Wenting Sun

List of Publications by Year in Descending Order

41 papers	1,823 citations	19 h-index	42 g-index
45 ext. papers	2,428 ext. citations	6.8 avg, IF	5.41 L-index

#	Paper	IF	Citations
41	Designing the bioproduction of Martian rocket propellant via a biotechnology-enabled in situ resource utilization strategy. *Nature Communications*, **2021**, 12, 6166	17.4	3
40	Plasma assisted ammonia combustion: Simultaneous NOx reduction and flame enhancement. *Combustion and Flame*, **2021**, 228, 430-432	5.3	10
39	High pressure ignition delay times of H2/CO mixture in carbon dioxide and argon diluent. *Proceedings of the Combustion Institute*, **2021**, 38, 251-260	5.9	2
38	Dynamics of laminar ethylene lifted flame with ozone addition. *Proceedings of the Combustion Institute*, **2021**, 38, 6773-6780	5.9	3
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	1.5	1
36	Laminar flame speeds of methane/air mixtures at engine conditions: Performance of different kinetic models and power-law correlations. *Combustion and Flame*, **2020**, 218, 101-108	5.3	24
35	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	5.3	4
34	Analysis of chemical pathways and flame structure for n-dodecane/air turbulent premixed flames. *Combustion and Flame*, **2019**, 207, 36-50	5.3	8
33	Measurement of methane autoignition delays in carbon dioxide and argon diluents at high pressure conditions. *Combustion and Flame*, **2019**, 204, 304-319	5.3	13
32	The effect of ozone addition on combustion: Kinetics and dynamics. *Progress in Energy and Combustion Science*, **2019**, 73, 1-25	33.6	43
31	Global Pathway Analysis: a hierarchical framework to understand complex chemical kinetics. *Combustion Theory and Modelling*, **2019**, 23, 549-571	1.5	2
30	Ozonolysis activated autoignition in non-premixed coflow. *Journal Physics D: Applied Physics*, **2019**, 52, 105201	3	2
29	Comparison of Finite-Rate Chemistry and Flamelet/Progress-Variable Models II: Sandia Flame E **2018**,		1
28	Investigation of Ethylene Ozonolysis Reactions Stable Products Using Flow Reactor at Room Temperature and Pressure **2018**,		1
27	Blowoff hysteresis, flame morphology and the effect of plasma in a swirling flow. *Journal Physics D: Applied Physics*, **2018**, 51, 365201	3	10
26	Comparison of Flamelet/Progress-Variable and Finite-Rate Chemistry LES Models in a Preconditioning Scheme **2017**,		14
25	The Effect of Ozonolysis Activated Autoignition on Jet Flame Dynamics **2017**,		7

24	Effect of turbulence–chemistry interactions on chemical pathways for turbulent hydrogen–air premixed flames. *Combustion and Flame*, **2017**, 176, 191-201	5.3	29
23	Sensitivity of predictions to chemical kinetics models in a temporally evolving turbulent non-premixed flame. *Combustion and Flame*, **2017**, 183, 224-241	5.3	23
22	Multiscale modeling and general theory of non-equilibrium plasma-assisted ignition and combustion. *Journal Physics D: Applied Physics*, **2017**, 50, 433001	3	33
21	Effects of Non-Equilibrium Plasma Discharge on Ignition and NTC Chemistry of DME/O2/Ar Mixtures: A Numerical Investigation **2017**,		5
20	The effects of ozonolysis activated autoignition on non-premixed jet flame dynamics: a numerical and experimental study **2017**,		5
19	Global Pathway Analysis of the Autoignition and Extinction of Aromatic/Alkane mixture **2017**,		4
18	The Investigation of Ozonolysis Reactions of Ethylene at Combustion Environment Using a Flow Reactor **2017**,		1
17	Global Pathway Analysis of the Extinction and Re-ignition of a Turbulent Non-Premixed Flame **2017** ,		8
16	Nanosecond Pulsed Plasma Activated C2H4/O2/Ar Mixtures in a Flow Reactor. *Journal of Propulsion and Power*, **2016**, 32, 1240-1252	1.8	28
15	The Effect of Ozone Addition on Autoignition and Flame Stabilization **2016**,		6
14	Plasma Assisted Low Temperature Combustion. *Plasma Chemistry and Plasma Processing*, **2016**, 36, 85-105	3.6	79
13	A global pathway selection algorithm for the reduction of detailed chemical kinetic mechanisms. *Combustion and Flame*, **2016**, 167, 238-247	5.3	41
12	The effect of ozone addition on laminar flame speed. *Combustion and Flame*, **2015**, 162, 3914-3924	5.3	57
11	Plasma assisted combustion: Progress, challenges, and opportunities. *Combustion and Flame*, **2015**, 162, 529-532	5.3	49
10	Plasma assisted combustion: Dynamics and chemistry. *Progress in Energy and Combustion Science*, **2015**, 48, 21-83	33.6	553
9	In situ plasma activated low temperature chemistry and the S-curve transition in DME/oxygen/helium mixture. *Combustion and Flame*, **2014**, 161, 2054-2063	5.3	56
8	Dual modulation Faraday rotation spectroscopy of HO2 in a flow reactor. *Optics Letters*, **2014**, 39, 1783-6	3	16
7	Direct In Situ Quantification of HO2 from a Flow Reactor. *Journal of Physical Chemistry Letters*, **2013** , 4, 872-6	6.4	32

6	A dynamic adaptive chemistry scheme with error control for combustion modeling with a large detailed mechanism. *Combustion and Flame*, **2013**, 160, 225-231	5.3	38
5	Kinetic effects of non-equilibrium plasma-assisted methane oxidation on diffusion flame extinction limits. *Combustion and Flame*, **2012**, 159, 221-229	5.3	116
4	Effects of non-equilibrium plasma discharge on counterflow diffusion flame extinction. *Proceedings of the Combustion Institute*, **2011**, 33, 3211-3218	5.9	70
3	Kinetic effects of toluene blending on the extinction limit of n-decane diffusion flames. *Combustion and Flame*, **2010**, 157, 411-420	5.3	69
2	A dynamic multi-timescale method for combustion modeling with detailed and reduced chemical kinetic mechanisms. *Combustion and Flame*, **2010**, 157, 1111-1121	5.3	94
1	A path flux analysis method for the reduction of detailed chemical kinetic mechanisms. *Combustion and Flame*, **2010**, 157, 1298-1307	5.3	262