Abhishek Jain

List of Publications by Year
in descending order

24 papers	661 citations	471509 17 h-index	610901 24 g-index
24 all docs	24 docs citations	24 times ranked	656 citing authors

#	Article	IF	Citations
1	In situ temperature measurements in sooting methane/air flames using synchrotron x-ray fluorescence of seeded krypton atoms. Science Advances, 2022, 8, eabm7947.	10.3	5
2	Elucidating the chemical pathways responsible for the sooting tendency of 1 and 2-phenylethanol. Proceedings of the Combustion Institute, 2021, 38, 1327-1334.	3.9	7
3	Effect of ammonia addition on suppressing soot formation in methane co-flow diffusion flames. Proceedings of the Combustion Institute, 2021, 38, 2497-2505.	3.9	41
4	ReaxFF molecular dynamics study on pyrolysis of bicyclic compounds for aviation fuel. Fuel, 2021, 297, 120724.	6.4	36
5	Pyrolysis of bio-derived dioxolane fuels: A ReaxFF molecular dynamics study. Fuel, 2021, 306, 121616.	6.4	19
6	Numerical simulations of yield-based sooting tendencies of aromatic fuels using ReaxFF molecular dynamics. Fuel, 2020, 262, 116545.	6.4	37
7	ReaxFF-based molecular dynamics study of bio-derived polycyclic alkanes as potential alternative jet fuels. Fuel, 2020, 279, 118548.	6.4	35
8	Reactive Molecular Dynamics Simulations and Quantum Chemistry Calculations To Investigate Soot-Relevant Reaction Pathways for Hexylamine Isomers. Journal of Physical Chemistry A, 2020, 124, 4290-4304.	2.5	11
9	Sooting tendencies of 20 bio-derived fuels for advanced spark-ignition engines. Fuel, 2020, 276, 118059.	6.4	19
10	Pyrolysis of binary fuel mixtures at supercritical conditions: A ReaxFF molecular dynamics study. Fuel, 2019, 235, 194-207.	6.4	75
11	Experimental and numerical study of variable oxygen index effects on soot yield and distribution in laminar co-flow diffusion flames. Proceedings of the Combustion Institute, 2019, 37, 859-867.	3.9	18
12	Sooting tendencies of co-optima test gasolines and their surrogates. Proceedings of the Combustion Institute, 2019, 37, 961-968.	3.9	39
13	Multi-scale modeling of gas-phase reactions in metal-organic chemical vapor deposition growth of WSe2. Journal of Crystal Growth, 2019, 527, 125247.	1.5	59
14	Numerical investigation of the pressure-dependence of yield sooting indices for n-alkane and aromatic species. Fuel, 2019, 254, 115574.	6.4	19
15	Application of ReaxFF-Reactive Molecular Dynamics and Continuum Methods in High-Temperature/Pressure Pyrolysis of Fuel Mixtures. Challenges and Advances in Computational Chemistry and Physics, 2019, , 161-185.	0.6	2
16	Experimental and numerical investigation of effects of premixing on soot processes in iso-octane co-flow flames. Proceedings of the Combustion Institute, 2019, 37, 1031-1039.	3.9	6
17	Effects of large aromatic precursors on soot formation in turbulent non-premixed sooting jet flames. Combustion Theory and Modelling, 2019, 23, 439-466.	1.9	8
18	Carbon structure and the resulting graphitizability upon oxygen evolution. Carbon, 2018, 135, 171-179.	10.3	22

#	Article	IF	Citations
19	Trajectories of Graphitizable Anthracene Coke and Non-Graphitizable Sucrose Char during the Earliest Stages of Annealing by Rapid CO2 Laser Heating. Journal of Carbon Research, 2018, 4, 36.	2.7	7
20	ReaxFF based molecular dynamics simulations of ignition front propagation in hydrocarbon/oxygen mixtures under high temperature and pressure conditions. Physical Chemistry Chemical Physics, 2017, 19, 5004-5017.	2.8	40
21	Assessment of the constant non-unity Lewis number assumption in chemically-reacting flows. Combustion Theory and Modelling, 2016, 20, 632-657.	1.9	57
22	A flamelet-based a priori analysis on the chemistry tabulation of polycyclic aromatic hydrocarbons in non-premixed flames. Combustion and Flame, 2014, 161, 1516-1525.	5.2	23
23	Modeling curvature effects in diffusion flames using a laminar flamelet model. Combustion and Flame, 2014, 161, 1294-1309.	5.2	42
24	Numerical modeling of sooting tendencies in a laminar co-flow diffusion flame. Combustion and Flame, 2013, 160, 1657-1666.	5.2	34