Suo Yang

List of Publications by Year
in descending order

51 papers	941 citations	759233 12 h-index	677142 22 g-index
52 all docs	52 docs citations	52 times ranked	723 citing authors

#	Article	IF	Citations
1	Risk assessment of airborne transmission of COVID-19 by asymptomatic individuals under different practical settings. Journal of Aerosol Science, 2021, 151, 105661.	3.8	164
2	Plasma Assisted Low Temperature Combustion. Plasma Chemistry and Plasma Processing, 2016, 36, 85-105.	2.4	130
3	Low temperature oxidation and pyrolysis of n-heptane in nanosecond-pulsed plasma discharges. Proceedings of the Combustion Institute, 2017, 36, 4105-4112.	3.9	74
4	A global pathway selection algorithm for the reduction of detailed chemical kinetic mechanisms. Combustion and Flame, 2016, 167, 238-247.	5.2	65
5	Multiscale modeling and general theory of non-equilibrium plasma-assisted ignition and combustion. Journal Physics D: Applied Physics, 2017, 50, 433001.	2.8	62
6	Airborne transmission of virus-laden aerosols inside a music classroom: Effects of portable purifiers and aerosol injection rates. Physics of Fluids, 2021, 33, 033307.	4.0	59
7	Parallel on-the-fly adaptive kinetics in direct numerical simulation of turbulent premixed flame. Proceedings of the Combustion Institute, 2017, 36, 2025-2032.	3.9	40
8	Nanosecond Pulsed Plasma Activated C2H4/O2/Ar Mixtures in a Flow Reactor. Journal of Propulsion and Power, 2016, 32, 1240-1252.	2.2	38
9	Sensitivity of predictions to chemical kinetics models in a temporally evolving turbulent non-premixed flame. Combustion and Flame, 2017, 183, 224-241.	5.2	36
10	Large Eddy Simulation of soot evolution in turbulent reacting flows: Presumed subfilter PDF model for soot–turbulence–chemistry interactions. Combustion and Flame, 2019, 209, 200-213.	5.2	29
11	Comparison of Flamelet/Progress-Variable and Finite-Rate Chemistry LES Models in a Preconditioning Scheme. , 2017, , .		17
12	Subgrid Scale Modeling of the Equation of State for Turbulent Flows under Supercritical Conditions. , 2017, , .		15
13	A Multi-Moment Sectional Method (MMSM) for tracking the soot Number Density Function. Proceedings of the Combustion Institute, 2019, 37, 1041-1048.	3.9	15
14	Parallel On-the-fly Adaptive Kinetics for Non-equilibrium Plasma Discharges of C2H4/O2/Ar Mixture. , 2016, , .		14
15	Comparison of Tabulation and Correlated Dynamic Evaluation of Real Fluid Properties for Supercritical Mixing. , 2017, , .		13
16	Time-resolved in situ measurements and predictions of plasma-assisted methane reforming in a nanosecond-pulsed discharge. Proceedings of the Combustion Institute, 2021, 38, 6533-6540.	3.9	13
17	A Detailed Comparison of Thermal and Nanosecond Plasma Assisted Ignition of Hydrogen-Air Mixtures. , 2015, , .		12
18	Well-Balanced Central Schemes on Overlapping Cells with Constant Subtraction Techniques for the Saint-Venant Shallow Water System. Journal of Scientific Computing, 2015, 63, 678-698.	2.3	12

#	ARTICLE	IF	CITATIONS
19	Global Pathway Analysis of the Extinction and Re-ignition of a Turbulent Non-Premixed Flame. , 2017, , .		12
20	Large Eddy Simulation of soot evolution in turbulent reacting flows: Strain-Sensitive Transport Approach for Polycyclic Aromatic Hydrocarbons. Combustion and Flame, 2020, 220, 219-234.	5.2	12
21	An efficient finite-rate chemistry model for a preconditioned compressible flow solver and its comparison with the flamelet/progress-variable model. Combustion and Flame, 2019, 210, 172-182.	5.2	10
22	Soot-based Global Pathway Analysis: Soot formation and evolution at elevated pressures in co-flow diffusion flames. Combustion and Flame, 2021, 227, 255-270.	5.2	10
23	A Robust Reacting Flow Solver with Computational Diagnostics Based on OpenFOAM and Cantera. Aerospace, 2022, 9, 102.	2.2	10
24	Numerical investigation of spatial-developing turbulent heat transfer in forced convections at different supercritical pressures. International Journal of Heat and Mass Transfer, 2020, 159, 120128.	4.8	9
25	Effects of Non-Equilibrium Plasma Discharge on Ignition and NTC Chemistry of DME/O2/Ar Mixtures: A Numerical Investigation. , 2017, , .		8
26	The effects of ozonolysis activated autoignition on non-premixed jet flame dynamics: a numerical and experimental study. , 2017, , .		8
27	Multicomponent Effects on the Supercritical CO2 Systems: Mixture Critical Point and Phase Separation. Flow, Turbulence and Combustion, 2022, 109, 515-543.	2.6	8
28	Numerical Modeling of Plasma Assisted Pyrolysis and Combustion of Ammonia. , 2021, , .		6
29	Stiffness-Reduced Neural ODE Models for Data-Driven Reduced-Order Modeling of Combustion Chemical Kinetics. , 2022, , .		6
30	Mobility analysis of nanocluster formation and growth from titanium tetraisopropoxide in a flow tube reactor. Journal of Aerosol Science, 2022, 163, 105981.	3.8	5
31	Evaluation of a non-equilibrium multi-component evaporation model for blended diesel/alcohol droplets. , 2020, , .		4
32	EFFECTS OF EVAPORATION AND FUEL PROPERTIES ON LIQUID JETS IN SUPERSONIC CROSSFLOW: A COMPUTATIONAL STUDY USING A COMPRESSIBLE EULERIAN-LAGRANGIAN SOLVER. Atomization and Sprays, 2020, 30, 675-696.	0.8	4
33	Comparison of Finite-Rate Chemistry and Flamelet/Progress-Variable Models II: Sandia Flame E. , 2018, , .		3
34	Time-Resolved Electron Temperature and Species Measurements and Predictions of Plasma-Assisted Reforming of Methane. , 2019, , .		3
35	Numerical and Experimental Investigation of Nanosecond-Pulsed Plasma Activated C2H4/O2/Ar Mixtures in a Low Temperature Flow Reactor. , 2015, , .		2
36	Hybrid Method of Moments to Predict Nanoparticle Nucleation, Growth and Charging in Dusty Plasmas. , 2020, , .		2

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37	Comparison of Finite Rate Chemistry and Flamelet/Progress-Variable Models: Sandia Flames and the Effect of Differential Diffusion. Combustion Science and Technology, 2020, 192, 1137-1159.	2.3	2
38	A robust reacting flow solver with detailed transport, chemistry, and steady-state preserving splitting schemes based on OpenFOAM and Cantera. , 2020, , .		2
39	Numerical Simulation of a Controlled Trajectory Rapid Compression Machine. , 2020, , .		2
40	Comparing Low-Mach and Fully-Compressible CFD Solvers for Phenomenological Modeling of Nanosecond Pulsed Plasma Discharges with and without Turbulence. , 2022, , .		2
41	An OpenFOAM-based fully compressible reacting flow solver with detailed transport and chemistry for high-speed combustion simulations. , 2020, , .		1
42	A Numerical Study on Soot Formation and Evolution in Co-flow Diffusion Flames under Elevated Pressures. , 2020, , .		1
43	Global Pathway Analysis of Plasma Assisted Ammonia Combustion. , 2022, , .		1
44	Optimization and uncertainty quantification of spray break-up submodel with regularized multi-task neural nets. , 2020, , .		0
45	Thermodynamic Analysis of Supercritical CO2 Systems. , 2020, , .		0
46	A Numerical Study on Soot Formation and Evolution in Pressurized Turbulent Sooting Flames. , 2021, , .		0
47	Comparison between Flat and Creviced Pistons in a Controlled Trajectory Rapid Compression and Expansion Machine (CT-RCEM). , 2021, , .		0
48	Multi-component transcritical flow simulation based on in situ adaptive tabulation of vapor-liquid equilibrium solutions. , 2021, , .		0
49	Computational Diagnostics for Reacting Flows with Global Pathway Analysis Aided by Chemical Explosive Mode Analysis. , 2021, , .		0
50	Atomization of High Viscosity Liquids Using a Two-Fluid Counterflow Nozzle: Experiments and Modeling. , 2020, , .		0
51	A parallel in situ adaptive tabulation of combustion chemistry using a shared-memory architecture. , 2022, , .		0