Qi Zhang

List of Publications by Year
in descending order

52 papers	1,305 citations	304743 22 h-index	377865 34 g-index
52 all docs	52 docs citations	52 times ranked	572 citing authors

#	Article	IF	Citations
1	Inhibition of aluminum dust explosion by NaHCO3 with different particle size distributions. Journal of Hazardous Materials, 2018, 344, 902-912.	12.4	108
2	Quantitative research on gas explosion inhibition by water mist. Journal of Hazardous Materials, 2019, 363, 16-25.	12.4	79
3	Explosion energy of methane/deposited coal dust and inert effects of rock dust. Fuel, 2018, 228, 112-122.	6.4	66
4	Explosion hazards of LPG-air mixtures in vented enclosure with obstacles. Journal of Hazardous Materials, 2017, 334, 59-67.	12.4	62
5	Comparison of explosion characteristics between hydrogen/air and methane/air at the stoichiometric concentrations. International Journal of Hydrogen Energy, 2015, 40, 8761-8768.	7.1	60
6	Influence of nitromethane concentration on ignition energy and explosion parameters in gaseous nitromethane/air mixtures. Journal of Hazardous Materials, 2011, 185, 756-762.	12.4	51
7	Effects of premixed methane concentration on distribution of flame region and hazard effects in a tube and a tunnel gas explosion. Journal of Loss Prevention in the Process Industries, 2015, 34, 30-38.	3.3	51
8	The quantitative studies on gas explosion suppression by an inert rock dust deposit. Journal of Hazardous Materials, 2018, 353, 62-69.	12.4	49
9	Evaluation of detonation characteristics of aluminum/JP-10/air mixtures at stoichiometric concentrations. Fuel, 2016, 169, 41-49.	6.4	43
10	A study of the explosion parameters of vaporâ€“liquid two-phase JP-10/air mixtures. Fuel, 2016, 165, 279-288.	6.4	43
11	Effect of vent size on vented hydrogen-air explosion. International Journal of Hydrogen Energy, 2018, 43, 17788-17799.	7.1	41
12	Effect of turbulence on explosion of aluminum dust at various concentrations in air. Powder Technology, 2018, 325, 467-475.	4.2	40
13	Multiple explosions induced by the deposited dust layer in enclosed pipeline. Journal of Hazardous Materials, 2019, 371, 423-432.	12.4	38
14	Influence of turbulent flow on the explosion parameters of micro- and nano-aluminum powderâ€“air mixtures. Journal of Hazardous Materials, 2015, 299, 603-617.	12.4	37
15	Comparison of the explosion characteristics of hydrogen, propane, and methane clouds at the stoichiometric concentrations. International Journal of Hydrogen Energy, 2017, 42, 14794-14808.	7.1	37
16	Interaction between gas explosion flame and deposited dust. Chemical Engineering Research and Design, 2017, 111, 775-784.	5.6	37
17	Flame propagation behaviors and temperature characteristics in polyethylene dust explosions. Powder Technology, 2018, 328, 345-357.	4.2	29
18	Theoretical and numerical study on ignition behaviour of coal dust layers on a hot surface with corrected kinetic parameters. Journal of Hazardous Materials, 2019, 368, 156-162.	12.4	27

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19	Combustion parameters of gaseous epoxypropane/air in a confined vessel. Fuel, 2013, 105, 512-517.	6.4	25
20	Ignition Characteristics for Methaneâ€Air Mixtures atVarious Initial Temperatures. Process Safety Progress, 2013, 32, 37-41.	1.0	25
21	Effects of spark duration on minimum ignition energy for methane/air mixture. Process Safety Progress, 2011, 30, 154-156.	1.0	24
22	Effect of ignition delay on explosion parameters of corn dust/air inÂconfined chamber. Journal of Loss Prevention in the Process Industries, 2015, 33, 23-28.	3.3	24
23	Comparison of detonation characteristics for typical binary blended fuel. Fuel, 2020, 268, 117351.	6.4	24
24	Relation of fragment with air shock wave intensity for explosion in a shell. International Journal of Impact Engineering, 2003, 28, 1129-1141.	5.0	23
25	Effect of Ignition Location and Vent on Hazards of Indoor Liquefied Petroleum Gas Explosion. Combustion Science and Technology, 2017, 189, 698-716.	2.3	21
26	Comparison of detonation characteristics in energy output of gaseous JP-10 and propylene oxide in air. Fuel, 2018, 232, 154-164.	6.4	21
27	Effect of aluminum dust on flammability of gaseous epoxypropane in air. Fuel, 2013, 109, 647-652.	6.4	18
28	Flame range and energy output in two-phase propylene oxide/air mixtures beyond the original premixed zone. Energy, 2019, 171, 666-677.	8.8	18
29	Experimental study of gas deflagration temperature distribution and its measurement. Experimental Thermal and Fluid Science, 2011, 35, 503-508.	2.7	16
30	Limiting explosible concentration of hydrogenâ€"oxygenâ€"helium mixtures related to the practical operational case. Journal of Loss Prevention in the Process Industries, 2014, 29, 240-244.	3.3	14
31	Experimental study of the explosion characteristics of isopropyl nitrate aerosol under high-temperature ignition source. Journal of Hazardous Materials, 2021, 415, 125634.	12.4	13
32	Experimental study on explosion process of flour deposits/air mixture in horizontal pipelines. Powder Technology, 2019, 346, 273-282.	4.2	12
33	Effects of humidity on minimum ignition energy of gaseous epoxypropane/air mixtures. Journal of Loss Prevention in the Process Industries, 2012, 25, 982-988.	3.3	11
34	Influence of built-in obstacles on unconfined vapor cloud explosion. Journal of Loss Prevention in the Process Industries, 2016, 43, 449-456.	3.3	11
35	Experimental study on the vapor-liquid two-phase explosion of n-heptane under high-temperature source ignition. Combustion and Flame, 2021, 234, 111633.	5.2	11
36	Coupling Relation Between Air Shockwave and High-Temperature Flow from Explosion of Methane in Air. Flow, Turbulence and Combustion, 2012, 89, 1-12.	2.6	10

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37	Numerical study of influence of initial pressures and temperatures on the lower flammability limits of oxygenated fuels in air. Journal of Loss Prevention in the Process Industries, 2016, 41, 40-47.	3.3	10
38	Influence of spark duration on deflagration characteristics of methaneâ€air mixtures. Process Safety Progress, 2012, 31, 148-151.	1.0	9
39	A methodology to predict shock overpressure decay in a tunnel produced by a premixed methane/air explosion. Journal of Loss Prevention in the Process Industries, 2016, 44, 275-281.	3.3	9
40	Methods for estimating fragment hazard in gas explosion. Journal of Hazardous Materials, 2020, 381, 120989.	12.4	9
41	Criterion and propagation process of spark-induced dust layer explosion. Fuel, 2020, 267, 117205.	6.4	9
42	Estimation of pressure distribution for shock wave through the junction of branch gallery. Safety Science, 2013, 57, 214-222.	4.9	7
43	Prediction of the explosion effect of aluminized explosives. Science China: Physics, Mechanics and Astronomy, 2013, 56, 1004-1009.	5.1	6
44	Anti-explosion Design Method for Aluminum Alloy Doors in Ordinary Buildings. Journal of Failure Analysis and Prevention, 2021, 21, 268-279.	0.9	6
45	Experimental study on explosion parameters of ethanol aerosol under high-temperature source ignition. Fuel, 2022, 311, 122610.	6.4	5
46	Influence of concentration distribution of hydrogen in air on measured flammability limits. Journal of Loss Prevention in the Process Industries, 2015, 34, 82-91.	3.3	4
47	Hazards of Propylene Oxide Aerosols in the Secondary Explosion. Combustion Science and Technology, 2023, 195, 153-168.	2.3	4
48	Failure Analysis of Physical Explosion due to Gas Jetting from High-Pressure Pipeline. Journal of Failure Analysis and Prevention, 2012, 12, 181-189.	0.9	3
49	Explosion Hazard of AP/HTPB in Fire Condition. Combustion Science and Technology, 2023, 195, 1169-1183.	2.3	3
50	Analysis of the temperature distribution in the explosion of a methane/air mixture in a tunnel. Journal of Engineering Physics and Thermophysics, 2012, 85, 1413-1418.	0.6	1
51	Critical Condition of Reinforced Concrete Roof Slab Failure Under Blast and its Blast Resistance Design Method. Journal of Failure Analysis and Prevention, 2022, 22, 829-840.	0.9	1
52	Numerical investigation of F2 and H2 explosion process under flow conditions. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-16.	2.3	0