Baolu Shi

List of Publications by Year
in descending order

52 papers	1,027 citations	394421 19 h-index	454955 30 g-index
53 all docs	53 docs citations	53 times ranked	496 citing authors

#	Article	IF	Citations
1	A comparison of partially premixed methane/air combustion in confined vane-swirl and jet-swirl combustors. Combustion Science and Technology, 2023, 195, 212-231.	2.3	3
2	Improvement of ignition and combustion performance of micro-aluminum particles by double-shell nickel-phosphorus alloy coating. Chemical Engineering Journal, 2022, 433, 133585.	12.7	4
3	Flammability enhancement of swirling ammonia/air combustion using AC powered gliding arc discharges. Fuel, 2022, 313, 122674.	6.4	32
4	Numerical study on the characteristics of a nano-aluminum dust-air jet flame. Aerospace Science and Technology, 2022, 121, 107304.	4.8	10
5	Experimental and numerical study on slag deposition in solid rocket motor. Aerospace Science and Technology, 2022, 122, 107404.	4.8	7
6	A technique to establish liquid ethanol tubular combustion by dual swirl. Fuel, 2022, 316, 123443.	6.4	1
7	Ethanol spray tubular flame established in a swirling air flow. Experimental Thermal and Fluid Science, 2022, 134, 110616.	2.7	1
8	Characteristics of oxy-methane flame in an axial/tangential swirl jet burner. Experimental Thermal and Fluid Science, 2022, 139, 110732.	2.7	2
9	Mitigating NO emissions from an ammonia-fueled micro-power system with a perforated plate implemented. Journal of Hazardous Materials, 2021, 401, 123848.	12.4	63
10	Hydrogen abstraction/addition reactions in soot surface growth. Physical Chemistry Chemical Physics, 2021, 23, 3071-3086.	2.8	4
11	A numerical investigation on heterogeneous combustion of aluminum nanoparticle clouds. Aerospace Science and Technology, 2021, 112, 106604.	4.8	25
12	Numerical study on combustion characteristic of micron aluminum particle. , 2021, , .		0
13	Experimental study on the collision behaviors of micron-sized aluminum droplets with solid wall in high temperature burned gas. Aerospace Science and Technology, 2021, 115, 106791.	4.8	15
14	Effects of AP powder topology on microscale combustion properties of AP/HTPB propellant. Powder Technology, 2021, 394, 468-477.	4.2	10
15	Investigation on the microscale combustion characteristics of AP/HTPB propellant under wide pressure range. Fuel, 2021, 306, 121652.	6.4	21
16	Modeling of micro aluminum particle combustion in multiple oxidizers. Acta Astronautica, 2021, 189, 119-128.	3.2	16
17	Temperature measurements and high-speed photography of micron-sized aluminum particles burning in methane flat-flame exhaust. Fuel, 2021, 306, 121743.	6.4	8
18	Quantitative measurement of mixture formation in an impinging spray of ethanol-gasoline blend under cold-start condition via UVâ€“Vis dual-wavelength laser absorption scattering (LAS) technique. Fuel, 2020, 262, 116685.	6.4	3

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19	Effects of swirl on the heating process of a central gas stream in a tubular flame. Experimental Thermal and Fluid Science, 2020, 119, 110209.	2.7	4
20	Size-derived reaction mechanism of core-shell aluminum nanoparticle. Applied Physics Letters, 2020, 117, .	3.3	15
21	Response of lean premixed swirl tubular flame to acoustic perturbations. Experimental Thermal and Fluid Science, 2020, 119, 110199.	2.7	11
22	Reaction Mechanism of the Aluminum Nanoparticle: Physicochemical Reaction and Heat/Mass Transfer. Journal of Physical Chemistry C, 2020, 124, 3886-3894.	3.1	31
23	Prediction of nano/micro aluminum particles ignition in oxygen atmosphere. Fuel, 2020, 266, 116952.	6.4	49
24	A novel combustion system for liquid fuel evaporating and burning. Proceedings of the Combustion Institute, 2019, 37, 4329-4336.	3.9	13
25	Quantitative investigation on the spray mixture formation for ethanol-gasoline blends via UVâ€“Vis dual-wavelength laser absorption scattering (LAS) technique. Fuel, 2019, 242, 425-437.	6.4	11
26	Flame stability and combustion characteristics of liquid fuel in a meso-scale burner with porous media. Fuel, 2019, 251, 249-259.	6.4	47
27	Effects of particle size on two-phase flow loss in aluminized solid rocket motors. Acta Astronautica, 2019, 159, 33-40.	3.2	38
28	Effects of temperature-time history on the flame synthesis of nanoparticles in a swirl-stabilized tubular burner with two feeding modes. Journal of Aerosol Science, 2019, 133, 72-82.	3.8	21
29	Coherence resonance and stochastic bifurcation behaviors of simplified standing-wave thermoacoustic systems. Journal of the Acoustical Society of America, 2019, 145, 692-702.	1.1	22
30	Characteristics of stoichiometric CH4/O2/CO2 flame up to the pure oxygen condition. Energy, 2019, 168, 151-159.	8.8	14
31	Effects of N2 and CO2 dilution on the combustion characteristics of C3H8/O2 mixture in a swirl tubular flame burner. Experimental Thermal and Fluid Science, 2019, 100, 251-258.	2.7	19
32	Oxy-fuel combustion of methane in a swirl tubular flame burner under various oxygen contents: Operation limits and combustion instability. Experimental Thermal and Fluid Science, 2018, 90, 115-124.	2.7	67
33	Effects of internal flue gas recirculation rate on the NO emission in a methane/air premixed flame. Combustion and Flame, 2018, 188, 199-211.	5.2	47
34	Characteristics of combustion and soot formation of ethanol-gasoline blends injected by a hole-type nozzle for direct-injection spark-ignition engines. Fuel Processing Technology, 2018, 181, 318-330.	7.2	22
35	Ignition and Oxidation of Coreâ€“Shell Al/Al₂O₃ Nanoparticles in an Oxygen Atmosphere: Insights from Molecular Dynamics Simulation. Journal of Physical Chemistry C, 2018, 122, 29620-29627.	3.1	43
36	Characteristics of Hydrogen Combustion in a Rapidly Mixed Tubular Flame Burner. , 2018, , .		0

#	Article	IF	Citations
37	Stability limits of methane/oxygen mixtures diluted by N₂ and CO₂ under various oxygen contents. , 2018, , .		0
38	Rapidly mixed combustion of hydrogen/oxygen diluted by N2 and CO2 in a tubular flame combustor. International Journal of Hydrogen Energy, 2018, 43, 14806-14815.	7.1	14
39	Effects of DamkÃ¶hler Number on Methane/Oxygen Tubular Combustion Diluted by N2 and CO2. Journal of Energy Resources Technology, Transactions of the ASME, 2017, 139, .	2.3	2
40	CO2 diluted propane/oxygen combustion in a rapidly mixed tubular flame burner. Proceedings of the Combustion Institute, 2017, 36, 4261-4268.	3.9	22
41	Effects of heat recirculation on combustion characteristics of n-heptane in micro combustors. Applied Thermal Engineering, 2016, 109, 697-708.	6.0	59
42	EFFECTS OF CROSS-FLOW ON FUEL SPRAY INJECTED BY HOLE-TYPE INJECTOR FOR DIRECT-INJECTION GASOLINE ENGINE. SECOND REPORT: SPRAY PATTERN, DROPLET SIZE, AND VORTEX STRUCTURE. Atomization and Sprays, 2016, 26, 53-72.	0.8	8
43	Experimental and Numerical Study on Oxygen Enhanced Methane Combustion in a Rapidly Mixed Tubular Flame Burner. , 2015, , .		0
44	EFFECTS OF CROSS-FLOW ON FUEL SPRAY INJECTED BY HOLE-TYPE INJECTOR FOR DIRECTINJECTION GASOLINE ENGINE. Atomization and Sprays, 2015, 25, 81-98.	0.8	10
45	Carbon dioxide diluted methane/oxygen combustion in a rapidly mixed tubular flame burner. Combustion and Flame, 2015, 162, 420-430.	5.2	57
46	Effect of flat-wall impingement on diesel spray combustion. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2015, 229, 535-549.	1.9	46
47	Flow visualization and mixing in a rapidly mixed type tubular flame burner. Experimental Thermal and Fluid Science, 2014, 54, 1-11.	2.7	24
48	Reexamination on methane/oxygen combustion in a rapidly mixed type tubular flame burner. Combustion and Flame, 2014, 161, 1310-1325.	5.2	23
49	Methane/oxygen combustion in a rapidly mixed type tubular flame burner. Proceedings of the Combustion Institute, 2013, 34, 3369-3377.	3.9	36
50	An Experimental Study on Methane/Oxygen-Air Combustion With a Rapidly Mixed Type Tubular Flame Burner. , 2011, , .		1
51	Cross-Flow Effect on Behavior of Fuel Spray Injected by Hole-Type Nozzle for D.I. Gasoline Engine. , 0, , .		4
52	Characteristics of Diesel Spray Flame under Flat Wall Impinging Condition --LAS, OH* Chemiluminescence and Two Color Pyrometry Results. , 0, , .		13