

# Chih-Jen Sung

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

176 papers	8,242 citations	51 h-index	88 g-index
190 ext. papers	9,485 ext. citations	5.3 avg, IF	6.34 L-index

#	Paper	IF	Citations
176	An experimental and detailed chemical kinetic modeling study of hydrogen and syngas mixture oxidation at elevated pressures. <i>Combustion and Flame</i> , <b>2013</b> , 160, 995-1011	5.3	430
175	Structure, aerodynamics, and geometry of premixed flamelets. <i>Progress in Energy and Combustion Science</i> , <b>2000</b> , 26, 459-505	33.6	411
174	A jet fuel surrogate formulated by real fuel properties. <i>Combustion and Flame</i> , <b>2010</b> , 157, 2333-2339	5.3	407
173	The experimental evaluation of a methodology for surrogate fuel formulation to emulate gas phase combustion kinetic phenomena. <i>Combustion and Flame</i> , <b>2012</b> , 159, 1444-1466	5.3	298
172	Skeletal mechanism generation for surrogate fuels using directed relation graph with error propagation and sensitivity analysis. <i>Combustion and Flame</i> , <b>2010</b> , 157, 1760-1770	5.3	227
171	A comprehensive experimental and modeling study of isobutene oxidation. <i>Combustion and Flame</i> , <b>2016</b> , 167, 353-379	5.3	220
170	An experimental and modeling study of propene oxidation. Part 2: Ignition delay time and flame speed measurements. <i>Combustion and Flame</i> , <b>2015</b> , 162, 296-314	5.3	213
169	Using rapid compression machines for chemical kinetics studies. <i>Progress in Energy and Combustion Science</i> , <b>2014</b> , 44, 1-18	33.6	164
168	A RAPID COMPRESSION MACHINE FOR CHEMICAL KINETICS STUDIES AT ELEVATED PRESSURES AND TEMPERATURES. <i>Combustion Science and Technology</i> , <b>2007</b> , 179, 497-530	1.5	161
167	Aerodynamics inside a rapid compression machine. <i>Combustion and Flame</i> , <b>2006</b> , 145, 160-180	5.3	145
166	Laminar Flame Speeds of Preheated iso-Octane/O <sub>2</sub> /N <sub>2</sub> and n-Heptane/O <sub>2</sub> /N <sub>2</sub> Mixtures. <i>Journal of Propulsion and Power</i> , <b>2007</b> , 23, 428-436	1.8	144
165	Laminar flame speeds and extinction limits of preheated n-decane/O <sub>2</sub> /N <sub>2</sub> and n-dodecane/O <sub>2</sub> /N <sub>2</sub> mixtures. <i>Combustion and Flame</i> , <b>2007</b> , 151, 209-224	5.3	140
164	Autoignition of n-butanol at elevated pressure and low-to-intermediate temperature. <i>Combustion and Flame</i> , <b>2011</b> , 158, 809-819	5.3	139
163	Compositional effects on the ignition of FACE gasolines. <i>Combustion and Flame</i> , <b>2016</b> , 169, 171-193	5.3	139
162	Experimental studies on the combustion characteristics of alternative jet fuels. <i>Fuel</i> , <b>2012</b> , 98, 176-182	7.1	135
161	Augmented reduced mechanisms for NO emission in methane oxidation. <i>Combustion and Flame</i> , <b>2001</b> , 125, 906-919	5.3	131
160	A comprehensive iso-octane combustion model with improved thermochemistry and chemical kinetics. <i>Combustion and Flame</i> , <b>2017</b> , 178, 111-134	5.3	130

159	Dimethyl ether autoignition in a rapid compression machine: Experiments and chemical kinetic modeling. <i>Fuel Processing Technology</i> , <b>2008</b> , 89, 1244-1254	7.2	128
158	Advances in rapid compression machine studies of low- and intermediate-temperature autoignition phenomena. <i>Progress in Energy and Combustion Science</i> , <b>2017</b> , 63, 1-78	33.6	125
157	Ignition of alkane-rich FACE gasoline fuels and their surrogate mixtures. <i>Proceedings of the Combustion Institute</i> , <b>2015</b> , 35, 249-257	5.9	124
156	An aerosol rapid compression machine for studying energetic-nanoparticle-enhanced combustion of liquid fuels. <i>Proceedings of the Combustion Institute</i> , <b>2011</b> , 33, 3367-3374	5.9	124
155	Heat Transfer of Aviation Kerosene at Supercritical Conditions. <i>Journal of Thermophysics and Heat Transfer</i> , <b>2009</b> , 23, 543-550	1.3	120
154	Recent development in studies of alternative jet fuel combustion: Progress, challenges, and opportunities. <i>Renewable and Sustainable Energy Reviews</i> , <b>2016</b> , 54, 120-138	16.2	119
153	Experimental and surrogate modeling study of gasoline ignition in a rapid compression machine. <i>Combustion and Flame</i> , <b>2012</b> , 159, 3066-3078	5.3	107
152	Laminar flame speeds of moist syngas mixtures. <i>Combustion and Flame</i> , <b>2011</b> , 158, 345-353	5.3	107
151	Autoignition of H <sub>2</sub> /CO at elevated pressures in a rapid compression machine. <i>International Journal of Chemical Kinetics</i> , <b>2006</b> , 38, 516-529	1.4	104
150	Laminar flame speeds of transportation-relevant hydrocarbons and jet fuels at elevated temperatures and pressures. <i>Fuel</i> , <b>2013</b> , 109, 191-200	7.1	98
149	Autoignition of toluene and benzene at elevated pressures in a rapid compression machine. <i>Combustion and Flame</i> , <b>2007</b> , 150, 355-368	5.3	94
148	Autoignition of gasoline and its surrogates in a rapid compression machine. <i>Proceedings of the Combustion Institute</i> , <b>2013</b> , 34, 345-352	5.9	85
147	Ignition of CO/H <sub>2</sub> /N <sub>2</sub> versus heated air in counterflow: experimental and modeling results. <i>Combustion and Flame</i> , <b>2000</b> , 120, 417-426	5.3	83
146	Reaction kinetics of CO + HO(2) → products: ab initio transition state theory study with master equation modeling. <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 4031-42	2.8	82
145	Catalyzed combustion of hydrogen-oxygen in platinum tubes for micro-propulsion applications. <i>Proceedings of the Combustion Institute</i> , <b>2005</b> , 30, 2481-2488	5.9	78
144	Experiments and modeling of the autoignition of methylcyclohexane at high pressure. <i>Combustion and Flame</i> , <b>2014</b> , 161, 1972-1983	5.3	77
143	A comprehensive experimental and modeling study of iso-pentanol combustion. <i>Combustion and Flame</i> , <b>2013</b> , 160, 2712-2728	5.3	77
142	An experimental investigation of ethylene/O <sub>2</sub> /diluent mixtures: Laminar flame speeds with preheat and ignition delays at high pressures. <i>Combustion and Flame</i> , <b>2008</b> , 153, 343-354	5.3	77

141	Investigation of Vaporized Kerosene Injection and Combustion in a Supersonic Model Combustor. <i>Journal of Propulsion and Power</i> , <b>2006</b> , 22, 103-110	1.8	76
140	Thermophoretic Effects on Seeding Particles in LDV Measurements of Flames. <i>Combustion Science and Technology</i> , <b>1994</b> , 99, 119-132	1.5	75
139	Laminar flame speeds and extinction limits of conventional and alternative jet fuels. <i>Fuel</i> , <b>2011</b> , 90, 1004-1011	4.1	74
138	Comparative Autoignition Trends in Butanol Isomers at Elevated Pressure. <i>Energy &amp; Fuels</i> , <b>2013</b> , 27, 1688-1698	4.1	73
137	On the importance of graph search algorithms for DRGEP-based mechanism reduction methods. <i>Combustion and Flame</i> , <b>2011</b> , 158, 1439-1443	5.3	72
136	An experimental study of the autoignition characteristics of conventional jet fuel/oxidizer mixtures: Jet-A and JP-8. <i>Combustion and Flame</i> , <b>2010</b> , 157, 676-685	5.3	72
135	Autoignition of n-decane under elevated pressure and low-to-intermediate temperature conditions. <i>Combustion and Flame</i> , <b>2009</b> , 156, 1278-1288	5.3	71
134	A detailed combined experimental and theoretical study on dimethyl ether/propane blended oxidation. <i>Combustion and Flame</i> , <b>2016</b> , 168, 310-330	5.3	60
133	Catalytic Cracking and Heat Sink Capacity of Aviation Kerosene Under Supercritical Conditions. <i>Journal of Propulsion and Power</i> , <b>2009</b> , 25, 1226-1232	1.8	59
132	Soot formation in non-premixed counterflow flames of butane and butanol isomers. <i>Combustion and Flame</i> , <b>2016</b> , 164, 167-182	5.3	56
131	On the uncertainty of temperature estimation in a rapid compression machine. <i>Combustion and Flame</i> , <b>2015</b> , 162, 2518-2528	5.3	55
130	CFD modeling of two-stage ignition in a rapid compression machine: Assessment of zero-dimensional approach. <i>Combustion and Flame</i> , <b>2010</b> , 157, 1316-1324	5.3	55
129	A comparative experimental study of the autoignition characteristics of alternative and conventional jet fuel/oxidizer mixtures. <i>Fuel</i> , <b>2010</b> , 89, 2853-2863	7.1	54
128	Recent progress and challenges in exploiting graphics processors in computational fluid dynamics. <i>Journal of Supercomputing</i> , <b>2014</b> , 67, 528-564	2.5	53
127	Ignition delay study of moist hydrogen/oxidizer mixtures using a rapid compression machine. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 6901-6911	6.7	52
126	Effect of ferrocene addition on sooting limits in laminar premixed ethylene-oxygen-argon flames. <i>Combustion and Flame</i> , <b>2004</b> , 139, 288-299	5.3	52
125	Autoignition of gasoline surrogates at low temperature combustion conditions. <i>Combustion and Flame</i> , <b>2015</b> , 162, 2272-2285	5.3	50
124	Mechanism reduction for multicomponent surrogates: A case study using toluene reference fuels. <i>Combustion and Flame</i> , <b>2014</b> , 161, 2752-2764	5.3	50

123	Steady and pulsating propagation and extinction of rich hydrogen/air flames at elevated pressures. <i>Combustion and Flame</i> , <b>2001</b> , 124, 35-49	5.3	50
122	Detailed oxidation kinetics and flame inhibition effects of chloromethane. <i>Combustion and Flame</i> , <b>1996</b> , 105, 291-307	5.3	50
121	Fundamental Combustion Properties of H <sub>2</sub> /CO Mixtures: Ignition and Flame Propagation at Elevated Pressures. <i>Combustion Science and Technology</i> , <b>2008</b> , 180, 1097-1116	1.5	49
120	Combustion and Ignition of Thermally Cracked Kerosene in Supersonic Model Combustors. <i>Journal of Propulsion and Power</i> , <b>2007</b> , 23, 317-324	1.8	48
119	Autoignition of methylcyclohexane at elevated pressures. <i>Combustion and Flame</i> , <b>2009</b> , 156, 1852-1855	5.3	47
118	A mechanistic study of Soret diffusion in hydrogen/air flames. <i>Combustion and Flame</i> , <b>2010</b> , 157, 192-200	5.3	46
117	Accelerating moderately stiff chemical kinetics in reactive-flow simulations using GPUs. <i>Journal of Computational Physics</i> , <b>2014</b> , 256, 854-871	4.1	43
116	Computational fluid dynamics modeling of hydrogen ignition in a rapid compression machine. <i>Combustion and Flame</i> , <b>2008</b> , 155, 417-428	5.3	43
115	Laminar flame speeds and extinction stretch rates of selected aromatic hydrocarbons. <i>Fuel</i> , <b>2012</b> , 97, 695-702	7.1	42
114	Autoignition of methanol: Experiments and computations. <i>International Journal of Chemical Kinetics</i> , <b>2011</b> , 43, 175-184	1.4	41
113	Development of Isopentanol Reaction Mechanism Reproducing Autoignition Character at High and Low Temperatures. <i>Energy &amp; Fuels</i> , <b>2012</b> , 26, 4871-4886	4.1	38
112	Experimental and numerical investigation of premixed tubular flames. <i>Proceedings of the Combustion Institute</i> , <b>2002</b> , 29, 1479-1486	5.9	38
111	PAH formation in counterflow non-premixed flames of butane and butanol isomers. <i>Combustion and Flame</i> , <b>2016</b> , 170, 91-110	5.3	36
110	Flame Propagation and Extinction Characteristics of Neat Surrogate Fuel Components. <i>Energy &amp; Fuels</i> , <b>2010</b> , 24, 3840-3849	4.1	36
109	pyJac: Analytical Jacobian generator for chemical kinetics. <i>Computer Physics Communications</i> , <b>2017</b> , 215, 188-203	4.2	35
108	The distillation curve and sooting propensity of a typical jet fuel. <i>Fuel</i> , <b>2019</b> , 235, 350-362	7.1	34
107	Two-line thermometry and H <sub>2</sub> O measurement for reactive mixtures in rapid compression machine near 7.6 $\bar{\text{h}}$ . <i>Combustion and Flame</i> , <b>2012</b> , 159, 3493-3501	5.3	34
106	Thermal Cracking and Heat Sink Capacity of Aviation Kerosene Under Supercritical Conditions. <i>Journal of Thermophysics and Heat Transfer</i> , <b>2011</b> , 25, 450-456	1.3	34

105	Flame macrostructures and thermoacoustic instabilities in stratified swirling flames. <i>Proceedings of the Combustion Institute</i> , <b>2019</b> , 37, 5377-5384	5.9	33
104	Multi-Property Measurements at High Sampling Rates Using Rayleigh Scattering. <i>AIAA Journal</i> , <b>2009</b> , 47, 850-862	2.1	32
103	Vortex formation in a rapid compression machine: Influence of physical and operating parameters. <i>Fuel</i> , <b>2012</b> , 94, 409-417	7.1	31
102	Soot formation in non-premixed counterflow flames of conventional and alternative jet fuels. <i>Fuel</i> , <b>2017</b> , 210, 343-351	7.1	30
101	Temperature measurements in a rapid compression machine using mid-infrared H <sub>2</sub> O absorption spectroscopy near 7.6 $\mu$ m. <i>Applied Optics</i> , <b>2012</b> , 51, 5464-76	1.7	28
100	Microgravity burner-generated spherical diffusion flames: experiment and computation. <i>Combustion and Flame</i> , <b>2001</b> , 125, 1265-1278	5.3	28
99	Effects of hydrogen addition on combustion characteristics of n-decane/air mixtures. <i>Combustion and Flame</i> , <b>2014</b> , 161, 2252-2262	5.3	27
98	Homogeneous charge compression ignition of binary fuel blends. <i>Combustion and Flame</i> , <b>2008</b> , 155, 431-439	5.3	24
97	A surrogate mixture and kinetic mechanism for emulating the evaporation and autoignition characteristics of gasoline fuel. <i>Combustion and Flame</i> , <b>2015</b> , 162, 3773-3784	5.3	23
96	Optimization of Jet-A fuel reforming for aerospace applications. <i>International Journal of Hydrogen Energy</i> , <b>2006</b> , 31, 1066-1078	6.7	23
95	Flame interactions in a stratified swirl burner: Flame stabilization, combustion instabilities and beating oscillations. <i>Combustion and Flame</i> , <b>2020</b> , 212, 500-509	5.3	23
94	Soot formation in counterflow non-premixed ethylene flames at elevated pressures. <i>Combustion and Flame</i> , <b>2018</b> , 195, 253-266	5.3	22
93	Autoignition of methyl butanoate under engine relevant conditions. <i>Combustion and Flame</i> , <b>2016</b> , 171, 1-14	5.3	22
92	Reduced Chemistry for a Gasoline Surrogate Valid at Engine-Relevant Conditions. <i>Energy &amp; Fuels</i> , <b>2015</b> , 29, 1172-1185	4.1	22
91	Experimental low-stretch gaseous diffusion flames in buoyancy-induced flowfields. <i>Proceedings of the Combustion Institute</i> , <b>2005</b> , 30, 527-535	5.9	22
90	Catalytic Combustion of Rich Methane/Oxygen Mixtures for Micropropulsion Applications. <i>Journal of Propulsion and Power</i> , <b>2006</b> , 22, 684-693	1.8	21
89	Autoignition response of n-butanol and its blends with primary reference fuel constituents of gasoline. <i>Combustion and Flame</i> , <b>2015</b> , 162, 2466-2479	5.3	20
88	Autoignition of trans-decalin, a diesel surrogate compound: Rapid compression machine experiments and chemical kinetic modeling. <i>Combustion and Flame</i> , <b>2018</b> , 194, 152-163	5.3	20

87	Flame temperature and location measurements of sooting premixed Bunsen flames by rainbow schlieren deflectometry. <i>Applied Optics</i> , <b>2005</b> , 44, 3565-75	1.7	18
86	A mechanistic evaluation of Soret diffusion in heptane/air flames. <i>Combustion and Flame</i> , <b>2012</b> , 159, 2345-2351	5.3	16
85	Autoignition study of ULSD#2 and FD9A diesel blends. <i>Combustion and Flame</i> , <b>2016</b> , 166, 45-54	5.3	16
84	The blending effect on the sooting tendencies of alternative/conventional jet fuel blends in non-premixed flames. <i>Fuel</i> , <b>2019</b> , 237, 648-657	7.1	16
83	Inlet temperature driven supercritical bifurcation of combustion instabilities in a lean premixed prevaporized combustor. <i>Experimental Thermal and Fluid Science</i> , <b>2019</b> , 109, 109857	3	15
82	An automated target species selection method for dynamic adaptive chemistry simulations. <i>Combustion and Flame</i> , <b>2015</b> , 162, 1358-1374	5.3	15
81	The Effect of Stratification Ratio on the Macrostructure of Stratified Swirl Flames: Experimental and Numerical Study. <i>Journal of Engineering for Gas Turbines and Power</i> , <b>2018</b> , 140,	1.7	14
80	An experimental and modeling study of dimethyl ether/methanol blends autoignition at low temperature. <i>Combustion and Flame</i> , <b>2018</b> , 198, 89-99	5.3	14
79	Ignition propensity of hydrogen/air mixtures impinging on a platinum stagnation surface. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 11412-11423	6.7	13
78	EFFECTS OF ENTRY CONDITIONS ON CRACKED KEROSENE-FUELED SUPERSONIC COMBUSTOR PERFORMANCE. <i>Combustion Science and Technology</i> , <b>2007</b> , 179, 2199-2217	1.5	13
77	An investigation of GPU-based stiff chemical kinetics integration methods. <i>Combustion and Flame</i> , <b>2017</b> , 179, 312-324	5.3	12
76	A semi-global reaction rate model based on experimental data for the self-hydrolysis kinetics of aqueous sodium borohydride. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 4024-4033	6.7	12
75	Fuel molecular structure effect on autoignition of highly branched iso-alkanes at low-to-intermediate temperatures: Iso-octane versus iso-dodecane. <i>Combustion and Flame</i> , <b>2020</b> , 214, 152-166	5.3	12
74	Effects of hydrogen peroxide addition on combustion characteristics of n-decane/air mixtures. <i>Fuel</i> , <b>2018</b> , 223, 324-333	7.1	11
73	Experiments and modeling of the autoignition of methyl pentanoate at low to intermediate temperatures and elevated pressures in a rapid compression machine. <i>Fuel</i> , <b>2018</b> , 212, 479-486	7.1	11
72	Autoignition of methyl propanoate and its comparisons with methyl ethanoate and methyl butanoate. <i>Combustion and Flame</i> , <b>2018</b> , 188, 116-128	5.3	11
71	Autoignition study of tetralin in a rapid compression machine at elevated pressures and low-to-intermediate temperatures. <i>Fuel</i> , <b>2015</b> , 159, 436-445	7.1	10
70	Counterflow ignition of n-butanol at atmospheric and elevated pressures. <i>Combustion and Flame</i> , <b>2015</b> , 162, 3596-3611	5.3	10



69	Heat Transfer of Aviation Kerosene at Supercritical Conditions <b>2008</b> ,		10
68	Reduced Chemistry for Butanol Isomers at Engine-Relevant Conditions. <i>Energy &amp; Fuels</i> , <b>2017</b> , 31, 867-881	4.1	9
67	The thermoacoustic instability in a stratified swirl burner and its passive control by using a slope confinement. <i>Energy</i> , <b>2020</b> , 195, 116956	7.9	9
66	Effect of hydrogen addition on the counterflow ignition of n-butanol at atmospheric and elevated pressures. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 16618-16633	6.7	9
65	Catalyzed Ignition of Using Methane/Hydrogen Fuel in a Microtube for Microthruster Applications. <i>Journal of Propulsion and Power</i> , <b>2009</b> , 25, 1203-1210	1.8	9
64	Burning velocity measurements of microgravity spherical sooting premixed flames using rainbow Schlieren deflectometry. <i>Combustion and Flame</i> , <b>2005</b> , 140, 93-102	5.3	9
63	Computed Flammability Limits of Opposed-Jet H/O/CO Diffusion Flames at Low Pressure. <i>Journal of Propulsion and Power</i> , <b>1999</b> , 15, 903-908	1.8	9
62	Autoignition Study of 1-Methylnaphthalene in a Rapid Compression Machine. <i>Energy &amp; Fuels</i> , <b>2017</b> , 31, 854-866	4.1	8
61	Experimental investigation of lean-dome high-airflow airblast pilot mixers' operability, emissions, and dynamics. <i>Aerospace Science and Technology</i> , <b>2020</b> , 100, 105829	4.9	7
60	Autoignition study of binary blends of n-dodecane/1-methylnaphthalene and iso-cetane/1-methylnaphthalene. <i>Combustion and Flame</i> , <b>2018</b> , 189, 367-377	5.3	7
59	Autoignition of Binary Fuel Blends of n-Butanol and n-Heptane in a Rapid Compression Machine <b>2011</b> ,		7
58	Experimental Investigation on Ignition Performance of LESS Combustor <b>2011</b> ,		7
57	Structure of low-stretch methane nonpremixed flames. <i>Combustion and Flame</i> , <b>2007</b> , 149, 173-190	5.3	7
56	Characterizing particulate matter emissions in an aviation kerosene-fueled model combustor at elevated pressures and temperatures. <i>Fuel</i> , <b>2019</b> , 241, 227-233	7.1	7
55	The impact of swirling flow strength on lean-dome LDI pilot mixers' operability and emissions. <i>Experimental Thermal and Fluid Science</i> , <b>2019</b> , 109, 109840	3	6
54	Comparative study of the counterflow forced ignition of the butanol isomers at atmospheric and elevated pressures. <i>Combustion and Flame</i> , <b>2016</b> , 165, 34-49	5.3	6
53	Acetone photophysics at 282 nm excitation at elevated pressure and temperature. I: absorption and fluorescence experiments. <i>Applied Physics B: Lasers and Optics</i> , <b>2017</b> , 123, 1	1.9	6
52	UConnRCMPy: Python-based data analysis for Rapid Compression Machines <b>2016</b> ,		6



51	The Impact of Venturi Geometry on Reacting Flows in a Swirl-Venturi Lean Direct Injection Airblast Injector <b>2016</b> ,		6
50	Numerical Simulation of Ignition and Combustion of Ethylene in a Supersonic Model Combustor with a Reduced Kinetic Mechanism. <i>Combustion Science and Technology</i> , <b>2013</b> , 185, 548-563	1.5	5
49	Performance of supersonic model combustors with staged injections of supercritical aviation kerosene. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2010</b> , 26, 661-668	2	5
48	Autoignition of CRC diesel surrogates at low temperature combustion conditions: Rapid compression machine experiments and modeling. <i>Combustion and Flame</i> , <b>2020</b> , 219, 178-197	5.3	5
47	The Influence of Intake Pressure and Ethanol Addition to Gasoline on Single- and Dual-Stage Autoignition in an HCCI Engine. <i>Energy &amp; Fuels</i> , <b>2018</b> , 32, 9822-9837	4.1	5
46	Autoignition of Butanol Isomers at Low to Intermediate Temperature and Elevated Pressure <b>2011</b> ,		4
45	Skeletal Mechanism Generation of Surrogate Fuels Using Directed Relation Graph with Error Propagation and Sensitivity Analysis <b>2009</b> ,		4
44	Laminar Flame Speeds and Extinction Limits of Conventional and Alternative Jet Fuels <b>2009</b> ,		4
43	ULTRA-DILUTE COMBUSTION OF PRIMARY REFERENCE FUELS. <i>Combustion Science and Technology</i> , <b>2007</b> , 179, 2361-2379	1.5	4
42	Combustion Instabilities With Different Degrees of Premixedness in a Separated Dual-Swirl Burner. <i>Journal of Engineering for Gas Turbines and Power</i> , <b>2020</b> , 142,	1.7	4
41	Sooting characteristics of hydrocarbon compounds and their blends relevant to aviation fuel applications. <i>Fuel</i> , <b>2021</b> , 287, 119522	7.1	4
40	Using SIMD and SIMT vectorization to evaluate sparse chemical kinetic Jacobian matrices and thermochemical source terms. <i>Combustion and Flame</i> , <b>2018</b> , 198, 186-204	5.3	4
39	Development of efficient and accurate skeletal mechanisms for hydrocarbon fuels and kerosene surrogate. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2015</b> , 31, 732-740	2	3
38	Ignition and combustion characteristics of decanoic acid derived alkyl esters in a fuel ignition tester. <i>Fuel</i> , <b>2020</b> , 276, 117982	7.1	3
37	DRGEP-based mechanism reduction strategies: graph search algorithms and skeletal primary reference fuel mechanisms <b>2011</b> ,		3
36	Injection of Subcritical and Supercritical Aviation Kerosene Into a High-Temperature and High-Pressure Crossflow <b>2011</b> ,		3
35	Cooling Effectiveness of Impingement/Effusion Cooling With and Without Turbulence Promoter Ribs <b>2012</b> ,		3
34	Experimental characterization of premixed spherical ethylene/air flames under sooting conditions. <i>Proceedings of the Combustion Institute</i> , <b>2007</b> , 31, 1047-1054	5.9	3

33	Hypotheses-Driven Combustion Technology and Design Development Approach Pursued Since Early 1970s <b>2020</b> , 439-484		3
32	Determination of modeled luminosity-based and pressure-based ignition delay times of turbulent spray combustion. <i>International Journal of Heat and Mass Transfer</i> , <b>2016</b> , 103, 1297-1312	4.9	3
31	Fundamental investigations for lowering emissions and improving operability. <i>Propulsion and Power Research</i> , <b>2018</b> , 7, 197-204	3.6	3
30	Multi-bifurcation behaviors of stability regimes in a centrally staged swirl burner. <i>Physics of Fluids</i> , <b>2021</b> , 33, 095121	4.4	3
29	Influence of Blending n-Butanol with Isooctane and n-Heptane on Ignition Delay Times in a Fuel Ignition Tester. <i>Energy &amp; Fuels</i> , <b>2018</b> , 32, 6239-6251	4.1	2
28	Effects of hydrogen peroxide addition on two-stage ignition characteristics of n-heptane/air mixtures. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 24312-24320	6.7	2
27	Experimental Study on NO <sub>x</sub> and CO Emissions of Aviation Kerosene and Coal-to-Liquid Synthetic Aviation Fuel in a Jet Stirred Combustion Reactor <b>2014</b> ,		2
26	Acetone photophysics at 282 nm excitation at elevated pressure and temperature. II: Fluorescence modeling. <i>Applied Physics B: Lasers and Optics</i> , <b>2017</b> , 123, 1	1.9	2
25	Catalytic Ignition of Methane/Hydrogen/Oxygen Mixtures for Microthruster Applications <b>2006</b> ,		2
24	Fundamental Combustion Research Challenged to Meet Designers' Expectations. <i>Green Energy and Technology</i> , <b>2021</b> , 251-285	0.6	2
23	Effect of the Diffuser on the Inlet Acoustic Boundary in Combustion-Acoustic Coupled Oscillation <b>2016</b> ,		2
22	Flame structures and thermoacoustic instabilities of centrally-staged swirl flames operating in different partially-premixed modes. <i>Energy</i> , <b>2021</b> , 236, 121512	7.9	2
21	Combustion Instabilities in a Lean Premixed Pre-Vaporized Combustor at High-Pressure High-Temperature <b>2017</b> ,		1
20	Advanced Engine Flows and Combustion. <i>Journal of Combustion</i> , <b>2017</b> , 2017, 1-3	0.8	1
19	Experimental Characterization of Fuel-Air Mixing in a Multihole Tube. <i>Journal of Engineering for Gas Turbines and Power</i> , <b>2012</b> , 134,	1.7	1
18	Evaluation of Combustion Performance of a Coal-Derived Synthetic Jet Fuel <b>2012</b> ,		1
17	Thermal Cracking and Heat Sink Capacity of Aviation Kerosene Under Supercritical Conditions <b>2009</b> ,		1
16	Skeletal Mechanism Generation of Surrogate Jet Fuels for Aeropropulsion Modeling <b>2010</b> ,		1

15	Catalytic Combustion of Methane/Oxygen Mixtures for Micropropulsion Applications <b>2005</b> ,		1
14	A comprehensive experimental and modeling study of n-propylcyclohexane oxidation. <i>Combustion and Flame</i> , <b>2022</b> , 238, 111944	5.3	1
13	Effect of nitric oxide and exhaust gases on gasoline surrogate autoignition: iso-octane experiments and modeling. <i>Combustion and Flame</i> , <b>2022</b> , 236, 111807	5.3	1
12	GPU-Based Parallel Integration of Large Numbers of Independent ODE Systems <b>2014</b> , 159-182		1
11	Nonlinear Threshold Sooting Index Prediction Method for Surrogate Formulation Emulating Sooting Characteristics: A Case Study Using RP-3 Jet Fuels. <i>Energy &amp; Fuels</i> , <b>2020</b> , 34, 9990-9999	4.1	1
10	Autoignition study of iso-cetane/tetralin blends at low temperature. <i>Combustion and Flame</i> , <b>2021</b> , 228, 415-429	5.3	1
9	System Validation Experiments for Obtaining Tracer Laser-Induced Fluorescence Data at Elevated Pressure and Temperature. <i>Applied Spectroscopy</i> , <b>2018</b> , 72, 618-626	3.1	1
8	Sooting Propensities of FACE Gasolines in Counterflow Nonpremixed Flames. <i>Energy &amp; Fuels</i> ,	4.1	1
7	Parametric study of the slope confinement for passive control in a centrally-staged swirl burner. <i>Energy</i> , <b>2021</b> , 233, 121188	7.9	1
6	Accelerating reactive-flow simulations using vectorized chemistry integration. <i>Computer Physics Communications</i> , <b>2022</b> , 108409	4.2	1
5	Effect of boundary conditions on downstream vorticity from counter-rotating swirlers. <i>Chinese Journal of Aeronautics</i> , <b>2015</b> , 28, 34-43	3.7	0
4	Dispersion and catalytic ignition of hydrogen leaks within enclosed spaces. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 10405-10415	6.7	0
3	A Rapid Compression Machine Study of 2-Phenylethanol Autoignition at Low-To-Intermediate Temperatures. <i>Energies</i> , <b>2021</b> , 14, 7708	3.1	0
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1	Acetone Tracer Laser-Induced Fluorescence (LIF) at 282 nm Excitation as a Diagnostic Tool in Elevated Pressure and Temperature Systems. <i>Applied Spectroscopy</i> , <b>2019</b> , 73, 395-402	3.1	0