

# Sang Hee Won

## List of Publications by Year in descending order

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Version: 2024-02-01

75  
papers

4,210  
citations

101496

36  
h-index

155592

55  
g-index

75  
all docs

75  
docs citations

75  
times ranked

1732  
citing authors

#	ARTICLE	IF	CITATIONS
1	A jet fuel surrogate formulated by real fuel properties. <i>Combustion and Flame</i> , 2010, 157, 2333-2339.	2.8	484
2	The experimental evaluation of a methodology for surrogate fuel formulation to emulate gas phase combustion kinetic phenomena. <i>Combustion and Flame</i> , 2012, 159, 1444-1466.	2.8	355
3	Flame propagation enhancement by plasma excitation of oxygen. Part I: Effects of O <sub>3</sub> . <i>Combustion and Flame</i> , 2010, 157, 1906-1915.	2.8	272
4	Flame propagation enhancement by plasma excitation of oxygen. Part II: Effects of O <sub>2</sub> (a1 <sup>1</sup> g). <i>Combustion and Flame</i> , 2010, 157, 1916-1928.	2.8	192
5	Kinetic effects of non-equilibrium plasma-assisted methane oxidation on diffusion flame extinction limits. <i>Combustion and Flame</i> , 2012, 159, 221-229.	2.8	157
6	Plasma Assisted Low Temperature Combustion. <i>Plasma Chemistry and Plasma Processing</i> , 2016, 36, 85-105.	1.1	130
7	The combustion kinetics of a synthetic paraffinic jet aviation fuel and a fundamentally formulated, experimentally validated surrogate fuel. <i>Combustion and Flame</i> , 2012, 159, 3014-3020.	2.8	124
8	Dynamics of cool flames. <i>Progress in Energy and Combustion Science</i> , 2019, 75, 100787.	15.8	119
9	Self-sustaining n -heptane cool diffusion flames activated by ozone. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 881-888.	2.4	118
10	Measurements of the critical initiation radius and unsteady propagation of n-decane/air premixed flames. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 929-936.	2.4	109
11	A radical index for the determination of the chemical kinetic contribution to diffusion flame extinction of large hydrocarbon fuels. <i>Combustion and Flame</i> , 2012, 159, 541-551.	2.8	100
12	Direct ignition and S-curve transition by in situ nano-second pulsed discharge in methane/oxygen/helium counterflow flame. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 847-855.	2.4	100
13	The combustion properties of 2,6,10-trimethyl dodecane and a chemical functional group analysis. <i>Combustion and Flame</i> , 2014, 161, 826-834.	2.8	100
14	Effects of non-equilibrium plasma discharge on counterflow diffusion flame extinction. <i>Proceedings of the Combustion Institute</i> , 2011, 33, 3211-3218.	2.4	96
15	Experimental study of the dynamics and structure of self-sustaining premixed cool flames using a counterflow burner. <i>Combustion and Flame</i> , 2016, 166, 125-132.	2.8	87
16	Kinetic effects of toluene blending on the extinction limit of n-decane diffusion flames. <i>Combustion and Flame</i> , 2010, 157, 411-420.	2.8	86
17	A kinetic model for methyl decanoate combustion. <i>Combustion and Flame</i> , 2012, 159, 1793-1805.	2.8	82
18	Kinetic effects of aromatic molecular structures on diffusion flame extinction. <i>Proceedings of the Combustion Institute</i> , 2011, 33, 1163-1170.	2.4	80

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19	The role of low temperature fuel chemistry on turbulent flame propagation. <i>Combustion and Flame</i> , 2014, 161, 475-483.	2.8	80
20	A comparative study of the chemical kinetic characteristics of small methyl esters in diffusion flame extinction. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 821-829.	2.4	78
21	Numerical simulations of premixed cool flames of dimethyl ether/oxygen mixtures. <i>Combustion and Flame</i> , 2015, 162, 3580-3588.	2.8	77
22	In situ plasma activated low temperature chemistry and the S-curve transition in DME/oxygen/helium mixture. <i>Combustion and Flame</i> , 2014, 161, 2054-2063.	2.8	75
23	Schlieren imaging and pulsed detonation engine testing of ignition by a nanosecond repetitively pulsed discharge. <i>Combustion and Flame</i> , 2015, 162, 2496-2507.	2.8	74
24	Reconstruction of chemical structure of real fuel by surrogate formulation based upon combustion property targets. <i>Combustion and Flame</i> , 2017, 183, 39-49.	2.8	72
25	Emulating the Combustion Behavior of Real Jet Aviation Fuels by Surrogate Mixtures of Hydrocarbon Fluid Blends: Implications for Science and Engineering. <i>Energy &amp; Fuels</i> , 2014, 28, 3474-3485.	2.5	70
26	Predicting the global combustion behaviors of petroleum-derived and alternative jet fuels by simple fuel property measurements. <i>Fuel</i> , 2016, 168, 34-46.	3.4	68
27	Stability enhancement of ozone-assisted laminar premixed Bunsen flames in nitrogen co-flow. <i>Combustion and Flame</i> , 2014, 161, 917-926.	2.8	58
28	Study of the low-temperature reactivity of large n-alkanes through cool diffusion flame extinction. <i>Combustion and Flame</i> , 2017, 179, 23-32.	2.8	56
29	Combustion characteristics of C4 iso-alkane oligomers: Experimental characterization of iso-dodecane as a jet fuel surrogate component. <i>Combustion and Flame</i> , 2016, 165, 137-143.	2.8	48
30	A chemical kinetic study of tertiary-butanol in a flow reactor and a counterflow diffusion flame. <i>Combustion and Flame</i> , 2012, 159, 968-978.	2.8	46
31	Importance of a Cycloalkane Functionality in the Oxidation of a Real Fuel. <i>Energy &amp; Fuels</i> , 2014, 28, 7649-7661.	2.5	44
32	Methyl butanoate inhibition of n-heptane diffusion flames through an evaluation of transport and chemical kinetics. <i>Combustion and Flame</i> , 2012, 159, 1371-1384.	2.8	42
33	Preferential vaporization impacts on lean blow-out of liquid fueled combustors. <i>Combustion and Flame</i> , 2019, 205, 295-304.	2.8	42
34	The combustion properties of 1,3,5-trimethylbenzene and a kinetic model. <i>Fuel</i> , 2013, 109, 125-136.	3.4	41
35	Flame structure and ignition limit of partially premixed cool flames in a counterflow burner. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 1513-1522.	2.4	41
36	Multi-scale modeling of dynamics and ignition to flame transitions of high pressure stratified n-heptane/toluene mixtures. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 1049-1056.	2.4	39

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37	Investigating the role of atomization on flame stability of liquid fuels in an annular spray burner. Fuel, 2020, 265, 116945.	3.4	34
38	Uncertainty assessment of species measurements in acetone counterflow diffusion flames. Proceedings of the Combustion Institute, 2013, 34, 813-820.	2.4	33
39	Experimental and numerical characterization of freely propagating ozone-activated dimethyl ether cool flames. Combustion and Flame, 2017, 176, 326-333.	2.8	32
40	Liquid Fuel Property Effects on Lean Blowout in an Aircraft Relevant Combustor. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	0.5	28
41	Study of ignition chemistry on turbulent premixed flames of n-heptane/air by using a reactor assisted turbulent slot burner. Combustion and Flame, 2016, 169, 19-29.	2.8	27
42	Chemical functional group descriptor for ignition propensity of large hydrocarbon liquid fuels. Proceedings of the Combustion Institute, 2019, 37, 5083-5093.	2.4	27
43	Thermo-kinetic dynamics of near-limit cool diffusion flames. Proceedings of the Combustion Institute, 2017, 36, 1329-1337.	2.4	19
44	Lube oil chemistry influences on autoignition as measured in an ignition quality tester. Proceedings of the Combustion Institute, 2019, 37, 4645-4654.	2.4	18
45	Sub-millimeter sized multi-component jet fuel surrogate droplet combustion: Physicochemical preferential vaporization effects. Proceedings of the Combustion Institute, 2021, 38, 3313-3323.	2.4	13
46	Evaluating ignition propensity of high cycloparaffinic content alternative jet fuel by a chemical functional group approach. Combustion and Flame, 2021, 223, 243-253.	2.8	13
47	Development of Reduced Kinetic Models for Petroleum-Derived and Alternative Jet Fuels. , 2014, , .		11
48	Chemistry and transport effects on critical flame initiation radius for alkanes and aromatic fuels. Proceedings of the Combustion Institute, 2017, 36, 1457-1465.	2.4	11
49	Characterization of Global Combustion Properties with Simple Fuel Property Measurements for Alternative Jet Fuels. , 2014, , .		9
50	On the Development of General Surrogate Composition Calculations for Chemical and Physical Properties. , 2017, , .		9
51	Turbulent nonpremixed cool flames: Experimental measurements, Direct Numerical Simulation, and manifold-based combustion modeling. Combustion and Flame, 2019, 209, 144-154.	2.8	9
52	Computational studies of diffusion cool flame structures of n-heptane with/without ozone sensitization with a reduced chemistry. Journal of Mechanical Science and Technology, 2015, 29, 1297-1305.	0.7	8
53	Ozone assisted cool flame combustion of sub-millimeter sized n-alkane droplets at atmospheric and higher pressure. Combustion and Flame, 2018, 195, 220-231.	2.8	8
54	The Impact of Preferential Vaporization on Lean Blowout in a Referee Combustor at Figure of Merit Conditions. , 2018, , .		8

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55	Surrogate fuels and combustion characteristics of liquid transportation fuels. <i>Computer Aided Chemical Engineering</i> , 2019, 45, 513-602.	0.3	7
56	Lean blow-out (LBO) computations in a gas turbine combustor. , 2018, , .		6
57	Computation of conventional and alternative jet fuel sensitivity to lean blowout. <i>Journal of the Energy Institute</i> , 2022, 101, 19-31.	2.7	6
58	Cool Flames Activated by Ozone Addition. , 2015, , .		5
59	Effects of CO2 Addition on the Turbulent Flame Front Dynamics and Propagation Speeds of Methane/Air Mixtures. <i>Journal of Engineering for Gas Turbines and Power</i> , 2019, 141, .	0.5	5
60	Effects of vitiation and pressure on laminar flame speeds of n-decane. , 2012, , .		4
61	Flame Dynamics and Structures of Partially Premixed Cool Flames. , 2016, , .		4
62	Combustion characteristics of crude oils for gas turbine applications by DCN measurements and NMR spectroscopy. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 5463-5473.	2.4	4
63	A New Cool Flame: Establishment and Studies of Dynamics and Kinetics. , 2014, , .		2
64	Corrigendum to "Experimental and Numerical Characterization of Freely Propagating Ozone-Activated Dimethyl Ether Cool Flames" [Combust. Flame (176) 326-333]. <i>Combustion and Flame</i> , 2017, 180, 1.	2.8	2
65	Kinetic Effects of Toluene Blending on n-Decane Diffusion Flame Extinction Limit. , 2009, , .		1
66	Direct Ignition and S-curve Transition by in situ Nano-Second Pulsed Discharge in Methane/Oxygen/Helium Counterflow Flame. , 2012, , .		1
67	Plasma assisted combustion: kinetic studies and new combustion technology. , 2015, , .		1
68	Effect of Low-Temperature Reactivity on the Turbulent Combustion of n-Octane/iso-Octane Mixtures in a Reactor-Assisted Turbulent Slot Burner. , 2017, , .		1
69	Experimental Investigation of the Stabilization and Structure of Turbulent Cool Diffusion Flames. , 2018, , .		1
70	Preferential Vaporization Potential of Jet fuels Evaluated by NMR Spectroscopy. , 2021, , .		1
71	Effects of Non-Equilibrium Plasma on Counterflow Diffusion Flames. , 2010, , .		0
72	Experimental Assessment of Transport and Chemical Kinetic Impacts on Critical Flame Initiation Radius in Outwardly Propagating Premixed Flames. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
73	Effect of Ignition Chemistry on Turbulent Premixed Flames of n-Heptane and Toluene. , 2015, , .		0
74	Effects of n-Alkane Chain Length on Cool Diffusion Flames. , 2017, , .		0
75	Derived Cetane Number As Chemical Potential Indicator for Near-Limit Combustion Behaviors in Gas Turbine Applications. , 2018, , .		0