

Bo Zhang

List of Publications by Year in descending order

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59
papers

2,663
citations

126708

33
h-index

189595

50
g-index

60
all docs

60
docs citations

60
times ranked

521
citing authors

#	ARTICLE	IF	CITATIONS
1	The influence of wall roughness on detonation limits in hydrogen–oxygen mixture. <i>Combustion and Flame</i> , 2016, 169, 333-339.	2.8	156
2	The effects of large scale perturbation-generating obstacles on the propagation of detonation filled with methane–oxygen mixture. <i>Combustion and Flame</i> , 2017, 182, 279-287.	2.8	128
3	Explosion characteristics of argon/nitrogen diluted natural gas–air mixtures. <i>Fuel</i> , 2014, 124, 125-132.	3.4	119
4	The effect of instability of detonation on the propagation modes near the limits in typical combustible mixtures. <i>Fuel</i> , 2019, 253, 305-310.	3.4	101
5	Theoretical prediction model and experimental investigation of detonation limits in combustible gaseous mixtures. <i>Fuel</i> , 2019, 258, 116132.	3.4	92
6	End-wall ignition of methane-air mixtures under the effects of CO ₂ /Ar/N ₂ fluidic jets. <i>Fuel</i> , 2020, 270, 117485.	3.4	87
7	Experimental study of detonation limits in methane-oxygen mixtures: Determining tube scale and initial pressure effects. <i>Fuel</i> , 2020, 259, 116220.	3.4	77
8	Analysis of the ignition induced by shock wave focusing equipped with conical and hemispherical reflectors. <i>Combustion and Flame</i> , 2022, 236, 111763.	2.8	76
9	Direct blast initiation of spherical gaseous detonations in highly argon diluted mixtures. <i>Proceedings of the Combustion Institute</i> , 2011, 33, 2265-2271.	2.4	73
10	Critical energy for direct initiation of spherical detonations in H ₂ /N ₂ O/Ar mixtures. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 5707-5716.	3.8	70
11	Explosion behavior of methane–dimethyl ether/air mixtures. <i>Fuel</i> , 2015, 157, 56-63.	3.4	68
12	An experimental investigation of detonation limits in hydrogen–oxygen–argon mixtures. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 6076-6083.	3.8	68
13	Effect of acoustically absorbing wall tubes on the near-limit detonation propagation behaviors in a methane–oxygen mixture. <i>Fuel</i> , 2019, 236, 975-983.	3.4	66
14	Investigation on the detonation propagation limit criterion for methane-oxygen mixtures in tubes with different scales. <i>Fuel</i> , 2019, 239, 617-622.	3.4	62
15	Detonation velocity deficits of H ₂ /O ₂ /Ar mixture in round tube and annular channels. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 15078-15087.	3.8	58
16	On the dynamic detonation parameters in acetylene–oxygen mixtures with varying amount of argon dilution. <i>Combustion and Flame</i> , 2014, 161, 1390-1397.	2.8	55
17	The precursor shock wave and flame propagation enhancement by CO ₂ injection in a methane-oxygen mixture. <i>Fuel</i> , 2021, 283, 118917.	3.4	55
18	Explosion behaviors of mixtures of methane and air with saturated water vapor. <i>Fuel</i> , 2016, 177, 15-18.	3.4	54

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19	Detonation limits in binary fuel blends of methane/hydrogen mixtures. <i>Fuel</i> , 2016, 168, 27-33.	3.4	54
20	Measurement and prediction of detonation cell size in binary fuel blends of methane/hydrogen mixtures. <i>Fuel</i> , 2016, 172, 196-199.	3.4	53
21	An experimental investigation of the explosion characteristics of dimethyl ether-air mixtures. <i>Energy</i> , 2016, 107, 1-8.	4.5	52
22	Methane-oxygen detonation characteristics near their propagation limits in ducts. <i>Fuel</i> , 2016, 177, 1-7.	3.4	52
23	Ignition behavior and the onset of quasi-detonation in methane-oxygen using different end wall reflectors. <i>Aerospace Science and Technology</i> , 2021, 116, 106873.	2.5	52
24	Velocity behavior downstream of perforated plates with large blockage ratio for unstable and stable detonations. <i>Aerospace Science and Technology</i> , 2019, 86, 236-243.	2.5	49
25	The critical tube diameter and critical energy for direct initiation of detonation in C ₂ H ₂ /N ₂ O/Ar mixtures. <i>Combustion and Flame</i> , 2012, 159, 2944-2953.	2.8	48
26	Explosion characteristics of methane-ethane mixtures in air. <i>Journal of Loss Prevention in the Process Industries</i> , 2017, 45, 102-107.	1.7	45
27	Explosion and flame characteristics of methane/air mixtures in a large-scale vessel. <i>Process Safety Progress</i> , 2014, 33, 362-368.	0.4	42
28	On the detonation propagation behavior in hydrogen-oxygen mixture under the effect of spiral obstacles. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 21392-21402.	3.8	41
29	Impacts of turbulence on explosion characteristics of methane-air mixtures with different fuel concentration. <i>Fuel</i> , 2020, 271, 117610.	3.4	41
30	Methods to predict the critical energy of direct detonation initiation in gaseous hydrocarbon fuels – An overview. <i>Fuel</i> , 2014, 117, 294-308.	3.4	40
31	Effects of argon/nitrogen dilution on explosion and combustion characteristics of dimethyl ether-air mixtures. <i>Fuel</i> , 2015, 159, 646-652.	3.4	40
32	Velocity fluctuation analysis near detonation propagation limits for stoichiometric methane-hydrogen-oxygen mixture. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 17750-17759.	3.8	40
33	Measurement and relationship between critical tube diameter and critical energy for direct blast initiation of gaseous detonations. <i>Journal of Loss Prevention in the Process Industries</i> , 2013, 26, 1293-1299.	1.7	39
34	Measurement and scaling analysis of critical energy for direct initiation of gaseous detonations. <i>Shock Waves</i> , 2012, 22, 275-279.	1.0	33
35	Measurement of effective blast energy for direct initiation of spherical gaseous detonations from high-voltage spark discharge. <i>Shock Waves</i> , 2012, 22, 1-7.	1.0	32
36	Critical energy of direct detonation initiation in gaseous fuel-oxygen mixtures. <i>Safety Science</i> , 2013, 53, 153-159.	2.6	32

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37	The critical energy of direct initiation and detonation cell size in liquid hydrocarbon fuel/air mixtures. <i>Fuel</i> , 2013, 113, 331-339.	3.4	30
38	Detonation limits in methane-hydrogen-oxygen mixtures: Dominant effect of induction length. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 23532-23537.	3.8	30
39	Experimental study on the effects of different fluidic jets on the acceleration of deflagration prior its transition to detonation. <i>Aerospace Science and Technology</i> , 2020, 106, 106203.	2.5	28
40	Deflagration to detonation transition and detonation structure in diethyl ether mist/aluminum dust/air mixtures. <i>Fuel</i> , 2013, 107, 400-408.	3.4	27
41	The effects of pre-ignition turbulence by gas jets on the explosion behavior of methane-oxygen mixtures. <i>Fuel</i> , 2020, 277, 118190.	3.4	27
42	An experimental study on the detonability of gaseous hydrocarbon fuel-oxygen mixtures in narrow channels. <i>Aerospace Science and Technology</i> , 2017, 69, 193-200.	2.5	26
43	On the explosion characteristics for central and end-wall ignition in hydrogen-air mixtures: A comparative study. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 30861-30869.	3.8	24
44	Response of critical tube diameter phenomenon to small perturbations for gaseous detonations. <i>Shock Waves</i> , 2014, 24, 219-229.	1.0	22
45	Effects of inert gas jet on the transition from deflagration to detonation in a stoichiometric methane-oxygen mixture. <i>Fuel</i> , 2021, 285, 119237.	3.4	22
46	Numerical simulation of flame acceleration and deflagration-to-detonation transition of ethylene in channels. <i>Journal of Loss Prevention in the Process Industries</i> , 2016, 43, 120-126.	1.7	21
47	The effect of gas jets on the explosion dynamics of hydrogen-air mixtures. <i>Chemical Engineering Research and Design</i> , 2022, 162, 384-394.	2.7	21
48	Detonation velocity behavior and scaling analysis for ethylene-nitrous oxide mixture. <i>Applied Thermal Engineering</i> , 2017, 127, 671-678.	3.0	20
49	Experimental investigation on the lower flammability limits of diethyl ether/n-pentane/epoxypropane-air mixtures. <i>Journal of Loss Prevention in the Process Industries</i> , 2019, 57, 273-279.	1.7	18
50	The effect of ignition delay time on the explosion behavior in non-uniform hydrogen-air mixtures. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 9810-9818.	3.8	15
51	Measurement and chemical kinetic model predictions of detonation cell size in methanol-oxygen mixtures. <i>Shock Waves</i> , 2012, 22, 173-178.	1.0	14
52	Explosion behavior of methane-air mixtures and Rayleigh-Taylor instability in the explosion process near the flammability limits. <i>Fuel</i> , 2022, 324, 124730.	3.4	14
53	Detonation propagation limits in highly argon diluted acetylene-oxygen mixtures in channels. <i>Experimental Thermal and Fluid Science</i> , 2018, 90, 125-131.	1.5	13
54	Schlieren visualization of the interaction of jet in crossflow and deflagrated flame in hydrogen-air mixture. <i>Fuel</i> , 2021, 292, 120380.	3.4	9

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55	Analysis of dispersion behavior of aluminum powder in a 20L chamber with two symmetric nozzles. <i>Process Safety Progress</i> , 2020, 39, e12097.	0.4	8
56	Investigation of the effect of turbulence induced by double non-reactive gas jet on the deflagration-to-detonation transition. <i>Aerospace Science and Technology</i> , 2022, 124, 107556.	2.5	8
57	Effects of inert dispersed particles on the propagation characteristics of a H ₂ /CO/air detonation wave. <i>Aerospace Science and Technology</i> , 2022, 126, 107660.	2.5	6
58	Detonation and deflagration characteristics of p-Xylene/gaseous hydrocarbon fuels/air mixtures. <i>Fuel</i> , 2015, 140, 73-80.	3.4	5
59	Effects of jet/flame interaction on deflagration-to-detonation transition by non-reactive gas jet in a methane-oxygen mixture. <i>Aerospace Science and Technology</i> , 2022, 126, 107581.	2.5	5