Xiaoyuan Zhang

List of Publications by Year
in descending order

37 papers	1,294 citations	430754 18 h-index	360920 35 g-index
37 all docs	37 docs citations	37 times ranked	598 citing authors

#	Article	IF	Citations
1	A comprehensive study on low-temperature oxidation chemistry of cyclohexane. II. Experimental and kinetic modeling investigation. Combustion and Flame, 2022, 235, 111550.	2.8	9
2	Probing the gas-phase oxidation of ammonia: Addressing uncertainties with theoretical calculations. Combustion and Flame, 2022, 235, 111708.	2.8	15
3	Ammonia and ammonia/hydrogen blends oxidation in a jet-stirred reactor: Experimental and numerical study. Fuel, 2022, 310, 122202.	3.4	34
4	A decoupled modeling approach and experimental measurements for pyrolysis of C6-C10 saturated fatty acid methyl esters (FAMEs). Combustion and Flame, 2022, 243, 111955.	2.8	5
5	Exploring fuel isomeric effects on laminar flame propagation of butylbenzenes at various pressures. Proceedings of the Combustion Institute, 2021, 38, 2419-2429.	2.4	5
6	A functional-group-based approach to modeling real-fuel combustion chemistry â€“ II: Kinetic model construction and validation. Combustion and Flame, 2021, 227, 510-525.	2.8	19
7	A functional-group-based approach to modeling real-fuel combustion chemistry â€“ I: Prediction of stoichiometric parameters for lumped pyrolysis reactions. Combustion and Flame, 2021, 227, 497-509.	2.8	21
8	Probing the fuel-specific intermediates in the low-temperature oxidation of 1-heptene and modeling interpretation. Proceedings of the Combustion Institute, 2021, 38, 385-394.	2.4	8
9	Characterizing the fuel-specific combustion chemistry of acetic acid and propanoic acid: Laminar flame propagation and kinetic modeling studies. Proceedings of the Combustion Institute, 2021, 38, 449-457.	2.4	9
10	Exploring the low-temperature oxidation chemistry of 1-butene and i-butene triggered by dimethyl ether. Proceedings of the Combustion Institute, 2021, 38, 289-298.	2.4	9
11	Flow reactor pyrolysis of iso-butylbenzene and tert-butylbenzene at various pressures: Insight into fuel isomeric effects on pyrolysis chemistry of butylbenzenes. Proceedings of the Combustion Institute, 2021, 38, 1423-1432.	2.4	5
12	Characterizing ammonia and nitric oxide interaction with outwardly propagating spherical flame method. Proceedings of the Combustion Institute, 2021, 38, 2477-2485.	2.4	27
13	A lumped kinetic model for high-temperature pyrolysis and combustion of 50 surrogate fuel components and their mixtures. Fuel, 2021, 286, 119361.	3.4	25
14	Exploring combustion chemistry of ethyl valerate at various pressures: Pyrolysis, laminar burning velocity and kinetic modeling. Combustion and Flame, 2021, 227, 27-38.	2.8	8
15	Revisit laminar premixed ethylene flames at elevated pressures: A mass spectrometric and laminar flame propagation study. Combustion and Flame, 2021, 230, 111422.	2.8	11
16	Hydrogen Evolution from Hydrocarbon Pyrolysis in a Simulated Liquid Metal Bubble Reactor. Energy & Fuels, 2021, 35, 14597-14609.	2.5	10
17	Combustion chemistry of ammonia/hydrogen mixtures: Jet-stirred reactor measurements and comprehensive kinetic modeling. Combustion and Flame, 2021, 234, 111653.	2.8	146
18	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. Combustion and Flame, 2021, 234, 111629.	2.8	7

#	Article	IF	Citations
19	High-Temperature Pyrolysis and Combustion of C₅â€“C₁₉ Fatty Acid Methyl Esters (FAMEs): A Lumped Kinetic Modeling Study. Energy & Fuels, 2021, 35, 19553-19567.	2.5	8
20	Experimental and kinetic modeling investigation on sec-butylbenzene combustion: Flow reactor pyrolysis and laminar flame propagation at various pressures. Combustion and Flame, 2020, 211, 18-31.	2.8	16
21	Exploration on laminar flame propagation of ammonia and syngas mixtures up to 10Âatm. Combustion and Flame, 2020, 220, 368-377.	2.8	79
22	Experimental and kinetic modeling investigation on ethylcyclohexane low-temperature oxidation in a jet-stirred reactor. Combustion and Flame, 2020, 214, 211-223.	2.8	31
23	Methylcyclohexane pyrolysis and oxidation in a jet-stirred reactor. Proceedings of the Combustion Institute, 2019, 37, 409-417.	2.4	40
24	New insights into propanal oxidation at low temperatures: An experimental and kinetic modeling study. Proceedings of the Combustion Institute, 2019, 37, 565-573.	2.4	21
25	Experimental and kinetic modeling investigation on laminar flame propagation of CH4/CO mixtures at various pressures: Insight into the transition from CH4-related chemistry to CO-related chemistry. Combustion and Flame, 2019, 209, 481-492.	2.8	20
26	Experimental and kinetic modeling investigation on the laminar flame propagation of ammonia under oxygen enrichment and elevated pressure conditions. Combustion and Flame, 2019, 210, 236-246.	2.8	275
27	Experimental and kinetic modeling study on flow reactor pyrolysis of iso-pentanol: Understanding of iso-pentanol pyrolysis chemistry and fuel isomeric effects of pentanol. Fuel, 2019, 257, 116039.	3.4	15
28	Low-temperature chemistry triggered by probe cooling in a low-pressure premixed flame. Combustion and Flame, 2019, 204, 260-267.	2.8	18
29	Pyrolysis of butane-2,3â€‘dione from low to high pressures: Implications for methyl-related growth chemistry. Combustion and Flame, 2019, 200, 69-81.	2.8	13
30	Acetaldehyde oxidation at low and intermediate temperatures: An experimental and kinetic modeling investigation. Combustion and Flame, 2018, 191, 431-441.	2.8	43
31	Investigation on the oxidation chemistry of methanol in laminar premixed flames. Combustion and Flame, 2017, 180, 20-31.	2.8	45
32	Experimental and modeling efforts towards a better understanding of the high-temperature combustion kinetics of C3C5 ethyl esters. Combustion and Flame, 2017, 185, 173-187.	2.8	47
33	Influence of the biofuel isomers diethyl ether and n-butanol on flame structure and pollutant formation in premixed n-butane flames. Combustion and Flame, 2017, 175, 47-59.	2.8	36
34	Experimental and kinetic modeling study of laminar coflow diffusion methane flames doped with iso-butanol. Proceedings of the Combustion Institute, 2017, 36, 1259-1267.	2.4	13
35	Pyrolysis of 2-methyl-1-butanol at low and atmospheric pressures: Mass spectrometry and modeling studies. Proceedings of the Combustion Institute, 2015, 35, 409-417.	2.4	14
36	Experimental and kinetic modeling study of the low- and intermediate-temperature oxidation of dimethyl ether. Combustion and Flame, 2015, 162, 1113-1125.	2.8	120

#	Article	IF	Citations
37	Kinetic modeling study of benzene and PAH formation in laminar methane flames. Combustion and Flame, 2015, 162, 1692-1711.	2.8	67