

Suresh K Aggarwal

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2245333/publications.pdf>

Version: 2024-02-01

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 nozzle orifice geometry on spray, combustion, and emission characteristics under diesel engine conditions. <i>Fuel</i> , 2011, 90, 1267-1276.	6.4	261
2	NOx emission characteristics of counterflow syngas diffusion flames with airstream dilution. <i>Fuel</i> , 2006, 85, 1729-1742.	6.4	151
3	Fuel effects on NOx emissions in partially premixed flames. <i>Combustion and Flame</i> , 2004, 139, 90-105.	5.2	122
4	Flame-vortex dynamics in an inverse partially premixed combustor: The Froude number effects. <i>Combustion and Flame</i> , 1997, 111, 276-295.	5.2	87
5	The structure of triple flames stabilized on a slot burner. <i>Combustion and Flame</i> , 1999, 119, 23-40.	5.2	87
6	An experimental and numerical investigation of n-heptane/air counterflow partially premixed flames and emission of NOx and PAH species. <i>Combustion and Flame</i> , 2006, 145, 740-764.	5.2	84
7	Single droplet ignition: Theoretical analyses and experimental findings. <i>Progress in Energy and Combustion Science</i> , 2014, 45, 79-107.	31.2	75
8	Extinction of laminar partially premixed flames. <i>Progress in Energy and Combustion Science</i> , 2009, 35, 528-570.	31.2	70
9	NOx emissions in n-heptane/air partially premixed flames. <i>Combustion and Flame</i> , 2003, 132, 723-741.	5.2	69
10	Gravity effects on triple flames: Flame structure and flow instability. <i>Physics of Fluids</i> , 1999, 11, 3449-3464.	4.0	58
11	A numerical investigation of flame liftoff, stabilization, and blowout. <i>Physics of Fluids</i> , 2006, 18, 043603.	4.0	54
12	Characteristics of lifted triple flames stabilized in the near field of a partially premixed axisymmetric jet. <i>Proceedings of the Combustion Institute</i> , 2002, 29, 1565-1572.	3.9	52
13	Liftoff characteristics of partially premixed flames under normal and microgravity conditions. <i>Combustion and Flame</i> , 2005, 143, 159-173.	5.2	52
14	Two-stage ignition and NTC phenomenon in diesel engines. <i>Fuel</i> , 2015, 144, 188-196.	6.4	49
15	Gas-phase unsteadiness and its influence on droplet vaporization in sub- and super-critical environments. <i>International Journal of Heat and Mass Transfer</i> , 2001, 44, 3081-3093.	4.8	47
16	Effects of oxygen-enrichment and fuel unsaturation on soot and NO emissions in ethylene, propane, and propene flames. <i>Combustion and Flame</i> , 2018, 187, 217-229.	5.2	46
17	An experimental and numerical investigation of the structure of steady two-dimensional partially premixed methane-air flames. <i>Proceedings of the Combustion Institute</i> , 1998, 27, 625-632.	0.3	44
18	Triple flame propagation and stabilization in a laminar axisymmetric jet. <i>Combustion Theory and Modelling</i> , 2004, 8, 293-314.	1.9	38

#	ARTICLE	IF	CITATIONS
19	EFFECT OF FUEL BLENDS ON POLLUTANT EMISSIONS IN FLAMES. Combustion Science and Technology, 2004, 177, 183-220.	2.3	37
20	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
21	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
22	Experimental Investigation on the Oxidation Characteristics of Diesel Particulates Relevant to DPF Regeneration. Combustion Science and Technology, 2013, 185, 95-121.	2.3	32
23	Gravity, radiation, and coflow effects on partially premixed flames. Physics of Fluids, 2004, 16, 2963-2974.	4.0	31
24	Evaluation of chemical-kinetics models for n-heptane combustion using a multidimensional CFD code. Fuel, 2012, 93, 339-350.	6.4	31
25	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
26	A numerical investigation of the flame structure of an unsteady inverse partially premixed flame. Combustion and Flame, 1997, 111, 296-311.	5.2	29
27	Effect of multistage combustion on NO _x emissions in methane-air flames. Combustion and Flame, 2007, 149, 448-462.	5.2	27
28	Effect of Fuel Molecular Structure and Premixing on Soot Emissions from n-Heptane and 1-Heptene Flames. Energy & Fuels, 2013, 27, 6262-6272.	5.1	27
29	Flame Structure Interactions and State Relationships in an Unsteady Partially Premixed Flame. AIAA Journal, 1998, 36, 1190-1199.	2.6	26
30	A numerical and experimental investigation of inverse triple flames. Physics of Fluids, 2001, 13, 265-275.	4.0	26
31	Structure of partially premixed n-heptane-air counterflow flames. Proceedings of the Combustion Institute, 2005, 30, 447-453.	3.9	26
32	Transcritical vaporization of a liquid fuel droplet in a supercritical ambient. Combustion Science and Technology, 2002, 174, 103-130.	2.3	23
33	Compositional effects on the ignition and combustion of low octane fuels under diesel conditions. Fuel, 2018, 220, 654-670.	6.4	20
34	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
35	Effect of pressure on counterflow H ₂ -air partially premixed flames. Combustion and Flame, 2005, 140, 46-59.	5.2	18
36	Effects of fuel composition and octane sensitivity on polycyclic aromatic hydrocarbon and soot emissions of gasoline-ethanol blend surrogates. Combustion and Flame, 2020, 221, 476-486.	5.2	18

#	ARTICLE	IF	CITATIONS
37	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
38	Structure and Extinction of Heptane/Air Partially Premixed Flames. AIAA Journal, 2002, 40, 2289-2297.	2.6	15
39	A High-Pressure Droplet Model for Spray Simulations. Journal of Engineering for Gas Turbines and Power, 2006, 128, 482.	1.1	14
40	Effects of Internal Heat Transfer Models on the Ignition of a Fuel Droplet. Combustion Science and Technology, 1985, 42, 325-334.	2.3	13
41	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
42	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
43	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
44	Effects of C ₂ -Chemistry on the Structure of Partially Premixed Methane-Air Flames. Combustion Science and Technology, 2000, 157, 185-211.	2.3	12
45	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
46	Fuel unsaturation effects on NO _x and PAH formation in spray flames. Fuel, 2015, 160, 1-15.	6.4	12
47	A numerical study of H ₂ /air partially premixed flames. International Journal of Hydrogen Energy, 2005, 30, 327-339.	7.1	11
48	Liftoff and blowout characteristics of laminar syngas nonpremixed flames. International Journal of Hydrogen Energy, 2018, 43, 6421-6433.	7.1	10
49	A numerical study of NO _x and soot emissions in methane/n-heptane triple flames. Renewable Energy, 2018, 126, 844-854.	8.9	10
50	An experimental-computational study of DPF soot capture and heat regeneration. International Journal of Green Energy, 2020, 17, 301-308.	3.8	10
51	Numerical analysis of soot emissions from gasoline-ethanol and gasoline-butanol blends under gasoline compression ignition conditions. Fuel, 2022, 319, 123740.	6.4	10
52	Gravity effects on partially premixed flames: an experimental-numerical investigation. Proceedings of the Combustion Institute, 2005, 30, 511-518.	3.9	9
53	A NUMERICAL INVESTIGATION OF METHANE AIR PARTIALLY PREMIXED FLAMES AT ELEVATED PRESSURES. Combustion Science and Technology, 2007, 179, 1085-1112.	2.3	8
54	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

#	ARTICLE	IF	CITATIONS
55	Design of a Compact Heat Exchanger in a Methanation Plant for Renewable Energy Storage. Applied Thermal Engineering, 2018, 129, 747-760.	6.0	7
56	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
57	Numerical Study of PAHs and Soot Emissions from Gasolineâ€“Methanol, Gasolineâ€“Ethanol, and Gasolineâ€“n-Butanol Blend Surrogates. Energy & Fuels, 2022, 36, 7052-7064.	5.1	6
58	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
59	Soot emission reduction in oxygenated co-flow jet flames. Proceedings of the Combustion Institute, 2021, 38, 2533-2541.	3.9	4
60	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
61	Extinction of laminar diffusion flames burning the Anodic syngas fuel from solid oxide fuel cell. International Journal of Hydrogen Energy, 2015, 40, 7214-7230.	7.1	3
62	Effect of Fuel Sensitivity on PAH Emissions in Low-Octane Naphtha Partially Premixed Flames.. , 2018, , .		3
63	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
64	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
65	Effects of Stretch and Preferential Diffusion in Laminar Syngas Premixed Flames. Journal of Energy Engineering - ASCE, 2017, 143, .	1.9	2
66	Numerical Investigation of a Central Fuel Property Hypothesis Under Boosted Spark-Ignition Conditions. , 2019, , .		2
67	Effect of Gravity on Burner-Stabilized and Lifted Partially Premixed Flames. , 2003, , .		1
68	Gravity Effects on Partially Premixed Flames. , 2003, , .		1
69	NOx and PAH Emissions from n-Heptane and 1-Heptene Partially Premixed Flames. , 2012, , .		1
70	Simulations of combustion and emissions characteristics of biomass-derived fuels. Sustainable Energy Developments, 2013, , 5-33.	0.3	1
71	On the Effects of Oxygen-Enrichment on Flame Liftoff, Stabilization, and Blowout in Ethylene Flames. , 2018, , .		1
72	Effects of Fuel Unsaturation on Transient Ignition and Flame Development in Sprays. Combustion Science and Technology, 2018, 190, 136-156.	2.3	1

#	ARTICLE	IF	CITATIONS
73	Effect of Fuel Unsaturation on Emissions in Flames and Diesel Engines. Green Energy and Technology, 2018, , 51-76.	0.6	1
74	On Soot Reduction Using Oxygenated Combustion in Counterflow Diffusion Flames. Green Energy and Technology, 2020, , 235-261.	0.6	1
75	Investigation of n-Heptane/Air Partially Premixed Flames Using Detailed Reaction Mechanisms. , 2004, , .		0
76	Fuel Effects on NOx Emissions in Partially Premixed Flames. , 2004, , .		0
77	Lifted Partially Premixed Flames in Microgravity. , 2004, , .		0
78	Partially Premixed Flames and Fire Safety in Space: A Review. , 2005, , .		0
79	A Numerical Investigation Of Flame LiftOff And Stabilization. , 2006, , .		0
80	Effect of Strain Rate and Pressure on the Flame Structure and Emission Characteristics of Syngas Flames. , 2007, , 829.		0
81	Characteristics of Propagating H2-Enriched CH4-Air Flames. , 2007, , .		0
82	A Review of Flame Extinction Phenomena from the Perspective of Fire Suppression. , 2007, , .		0
83	Partially-Premixed Flames: Applications and Issues. , 2007, , .		0
84	Ignition of Methane-Hydrogen Mixtures at High Pressure. , 2010, , .		0
85	Using Petroleum and Biomass-Derived Fuels in Dual-fuel Diesel Engines. , 2014, , 243-276.		0
86	Effect of Oxygenation on PAHs And Soot Emissions in Coflow Jet Flames. , 2018, , .		0
87	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