16, 848-851.	4.0	11
57	Heat propagation from a concentrated external energy source in a gas. Journal of Fluid Mechanics, 2003, 491, 379-410.	3.4	15
58	The Coupling of Motion and Conductive Heating of a Gas by Localized Energy Sources. SIAM Journal on Applied Mathematics, 2003, 63, 937-961.	1.8	6
59	Laminar mixing in diluted and undiluted fuel jets upstream from lifted flames. Combustion and Flame, 2002, 128, 199-210.	5.2	14
60	A Tsuji burner in a counterflow. Combustion Theory and Modelling, 0, , 1-17.	1.9	0
61	Aerodynamics of Tsuji Burners with Augmented Fuel Injection. Combustion Science and Technology, 0, , 1-12.	2.3	1