

Shankar Mahalingam

List of Publications by Year in descending order

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54
papers

1,222
citations

393982

19
h-index

395343

33
g-index

55
all docs

55
docs citations

55
times ranked

957
citing authors

#	ARTICLE	IF	CITATIONS
1	Fire spread in chaparral "go or no-go?". International Journal of Wildland Fire, 2005, 14, 99.	1.0	113
2	Particle size distributions from laboratory-scale biomass fires using fast response instruments. Atmospheric Chemistry and Physics, 2010, 10, 8065-8076.	1.9	86
3	Modeling of marginal burning state of fire spread in live chaparral shrub fuel bed. Combustion and Flame, 2005, 143, 183-198.	2.8	74
4	Effect of hydrogen addition on criteria and greenhouse gas emissions for a marine diesel engine. International Journal of Hydrogen Energy, 2014, 39, 11336-11345.	3.8	63
5	Finite-rate chemistry and transient effects in direct numerical simulations of turbulent nonpremixed flames. Combustion and Flame, 1995, 102, 285-297.	2.8	61
6	Infrared Imagery of Crown-Fire Dynamics during FROSTFIRE. Journal of Applied Meteorology and Climatology, 2004, 43, 1241-1259.	1.7	59
7	Influence of Connection Geometry and SVC-IVC Flow Rate Ratio on Flow Structures within the Total Cavopulmonary Connection: A Numerical Study. Journal of Biomechanical Engineering, 2002, 124, 364-377.	0.6	52
8	Experimental study and large eddy simulation of effect of terrain slope on marginal burning in shrub fuel beds. Proceedings of the Combustion Institute, 2007, 31, 2547-2555.	2.4	47
9	Comparison of burning characteristics of live and dead chaparral fuels. Combustion and Flame, 2006, 144, 349-359.	2.8	42
10	Experimental measurements and numerical modeling of marginal burning in live chaparral fuel beds. Proceedings of the Combustion Institute, 2005, 30, 2287-2294.	2.4	37
11	A numerical investigation of the influence of radiation and moisture content on pyrolysis and ignition of a leaf-like fuel element. Combustion and Flame, 2016, 163, 301-316.	2.8	34
12	Numerical modeling of multi-component fuel spray evaporation process. International Journal of Heat and Mass Transfer, 2014, 69, 44-53.	2.5	32
13	Fire spread in chaparral " a comparison of laboratory data and model predictions in burning live fuels. International Journal of Wildland Fire, 2016, 25, 980.	1.0	30
14	An Investigation of Crown Fuel Bulk Density Effects on the Dynamics of Crown Fire Initiation in Shrublands. Combustion Science and Technology, 2008, 180, 593-615.	1.2	28
15	Comparison of In Vitro Velocity Measurements in a Scaled Total Cavopulmonary Connection with Computational Predictions. Annals of Biomedical Engineering, 2003, 31, 810-822.	1.3	26
16	Effects of distribution of bulk density and moisture content on shrub fires. International Journal of Wildland Fire, 2013, 22, 625.	1.0	26
17	Classification of Absolute and Convective Instabilities in Premixed Bluff Body Stabilized Flames. Combustion Science and Technology, 1996, 112, 257-269.	1.2	25
18	The Role of Moisture on Combustion of Pyrolysis Gases in Wildland Fires. Combustion Science and Technology, 2013, 185, 435-453.	1.2	23

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19	Self-similar diffusion flame. <i>Combustion and Flame</i> , 1990, 82, 231-234.	2.8	21
20	Experimental modelling of crown fire initiation in open and closed shrubland systems. <i>International Journal of Wildland Fire</i> , 2014, 23, 451.	1.0	21
21	An investigation of pyrolysis and ignition of moist leaf-like fuel subject to convective heating. <i>Combustion and Flame</i> , 2018, 190, 25-35.	2.8	21
22	Modeling of water evaporation from a shrinking moist biomass slab subject to heating: Arrhenius approach versus equilibrium approach. <i>International Journal of Heat and Mass Transfer</i> , 2019, 145, 118672.	2.5	21
23	Fluid Dynamic Structures in a Fire Environment Observed in Laboratory-Scale Experiments. <i>Combustion Science and Technology</i> , 2010, 182, 858-878.	1.2	18
24	Physics-Based Modeling of Live Wildland Fuel Ignition Experiments in the Forced Ignition and Flame Spread Test Apparatus. <i>Combustion Science and Technology</i> , 2017, 189, 1551-1570.	1.2	18
25	Assessment of Conditional Moment Closure for Single and Multistep Chemistry. <i>Combustion Science and Technology</i> , 1996, 112, 301-326.	1.2	16
26	Thermal particle image velocity estimation of fire plume flow. <i>Combustion Science and Technology</i> , 2003, 175, 1293-1316.	1.2	16
27	Experimental and Numerical Modeling of Shrub Crown Fire Initiation. <i>Combustion Science and Technology</i> , 2009, 181, 618-640.	1.2	16
28	Structure of nonpremixed reaction zones in numerical isotropic turbulence. <i>Theoretical and Computational Fluid Dynamics</i> , 1996, 8, 201-218.	0.9	15
29	Fire behavior in chaparral—Evaluating flame models with laboratory data. <i>Combustion and Flame</i> , 2018, 191, 500-512.	2.8	15
30	Computational investigation of flame characteristics of a non-propagating shrub fire. <i>Fire Safety Journal</i> , 2016, 81, 64-73.	1.4	14
31	A computational study of burning of vertically oriented leaves with various fuel moisture contents by upward convective heating. <i>Fuel</i> , 2020, 276, 118030.	3.4	14
32	A flame surface density based model for large eddy simulation of turbulent nonpremixed combustion. <i>Physics of Fluids</i> , 2002, 14, L77-L80.	1.6	13
33	Analysis and numerical simulation of a nonpremixed flame in a corner. <i>Combustion and Flame</i> , 1999, 118, 221-232.	2.8	12
34	Experimental investigation of fire propagation in single live shrubs. <i>International Journal of Wildland Fire</i> , 2017, 26, 58.	1.0	12
35	Direct numerical simulation of acoustic/shear flow interactions in two-dimensional ducts. <i>AIAA Journal</i> , 1996, 34, 237-243.	1.5	10
36	An Investigation of the Influence of Heating Modes on Ignition and Pyrolysis of Woody Wildland Fuel. <i>Combustion Science and Technology</i> , 2015, 187, 780-796.	1.2	10

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37	A two-dimensional planar computational investigation of flame broadening in confined non-premixed jets. <i>Combustion and Flame</i> , 1999, 118, 233-247.	2.8	9
38	A suitable mixture fraction for diffusion flames of wood pyrolysis gas. <i>Combustion and Flame</i> , 2003, 133, 197-199.	2.8	9
39	An accurate method to implement boundary conditions for reacting flows based on characteristic wave analysis. <i>Combustion Theory and Modelling</i> , 2003, 7, 705-729.	1.0	9
40	Dispersion and deposition of firebrands in a turbulent boundary layer. <i>International Journal of Multiphase Flow</i> , 2018, 109, 98-113.	1.6	8
41	Performance of reduced reaction mechanisms in unsteady nonpremixed flame simulations. <i>Combustion Theory and Modelling</i> , 2003, 7, 365-382.	1.0	6
42	Assessment of a flame surface density-based subgrid turbulent combustion model for nonpremixed flames of wood pyrolysis gas. <i>Physics of Fluids</i> , 2004, 16, 3795-3807.	1.6	6
43	Interactions of fires of neighbouring shrubs in two- and three-shrub arrangements. <i>International Journal of Wildland Fire</i> , 2015, 24, 624.	1.0	6
44	Fire behavior in multiple burning shrubs separated horizontally and vertically. <i>Fire Safety Journal</i> , 2020, 118, 103236.	1.4	6
45	Modeling of multi-component droplet coalescence in evaporating and non-evaporating diesel fuel sprays. <i>International Journal of Automotive Technology</i> , 2014, 15, 1091-1100.	0.7	5
46	A computational study of the interactions of three adjacent burning shrubs subjected to wind. <i>Fire Safety Journal</i> , 2017, 91, 749-757.	1.4	5
47	Laboratory and numerical modeling of the formation of superfog from wildland fires. <i>Fire Safety Journal</i> , 2019, 106, 94-104.	1.4	5
48	EXHAUST GAS RECIRCULATION EFFECTS ON HYDROGEN-AIR COMBUSTION. <i>Combustion Science and Technology</i> , 2007, 179, 1131-1157.	1.2	3
49	Numerical solution of the viscous stability equations for low-speed reacting flows. <i>International Journal for Numerical Methods in Fluids</i> , 1992, 15, 729-741.	0.9	2
50	CONCENTRATION FLUCTUATION MEASUREMENTS IN REACTING FLOWS. <i>Annals of the New York Academy of Sciences</i> , 1983, 404, 351-353.	1.8	1
51	Self-Similar Diffusion Flame Including Effects of Streamwise Diffusion. <i>Combustion Science and Technology</i> , 1993, 89, 363-373.	1.2	1
52	Effects of active forcing on non-premixed combustion in coflowing jets. , 1996, , .		0
53	Effects of shear and strain on temporal evolution of laminar diffusion flames. <i>AAIA Journal</i> , 1996, 34, 89-95.	1.5	0
54	Effects of Crown Fuel Bulk Density Distribution and Thermophoresis of Soot Particles on Wildland Fires. , 2011, , .		0