

Zhandong Wang

List of Publications by Year in descending order

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Version: 2024-02-01

81
papers

3,401
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94433

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docs citations

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times ranked

1730
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#	ARTICLE	IF	CITATIONS
1	Experimental and kinetic modeling studies of 2-acetylfuran pyrolysis at atmospheric pressure. <i>Combustion and Flame</i> , 2022, 236, 111824.	5.2	6
2	Comprehensive study of the low-temperature oxidation chemistry by synchrotron photoionization mass spectrometry and gas chromatography. <i>Combustion and Flame</i> , 2022, 236, 111797.	5.2	47
3	Conformation-dependent low-temperature oxidation chemistry of methylcyclohexane: First oxygen addition and chain-branching. <i>Combustion and Flame</i> , 2022, 243, 111963.	5.2	8
4	A decoupled modeling approach and experimental measurements for pyrolysis of C6-C10 saturated fatty acid methyl esters (FAMES). <i>Combustion and Flame</i> , 2022, 243, 111955.	5.2	5
5	Reaction kinetics of phenyl+phenylacetylene at combustion-relevant intermediate temperatures. <i>Combustion and Flame</i> , 2022, 243, 112014.	5.2	4
6	Variable pressure JSR study of low temperature oxidation chemistry of n-heptane by synchrotron photoionization mass spectrometry. <i>Combustion and Flame</i> , 2022, 240, 111946.	5.2	7
7	An experimental and modeling study of ammonia oxidation in a jet stirred reactor. <i>Combustion and Flame</i> , 2022, 240, 112007.	5.2	35
8	Exploring low temperature oxidation of iso-octane under atmospheric pressure. <i>Combustion and Flame</i> , 2022, 243, 112019.	5.2	9
9	Revisiting low temperature oxidation chemistry of n-heptane. <i>Combustion and Flame</i> , 2022, 242, 112177.	5.2	15
10	Low temperature oxidation of toluene in an n-heptane/toluene mixture. <i>Combustion and Flame</i> , 2022, 242, 112200.	5.2	3
11	Improving quantification of hydrogen peroxide by synchrotron vacuum ultraviolet photoionization mass spectrometry. <i>Combustion and Flame</i> , 2022, 242, 112214.	5.2	14
12	Experimental and kinetic model studies on the pyrolysis of 2-furfuryl alcohol at two reactors: Flow reactor and jet-stirred reactor. <i>Combustion and Flame</i> , 2022, 244, 112275.	5.2	5
13	Chemistry deriving from OOQOOH radicals in alkane low-temperature oxidation: A first combined theoretical and electron-ion coincidence mass spectrometry study. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 309-319.	3.9	16
14	A comprehensive experimental and kinetic modeling study of 1- and 2-pentene. <i>Combustion and Flame</i> , 2021, 223, 166-180.	5.2	47
15	Intramolecular CH ₃ -migration-controlled cation reactions in the VUV photochemistry of 2-methyl-3-buten-2-ol investigated by synchrotron photoionization mass spectrometry and theoretical calculations. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 10456-10467.	2.8	4
16	Efficient alkane oxidation under combustion engine and atmospheric conditions. <i>Communications Chemistry</i> , 2021, 4, .	4.5	33
17	Probing pyrolysis chemistry of 1-heptene pyrolysis with insight into fuel molecular structure effects. <i>Combustion and Flame</i> , 2021, 227, 79-94.	5.2	7
18	A comprehensive combustion chemistry study of n-propylcyclohexane. <i>Combustion and Flame</i> , 2021, 233, 111576.	5.2	13

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19	Low-temperature oxidation chemistry of 2,4,4-trimethyl-1-pentene (diisobutylene) triggered by dimethyl ether (DME): A jet-stirred reactor oxidation and kinetic modeling investigation. <i>Combustion and Flame</i> , 2021, 234, 111629.	5.2	7
20	Predictive Combustion Kinetics of OH Radical Reactions with a C5 Unsaturated Alcohol: The Competitive H-Abstraction and OH-Addition Reactions of 2-Methyl-3-buten-2-ol. <i>Journal of Physical Chemistry A</i> , 2021, 125, 10451-10462.	2.5	2
21	Jet-Stirred Reactor Study of Low-Temperature Neopentane Oxidation: A Combined Theoretical, Chromatographic, Mass Spectrometric, and PEPICO Analysis. <i>Energy & Fuels</i> , 2021, 35, 19689-19704.	5.1	12
22	Isomer-sensitive characterization of low temperature oxidation reaction products by coupling a jet-stirred reactor to an electron/ion coincidence spectrometer: case of <i>n</i> -pentane. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 1222-1241.	2.8	28
23	Cool flame chemistry of diesel surrogate compounds: <i>n</i> -Decane, 2-methylnonane, 2,7-dimethyloctane, and <i>n</i> -butylcyclohexane. <i>Combustion and Flame</i> , 2020, 219, 384-392.	5.2	15
24	Exploring low temperature oxidation of 1-butene in jet-stirred reactors. <i>Combustion and Flame</i> , 2020, 222, 259-271.	5.2	15
25	Methylcyclohexane pyrolysis and oxidation in a jet-stirred reactor. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 409-417.	3.9	40
26	Polycyclic aromatic hydrocarbons in pyrolysis of gasoline surrogates (<i>n</i> -heptane/ <i>iso</i> -octane/toluene). <i>Proceedings of the Combustion Institute</i> , 2019, 37, 993-1001.	3.9	50
27	Small ester combustion chemistry: Computational kinetics and experimental study of methyl acetate and ethyl acetate. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 419-428.	3.9	45
28	Multistructural Anharmonicity Controls the Radical Generation Process in Biofuel Combustion. <i>Journal of the American Chemical Society</i> , 2019, 141, 18531-18543.	13.7	22
29	Chemical kinetic study of triptane (2,2,3-trimethylbutane) as an anti-knock additive. <i>Combustion and Flame</i> , 2019, 210, 399-412.	5.2	3
30	Ion chemistry in premixed rich methane flames. <i>Combustion and Flame</i> , 2019, 202, 208-218.	5.2	30
31	Exploring hydroperoxides in combustion: History, recent advances and perspectives. <i>Progress in Energy and Combustion Science</i> , 2019, 73, 132-181.	31.2	119
32	Three-stage heat release in <i>n</i> -heptane auto-ignition. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 485-492.	3.9	44
33	Exploring gasoline oxidation chemistry in jet stirred reactors. <i>Fuel</i> , 2019, 236, 1282-1292.	6.4	38
34	Theoretical kinetic study of the formic acid catalyzed Criegee intermediate isomerization: multistructural anharmonicity and atmospheric implications. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 10806-10814.	2.8	21
35	Exploring the negative temperature coefficient behavior of acetaldehyde based on detailed intermediate measurements in a jet-stirred reactor. <i>Combustion and Flame</i> , 2018, 192, 120-129.	5.2	31
36	Chemical kinetic insights into the ignition dynamics of <i>n</i> -hexane. <i>Combustion and Flame</i> , 2018, 188, 28-40.	5.2	42

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37	n-Heptane cool flame chemistry: Unraveling intermediate species measured in a stirred reactor and motored engine. <i>Combustion and Flame</i> , 2018, 187, 199-216.	5.2	68
38	Relative Rates of Hydrogen Shift Isomerizations Depend Strongly on Multiple-Structure Anharmonicity. <i>Journal of the American Chemical Society</i> , 2018, 140, 17556-17570.	13.7	14
39	Hydrogen shift isomerizations in the kinetics of the second oxidation mechanism of alkane combustion. Reactions of the hydroperoxyperoxy OOQOOH radical. <i>Combustion and Flame</i> , 2018, 197, 88-101.	5.2	24
40	Glycerol carbonate as a fuel additive for a sustainable future. <i>Sustainable Energy and Fuels</i> , 2018, 2, 2171-2178.	4.9	38
41	Measuring hydroperoxide chain-branching agents during n-pentane low-temperature oxidation. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 333-342.	3.9	66
42	Hydroperoxide Measurements During Low-Temperature Gas-Phase Oxidation of n-Heptane and n-Decane. <i>Journal of Physical Chemistry A</i> , 2017, 121, 1861-1876.	2.5	31
43	Comparative experimental and modeling study of the low- to moderate-temperature oxidation chemistry of 2,5-dimethylfuran, 2-methylfuran, and furan. <i>Combustion and Flame</i> , 2017, 181, 251-269.	5.2	61
44	Degradation of Carbonyl Hydroperoxides in the Atmosphere and in Combustion. <i>Journal of the American Chemical Society</i> , 2017, 139, 15821-15835.	13.7	34
45	A comprehensive experimental and kinetic modeling study of n-propylbenzene combustion. <i>Combustion and Flame</i> , 2017, 186, 178-192.	5.2	40
46	Unraveling the structure and chemical mechanisms of highly oxygenated intermediates in oxidation of organic compounds. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 13102-13107.	7.1	117
47	Heats of Formation of Medium-Sized Organic Compounds from Contemporary Electronic Structure Methods. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 3537-3560.	5.3	45
48	Experimental and kinetic modeling studies of low-pressure premixed laminar 2-methylfuran flames. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 1295-1302.	3.9	36
49	Antiknock quality and ignition kinetics of 2-phenylethanol, a novel lignocellulosic octane booster. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 3515-3522.	3.9	21
50	New insights into the low-temperature oxidation of 2-methylhexane. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 373-382.	3.9	36
51	Conformational inversion-topomerization mechanism of ethylcyclohexyl isomers and its role in combustion kinetics. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 237-244.	3.9	8
52	Jet-stirred reactor oxidation of alkane-rich FACE gasoline fuels. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 517-524.	3.9	27
53	Third O ₂ addition reactions promote the low-temperature auto-ignition of n-alkanes. <i>Combustion and Flame</i> , 2016, 165, 364-372.	5.2	66
54	Quantification of the Keto-Hydroperoxide (HOOCH ₂ OCHO) and Other Elusive Intermediates during Low-Temperature Oxidation of Dimethyl Ether. <i>Journal of Physical Chemistry A</i> , 2016, 120, 7890-7901.	2.5	104

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55	Experimental and kinetic modeling study of 1-hexene combustion at various pressures. <i>Combustion and Flame</i> , 2016, 173, 151-160.	5.2	32
56	Experimental and Chemical Kinetic Modeling Study of Dimethylcyclohexane Oxidation and Pyrolysis. <i>Energy & Fuels</i> , 2016, 30, 8648-8657.	5.1	13
57	Modeling Ignition of a Heptane Isomer: Improved Thermodynamics, Reaction Pathways, Kinetics, and Rate Rule Optimizations for 2-Methylhexane. <i>Journal of Physical Chemistry A</i> , 2016, 120, 2201-2217.	2.5	53
58	Experimental and modeling study on pyrolysis of n-decane initiated by nitromethane. <i>Combustion and Flame</i> , 2016, 165, 246-258.	5.2	51
59	Additional chain-branching pathways in the low-temperature oxidation of branched alkanes. <i>Combustion and Flame</i> , 2016, 164, 386-396.	5.2	94
60	Investigation on primary decomposition of ethylcyclohexane at atmospheric pressure. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 367-375.	3.9	47
61	Experimental and kinetic modeling study of the low- and intermediate-temperature oxidation of dimethyl ether. <i>Combustion and Flame</i> , 2015, 162, 1113-1125.	5.2	120
62	Kinetics of ethylcyclohexane pyrolysis and oxidation: An experimental and detailed kinetic modeling study. <i>Combustion and Flame</i> , 2015, 162, 2873-2892.	5.2	70
63	Experimental and kinetic modeling study on methylcyclohexane pyrolysis and combustion. <i>Combustion and Flame</i> , 2014, 161, 84-100.	5.2	126
64	Products from the Oxidation of Linear Isomers of Hexene. <i>Journal of Physical Chemistry A</i> , 2014, 118, 673-683.	2.5	50
65	Experimental Investigation of the Low Temperature Oxidation of the Five Isomers of Hexane. <i>Journal of Physical Chemistry A</i> , 2014, 118, 5573-5594.	2.5	44
66	An experimental and theoretical study of pyrrolidine pyrolysis at low pressure. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 641-648.	3.9	9
67	An experimental and kinetic modeling investigation on a rich premixed n-propylbenzene flame at low pressure. <i>Proceedings of the Combustion Institute</i> , 2013, 34, 1785-1793.	3.9	41
68	Experimental and modelling studies of the effects of methanol and ethanol addition on the laminar premixed low-pressure n-heptane/toluene flames. <i>Combustion and Flame</i> , 2013, 160, 1333-1344.	5.2	58
69	Kinetics of Decomposition and Isomerization of Methylcyclohexane: Starting Point for Studying Monoalkylated Cyclohexanes Combustion. <i>Energy & Fuels</i> , 2013, 27, 1679-1687.	5.1	44
70	Experimental and Kinetic Modeling Study of <i>n</i> -Butanol Pyrolysis and Combustion. <i>Energy & Fuels</i> , 2012, 26, 5550-5568.	5.1	123
71	Study of the Low Temperature Oxidation of Propane. <i>Journal of Physical Chemistry A</i> , 2012, 116, 12214-12228.	2.5	57
72	Experimental and modeling investigation of the low-temperature oxidation of n-heptane. <i>Combustion and Flame</i> , 2012, 159, 3455-3471.	5.2	165

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73	An experimental and kinetic modeling study of cyclohexane pyrolysis at low pressure. Combustion and Flame, 2012, 159, 2243-2253.	5.2	110
74	Experimental and modeling study of the effects of adding oxygenated fuels to premixed n-heptane flames. Combustion and Flame, 2012, 159, 2324-2335.	5.2	85
75	Experimental and theoretical studies on decomposition of pyrrolidine. Proceedings of the Combustion Institute, 2011, 33, 415-423.	3.9	16
76	Experimental and modeling investigation on premixed ethylbenzene flames at low pressure. Proceedings of the Combustion Institute, 2011, 33, 617-624.	3.9	56
77	Determination of absolute photoionization cross-sections of nitrogenous compounds. International Journal of Mass Spectrometry, 2011, 303, 137-146.	1.5	36
78	Determination of absolute photoionization cross-sections of oxygenated hydrocarbons. International Journal of Mass Spectrometry, 2010, 293, 28-33.	1.5	56
79	Determination of absolute photoionization cross-sections of alkanes and cycloalkanes. Rapid Communications in Mass Spectrometry, 2010, 24, 1335-1342.	1.5	53
80	Determination of absolute photoionization cross-sections of aromatics and aromatic derivatives. Rapid Communications in Mass Spectrometry, 2009, 23, 3994-4002.	1.5	114
81	A Theoretical Study on Cool Flame Oxidation as an Effective Way for Fuel Reforming: Emphasis on Ignition Characteristics and Chemical Analysis. Combustion Science and Technology, 0, , 1-17.	2.3	0