Jean-Louis Consalvi

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Modeling transport and combustion of firebrands from burning trees. Combustion and Flame, 2007, 150, 151-169.	5.2	98
2	Effects of water vapor addition to the air stream on soot formation and flame properties in a laminar coflow ethylene/air diffusion flame. Combustion and Flame, 2014, 161, 1724-1734.	5.2	80
3	Simultaneous soot temperature and volume fraction measurements in axis-symmetric flames by a two-dimensional modulated absorption/emission technique. Combustion and Flame, 2015, 162, 2705-2719.	5.2	69
4	Effects of total pressure on non-grey gas radiation transfer in oxy-fuel combustion using the LBL, SNB, SNBCK, WSGG, and FSCK methods. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 172, 24-35.	2.3	60
5	Experimental and numerical study of the effects of the oxygen index on the radiation characteristics of laminar coflow diffusion flames. Combustion and Flame, 2013, 160, 786-795.	5.2	58
6	Spectral emission of flames from laboratory-scale vegetation fires. International Journal of Wildland Fire, 2009, 18, 875.	2.4	50
7	Calculations of radiative heat transfer in an axisymmetric jet diffusion flame at elevated pressures using different gas radiation models. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 197, 12-25.	2.3	43
8	Dynamics of wildland fires and their impact on structures. Combustion and Flame, 2007, 149, 314-328.	5.2	42
9	Numerical study of soot formation in laminar coflow diffusion flames of methane doped with primary reference fuels. Combustion and Flame, 2015, 162, 1153-1163.	5.2	30
10	Relationship between the spectral line based weighted-sum-of-gray-gases model and the full spectrum k-distribution model. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 143, 111-120.	2.3	29
11	Numerical study of soot formation in laminar coflow methane/air diffusion flames doped by n-heptane/toluene and iso-octane/toluene blends. Combustion and Flame, 2017, 180, 167-174.	5.2	29
12	Soot production modeling in a laminar coflow ethylene diffusion flame at different Oxygen Indices using a PAH-based sectional model. Fuel, 2018, 231, 404-416.	6.4	29
13	Experimental assessment of the sudden-reversal of the oxygen dilution effect on soot production in coflow ethylene flames. Combustion and Flame, 2017, 183, 242-252.	5.2	28
14	Investigation of gas and particle radiation modelling in wet oxy-coal combustion atmospheres. International Journal of Heat and Mass Transfer, 2019, 133, 1026-1040.	4.8	26
15	Influence of water-vapor in oxidizer stream on the sooting behavior for laminar coflow ethylene diffusion flames. Combustion and Flame, 2019, 210, 114-125.	5.2	25
16	Large Eddy Simulation of medium-scale methanol pool fires - effects of pool boundary conditions. Combustion and Flame, 2020, 222, 336-354.	5.2	25
17	The impact of radiative heat transfer in combustion processes and its modeling â€“ with a focus on turbulent flames. Fuel, 2020, 281, 118555.	6.4	25
18	Simulations of sooting turbulent jet flames using a hybrid flamelet/stochastic Eulerian field method. Combustion Theory and Modelling, 2016, 20, 221-257.	1.9	24

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19	Effects of soot inception and condensation PAH species and fuel preheating on soot formation modeling in laminar coflow CH4/air diffusion flames doped with n-heptane/toluene mixtures. Fuel, 2019, 253, 1371-1377.	6.4	24
20	Numerical study of the effects of pressure on soot formation in laminar coflow n-heptane/air diffusion flames between 1 and 10 atm. Proceedings of the Combustion Institute, 2015, 35, 1727-1734.	3.9	23
21	Transported scalar PDF modeling of oxygen-enriched turbulent jet diffusion flames: Soot production and radiative heat transfer. Fuel, 2016, 178, 37-48.	6.4	23
22	Absorption turbulence-radiation interactions in sooting turbulent jet flames. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 201, 1-9.	2.3	22
23	Modeling soot formation in laminar coflow ethylene inverse diffusion flames. Combustion and Flame, 2021, 232, 111513.	5.2	21
24	The Oxygen Index on Soot Production in Propane Diffusion Flames. Combustion Science and Technology, 2014, 186, 504-517.	2.3	20
25	Effects of soot absorption coefficientâ€“Planck function correlation on radiative heat transfer in oxygen-enriched propane turbulent diffusion flame. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 172, 50-57.	2.3	18
26	On the modeling of the filtered radiative transfer equation in large eddy simulations of lab-scale sooting turbulent diffusion flames. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 221, 51-60.	2.3	18
27	Experimental Evaluation of Flame Radiative Feedback: Methodology and Application to Opposed Flame Spread Over Coated Wires in Microgravity. Fire Technology, 2020, 56, 185-207.	3.0	18
28	Effects of pressure on soot formation in laminar coflow methane/air diffusion flames doped with n-heptane and toluene between 2 and 8 atm. Proceedings of the Combustion Institute, 2021, 38, 1403-1412.	3.9	17
29	Soot Production and Radiative Heat Transfer in Opposed Flame Spread over a Polyethylene Insulated Wire in Microgravity. Fire Technology, 2020, 56, 287-314.	3.0	15
30	Modelling thermal radiation in buoyant turbulent diffusion flames. Combustion Theory and Modelling, 2012, 16, 817-841.	1.9	14
31	Soot emission radiationâ€“turbulence interactions in diffusion jet flames. Combustion Science and Technology, 2019, 191, 126-136.	2.3	14
32	Assessment of subfilter-scale turbulence-radiation interaction in non-luminous pool fires. Proceedings of the Combustion Institute, 2021, 38, 4927-4934.	3.9	14
33	Pressure effects on radiative heat transfer in hydrogen/air turbulent diffusion flames. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 220, 172-179.	2.3	13
34	DYNAMIC AND RADIATIVE ASPECTS OF FIREâ€“WATER MIST INTERACTIONS. Combustion Science and Technology, 2004, 176, 721-752.	2.3	12
35	A BLOCKED-OFF-REGION STRATEGY TO COMPUTE FIRE-SPREAD SCENARIOS INVOLVING INTERNAL FLAMMABLE TARGETS. Numerical Heat Transfer, Part B: Fundamentals, 2005, 47, 419-441.	0.9	12
36	A theoretical and numerical evaluation of the steady-state burning rate of vertically oriented PMMA slabs. Combustion Theory and Modelling, 2008, 12, 451-475.	1.9	12

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37	Probing the local radiative quenching during the transition from a non-smoking to a smoking laminar coflow ethylene/air non-premixed flame. Combustion and Flame, 2019, 203, 120-129.	5.2	12
38	Radiative Heat Transfer Through the Fuel-Rich Core of Laboratory-Scale Pool Fires. Combustion Science and Technology, 2014, 186, 475-489.	2.3	11
39	Modeling of large-scale under-expanded hydrogen jet fires. Proceedings of the Combustion Institute, 2019, 37, 3943-3950.	3.9	11
40	Stochastic Eulerian field method for radiative heat transfer in a propane oxygen-enhanced turbulent diffusion flame. Combustion Theory and Modelling, 2017, 21, 62-78.	1.9	10
41	Influence of gas radiative property models on Large Eddy Simulation of 1 m methanol pool fires. Combustion and Flame, 2020, 221, 352-363.	5.2	10
42	Pressure effects on radiative heat transfer in sooting turbulent diffusion flames. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 245, 106906.	2.3	10
43	A database of narrow-band parameters for fuels commonly encountered in fire applications. Fire Safety Journal, 2015, 78, 202-218.	3.1	9
44	Verification and validation of a variableâ€"density solver for fire safety applications. Numerical Heat Transfer, Part B: Fundamentals, 2019, 76, 107-129.	0.9	9
45	Effects of the K-value solution schemes on radiation heat transfer modelling in oxy-fuel flames using the full-spectrum correlated K-distribution method. Applied Thermal Engineering, 2020, 170, 114986.	6.0	9
46	Local contributions of resolved and subgrid turbulence-radiation interaction in LES/presumed FDF modelling of large-scale methanol pool fires. International Journal of Heat and Mass Transfer, 2022, 190, 122746.	4.8	9
47	A calibrated soot production model for ethylene inverse diffusion flames at different Oxygen Indexes. Fuel, 2018, 212, 1-11.	6.4	8
48	On the effects of opposed flow conditions on non-buoyant flames spreading over polyethylene-coated wires â€" Part I: Spread rate and soot production. Combustion and Flame, 2020, 221, 530-543.	5.2	8
49	Pressure effects on the soot production and radiative heat transfer of non-buoyant laminar diffusion flames spreading in opposed flow over insulated wires. Combustion and Flame, 2020, 222, 383-391.	5.2	7
50	Effects of oxygen depletion on soot production, emission and radiative heat transfer in opposed-flow flame spreading over insulated wire in microgravity. Combustion and Flame, 2021, 230, 111447.	5.2	7
51	ACCURACY OF ENGINEERING METHODS FOR RADIATIVE TRANSFER IN CO2-H2O MIXTURES AT HIGH TEMPERATURE. , 2019, , .		7
52	Numerical simulations of microgravity ethylene/air laminar boundary layer diffusion flames. Combustion and Flame, 2018, 191, 99-108.	5.2	6
53	On the effects of opposed flow conditions on non-buoyant flames spreading over polyethylene-coated wires â€" Part II: Soot oxidation quenching and smoke release. Combustion and Flame, 2020, 221, 544-551.	5.2	6
54	Fire safety in spacecraft: Past incidents and Deep Space challenges. Acta Astronautica, 2022, 195, 344-354.	3.2	6

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55	Exploring subgrid-scale variance models in LES of lab-scale methane fire plumes. Combustion Theory and Modelling, 2021, 25, 44-72.	1.9	5
56	Experimental assessment of the sudden-reversal of the oxygen dilution effect on soot production in coflow ethylene flames II: soot radiation and flame transition analysis. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 255, 107261.	2.3	3
57	Modelling extinction/re-ignition processes in fire plumes under oxygen-diluted conditions using flamelet tabulation approaches. Combustion Theory and Modelling, 2022, 26, 613-636.	1.9	3
58	Large-eddy simulation of lab-scale ethylene buoyant diffusion flames: Effects of subgrid turbulence/soot production interaction and radiation models. Proceedings of the Combustion Institute, 2023, 39, 3959-3968.	3.9	3
59	On the influence of the correlation between enthalpy defect and mixture fraction in sooting turbulent jet flames. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 184, 68-75.	2.3	2
60	Modelling emission turbulence-radiation interaction by using a hybrid flamelet/stochastic Eulerian field method. AIP Conference Proceedings, 2017, , .	0.4	0