Suresh K Aggarwal

List of Publications by Year
in descending order

87 papers	2,200 citations	218677 26 h-index	243625 44 g-index
91 all docs	91 docs citations	91 times ranked	1279 citing authors

#	Article	IF	Citations
1	Effect of Oxygenation on the Liftoff, Stabilization, and Blowout Characteristics of Laminar Co-flow Jet Flames. Green Energy and Technology, 2022, , 273-289.	0.6	0
2	Numerical analysis of soot emissions from gasoline-ethanol and gasoline-butanol blends under gasoline compression ignition conditions. Fuel, 2022, 319, 123740.	6.4	10
3	Numerical Study of PAHs and Soot Emissions from Gasolineâ€“Methanol, Gasolineâ€“Ethanol, and Gasolineâ€“<i>n</i>-Butanol Blend Surrogates. Energy & Fuels, 2022, 36, 7052-7064.	5.1	6
4	Soot emission reduction in oxygenated co-flow jet flames. Proceedings of the Combustion Institute, 2021, 38, 2533-2541.	3.9	4
5	Numerical Analysis of Fuel Effects on Advanced Compression Ignition Using a Cooperative Fuel Research Engine Computational Fluid Dynamics Model. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	2.3	13
6	Numerical simulation of DPF thermal regeneration process based on an improved dynamic model. International Journal of Green Energy, 2020, 17, 723-729.	3.8	3
7	Effects of fuel composition and octane sensitivity on polycyclic aromatic hydrocarbon and soot emissions of gasolineâ€“ethanol blend surrogates. Combustion and Flame, 2020, 221, 476-486.	5.2	18
8	An experimental-computational study of DPF soot capture and heat regeneration. International Journal of Green Energy, 2020, 17, 301-308.	3.8	10
9	On Soot Reduction Using Oxygenated Combustion in Counterflow Diffusion Flames. Green Energy and Technology, 2020, , 235-261.	0.6	1
10	Polycyclic Aromatic Hydrocarbons and Soot Emissions in Oxygenated Ethylene Diffusion Flames at Elevated Pressures. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	4
11	Numerical Investigation of a Central Fuel Property Hypothesis Under Boosted Spark-Ignition Conditions. , 2019, , .		2
12	Compositional effects on the ignition and combustion of low octane fuels under diesel conditions. Fuel, 2018, 220, 654-670.	6.4	20
13	On the Effects of Oxygen-Enrichment on Flame Liftoff, Stabilization, and Blowout in Ethylene Flames. , 2018, , .		1
14	Effect of Fuel Sensitivity on PAH Emissions in Low-Octane Naphtha Partially Premixed Flames.. , 2018, , .		3
15	Effect of Oxygenation on PAHs And Soot Emissions in Coflow Jet Flames. , 2018, , .		0
16	Liftoff and blowout characteristics of laminar syngas nonpremixed flames. International Journal of Hydrogen Energy, 2018, 43, 6421-6433.	7.1	10
17	Effects of oxygen-enrichment and fuel unsaturation on soot and NO emissions in ethylene, propane, and propene flames. Combustion and Flame, 2018, 187, 217-229.	5.2	46
18	Design of a Compact Heat Exchanger in a Methanation Plant for Renewable Energy Storage. Applied Thermal Engineering, 2018, 129, 747-760.	6.0	7

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19	Effects of Fuel Unsaturation on Transient Ignition and Flame Development in Sprays. Combustion Science and Technology, 2018, 190, 136-156.	2.3	1
20	Effect of Fuel Unsaturation on Emissions in Flames and Diesel Engines. Green Energy and Technology, 2018, , 51-76.	0.6	1
21	A numerical study of NOx and soot emissions in methane/n-heptane triple flames. Renewable Energy, 2018, 126, 844-854.	8.9	10
22	Effects of Stretch and Preferential Diffusion in Laminar Syngas Premixed Flames. Journal of Energy Engineering - ASCE, 2017, 143, .	1.9	2
23	Performance and Emission Investigations of Jatropha and Karanja Biodiesels in a Single-Cylinder Compression-Ignition Engine Using Endoscopic Imaging. Journal of Energy Resources Technology, Transactions of the ASME, 2016, 138, .	2.3	17
24	Effects of fuel reactivity and injection timing on diesel engine combustion and emissions. International Journal of Green Energy, 2016, 13, 431-445.	3.8	13
25	Two-stage ignition and NTC phenomenon in diesel engines. Fuel, 2015, 144, 188-196.	6.4	49
26	Extinction of laminar diffusion flames burning theÂanodic syngas fuel from solid oxide fuel cell. International Journal of Hydrogen Energy, 2015, 40, 7214-7230.	7.1	3
27	Fuel unsaturation effects on NOx and PAH formation in spray flames. Fuel, 2015, 160, 1-15.	6.4	12
28	Using Petroleum and Biomass-Derived Fuels in Duel-fuel Diesel Engines. , 2014, , 243-276.		0
29	A numerical investigation on the ignition of JP-8 surrogates blended with hydrogen and syngas. International Journal of Advances in Engineering Sciences and Applied Mathematics, 2014, 6, 49-64.	1.1	6
30	Single droplet ignition: Theoretical analyses and experimental findings. Progress in Energy and Combustion Science, 2014, 45, 79-107.	31.2	75
31	Effect of Fuel Molecular Structure and Premixing on Soot Emissions from <i>n</i>-Heptane and 1-Heptene Flames. Energy & Fuels, 2013, 27, 6262-6272.	5.1	27
32	Experimental Investigation on the Oxidation Characteristics of Diesel Particulates Relevant to DPF Regeneration. Combustion Science and Technology, 2013, 185, 95-121.	2.3	32
33	Effect of hydrogen and syngas addition on the ignition of iso-octane/air mixtures. International Journal of Hydrogen Energy, 2013, 38, 4163-4176.	7.1	31
34	Biogas Combustion in Premixed Flames or Electrochemical Oxidation in SOFC: Exergy and Emission Comparison. Journal of Energy Resources Technology, Transactions of the ASME, 2013, 135, .	2.3	3
35	Simulations of combustion and emissions characteristics of biomass-derived fuels. Sustainable Energy Developments, 2013, , 5-33.	0.3	1
36	NOx and PAH Emissions from n-Heptane and 1-Heptene Partially Premixed Flames. , 2012, , .		1

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37	Evaluation of chemical-kinetics models for n-heptane combustion using a multidimensional CFD code. Fuel, 2012, 93, 339-350.	6.4	31
38	Measurements of Heat Release of Diesel PM for Advanced Thermal Management Strategies for DPF Regeneration. Combustion Science and Technology, 2011, 183, 1328-1341.	2.3	13
39	Effect of nozzle orifice geometry on spray, combustion, and emission characteristics under diesel engine conditions. Fuel, 2011, 90, 1267-1276.	6.4	261
40	Ignition of Methane-Hydrogen Mixtures at High Pressure. , 2010, , .		0
41	Quantitative X-ray measurements of high-pressure fuel sprays from a production heavy duty diesel injector. Experiments in Fluids, 2009, 47, 119-134.	2.4	37
42	Extinction of laminar partially premixed flames. Progress in Energy and Combustion Science, 2009, 35, 528-570.	31.2	70
43	Structure of Unsteady Partially Premixed Flames and the Existence of State Relationships. International Journal of Spray and Combustion Dynamics, 2009, 1, 339-363.	1.0	2
44	Effect of Strain Rate and Pressure on the Flame Structure and Emission Characteristics of Syngas Flames. , 2007, , 829.		0
45	Characteristics of Propagating H2-Enriched CH4-Air Flames. , 2007, , .		0
46	A Review of Flame Extinction Phenomena from the Perspective of Fire Suppression. , 2007, , .		0
47	Partially-Premixed Flames: Applications and Issues. , 2007, , .		0
48	A NUMERICAL INVESTIGATION OF METHANE AIR PARTIALLY PREMIXED FLAMES AT ELEVATED PRESSURES. Combustion Science and Technology, 2007, 179, 1085-1112.	2.3	8
49	THE INFLUENCE OF REAL-GAS THERMODYNAMICS ON SIMULATIONS OF FREELY PROPAGATING FLAMES IN METHANE/OXYGEN/INERT MIXTURES. Combustion Science and Technology, 2007, 179, 1777-1795.	2.3	12
50	Effect of multistage combustion on NOx emissions in methaneâ€"air flames. Combustion and Flame, 2007, 149, 448-462.	5.2	27
51	A Numerical Investigation Of Flame LiftOff And Stabilization. , 2006, , .		0
52	NOx emission characteristics of counterflow syngas diffusion flames with airstream dilution. Fuel, 2006, 85, 1729-1742.	6.4	151
53	An experimental and numerical investigation of n-heptane/air counterflow partially premixed flames and emission of NOx and PAH species. Combustion and Flame, 2006, 145, 740-764.	5.2	84
54	A High-Pressure Droplet Model for Spray Simulations. Journal of Engineering for Gas Turbines and Power, 2006, 128, 482.	1.1	14

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55	A numerical investigation of flame liftoff, stabilization, and blowout. Physics of Fluids, 2006, 18, 043603.	4.0	54
56	Structure of partially premixed n-heptaneâ€“air counterflow flames. Proceedings of the Combustion Institute, 2005, 30, 447-453.	3.9	26
57	Gravity effects on partially premixed flames: an experimental-numerical investigation. Proceedings of the Combustion Institute, 2005, 30, 511-518.	3.9	9
58	Liftoff characteristics of partially premixed flames under normal and microgravity conditions. Combustion and Flame, 2005, 143, 159-173.	5.2	52
59	Effect of pressure on counterflow H2â€“air partially premixed flames. Combustion and Flame, 2005, 140, 46-59.	5.2	18
60	A numerical study of H?air partially premixed flames. International Journal of Hydrogen Energy, 2005, 30, 327-339.	7.1	11
61	Partially Premixed Flames and Fire Safety in Space: A Review. , 2005, , .		0
62	Gravity, radiation, and coflow effects on partially premixed flames. Physics of Fluids, 2004, 16, 2963-2974.	4.0	31
63	Fuel effects on NOx emissions in partially premixed flames. Combustion and Flame, 2004, 139, 90-105.	5.2	122
64	EFFECT OF FUEL BLENDS ON POLLUTANT EMISSIONS IN FLAMES. Combustion Science and Technology, 2004, 177, 183-220.	2.3	37
65	Triple flame propagation and stabilization in a laminar axisymmetric jet. Combustion Theory and Modelling, 2004, 8, 293-314.	1.9	38
66	Investigation of n-Heptane/Air Partially Premixed Flames Using Detailed Reaction Mechanisms. , 2004, , .		0
67	Fuel Effects on NOx Emissions in Partially Premixed Flames. , 2004, , .		0
68	Lifted Partially Premixed Flames in Microgravity. , 2004, , .		0
69	NOx emissions in n-heptane/air partially premixed flames. Combustion and Flame, 2003, 132, 723-741.	5.2	69
70	Effect of Gravity on Burner-Stabilized and Lifted Partially Premixed Flames. , 2003, , .		1
71	Gravity Effects on Partially Premixed Flames. , 2003, , .		1
72	VISUALIZATION OF SCALAR TRANSPORT IN NONREACTING AND REACTING JETS THROUGH A UNIFIED "HEATLINE" AND "MASSLINE" FORMULATION. Numerical Heat Transfer; Part A: Applications, 2003, 44, 683-704.	2.1	18

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73	Transcritical vaporization of a liquid fuel droplet in a supercritical ambient. Combustion Science and Technology, 2002, 174, 103-130.	2.3	23
74	Structure and Extinction of Heptane/Air Partially Premixed Flames. AIAA Journal, 2002, 40, 2289-2297.	2.6	15
75	Characteristics of lifted triple flames stabilized in the near field of a partially premixed axisymmetric jet. Proceedings of the Combustion Institute, 2002, 29, 1565-1572.	3.9	52
76	A numerical and experimental investigation of â€œinverseâ€• triple flames. Physics of Fluids, 2001, 13, 265-275.	4.0	26
77	On the similitude between lifted and burner-stabilized triple flames: a numerical and experimental investigation. Combustion and Flame, 2001, 124, 311-325.	5.2	34
78	Gas-phase unsteadiness and its influence on droplet vaporization in sub- and super-critical environments. International Journal of Heat and Mass Transfer, 2001, 44, 3081-3093.	4.8	47
79	Effects of C2-Chernistry on the Structure of Partially Premixed Methane-Air Flames. Combustion Science and Technology, 2000, 157, 185-211.	2.3	12
80	The structure of triple flames stabilized on a slot burner. Combustion and Flame, 1999, 119, 23-40.	5.2	87
81	Gravity effects on triple flames: Flame structure and flow instability. Physics of Fluids, 1999, 11, 3449-3464.	4.0	58
82	An experimental and numerical investigation of the structure of steady two-dimensional partially premixed methane-air flames. Proceedings of the Combustion Institute, 1998, 27, 625-632.	0.3	44
83	Flame Structure Interactions and State Relationships in an Unsteady Partially Premixed Flame. AIAA Journal, 1998, 36, 1190-1199.	2.6	26
84	A numerical investigation of the flame structure of an unsteady inverse partially premixed flame. Combustion and Flame, 1997, 111, 296-311.	5.2	29
85	Flame-vortex dynamics in an inverse partially premixed combustor: The Froude number effects. Combustion and Flame, 1997, 111, 276-295.	5.2	87
86	Effect of Wall Conduction on Natural Convection in an Enclosure With a Centered Heat Source. Journal of Electronic Packaging, Transactions of the ASME, 1995, 117, 301-306.	1.8	7
87	Effects of Internal Heat Transfer Models on the Ignition of a Fuel Droplet. Combustion Science and Technology, 1985, 42, 325-334.	2.3	13