Stephen Dooley

List of Publications by Year
in descending order

47 papers	2,600 citations	236925 25 h-index	330143 37 g-index
48 all docs	48 docs citations	48 times ranked	1532 citing authors

#	Article	IF	Citations
1	Prescreening of Sustainable Aviation Jet Fuels. , 2021, , 487-523.		4
2	Rational Design and Testing of Anti-Knock Additives. Energies, 2020, 13, 4923.	3.1	7
3	Accurate and standard thermochemistry for oxygenated hydrocarbons: A case study of ethyl levulinate. Proceedings of the Combustion Institute, 2019, 37, 337-346.	3.9	4
4	Mechanism and theory of <scp>d</scp>-glucopyranose homogeneous acid catalysis in the aqueous solution phase. Physical Chemistry Chemical Physics, 2019, 21, 17993-18011.	2.8	9
5	Quantitative NMR Spectroscopy for the Analysis of Fuels: A Case Study of FACE Gasoline F. Energy & Fuels, 2019, 33, 11741-11756.	5.1	18
6	Ethanolic gasoline, a lignocellulosic advanced biofuel. Sustainable Energy and Fuels, 2019, 3, 409-421.	4.9	12
7	Surrogate fuels and combustion characteristics of liquid transportation fuels. Computer Aided Chemical Engineering, 2019, 45, 513-602.	0.5	7
8	Chemical functional group descriptor for ignition propensity of large hydrocarbon liquid fuels. Proceedings of the Combustion Institute, 2019, 37, 5083-5093.	3.9	27
9	A minimalist functional group (MFG) approach for surrogate fuel formulation. Combustion and Flame, 2018, 192, 250-271.	5.2	71
10	The combustion kinetics of the lignocellulosic biofuel, ethyl levulinate. Combustion and Flame, 2018, 193, 157-169.	5.2	20
11	On the Development of General Surrogate Composition Calculations for Chemical and Physical Properties. , 2017, , .		9
12	Reconstruction of chemical structure of real fuel by surrogate formulation based upon combustion property targets. Combustion and Flame, 2017, 183, 39-49.	5.2	72
13	Detailed Measurement Uncertainty Analysis of Solid-Phase Adsorptionâ€"Total Gas Chromatography (GC)-Detectable Tar from Biomass Gasification. Energy & Fuels, 2016, 30, 2187-2197.	5.1	26
14	Predicting Fuel Ignition Quality Using ¹H NMR Spectroscopy and Multiple Linear Regression. Energy & Fuels, 2016, 30, 9819-9835.	5.1	85
15	Predicting the global combustion behaviors of petroleum-derived and alternative jet fuels by simple fuel property measurements. Fuel, 2016, 168, 34-46.	6.4	68
16	Combustion characteristics of C4 iso-alkane oligomers: Experimental characterization of iso-dodecane as a jet fuel surrogate component. Combustion and Flame, 2016, 165, 137-143.	5.2	48
17	Fluidized Bed Gasification of Torrefied and Raw Grassy Biomass (Miscanthus Ã—) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2015, 29, 7290-7300.	5.1	24
18	Decomposition Studies of Isopropanol in aâ€˜â€˜Variable Pressure Flow Reactor. Zeitschrift Fur Physikalische Chemie, 2015, 229, 881-907.	2.8	10

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19	Reaction Pathway Analysis of Ethyl Levulinate and 5-Ethoxymethylfurfural from <scp>d</scp>-Fructose Acid Hydrolysis in Ethanol. Energy & Fuels, 2015, 29, 7554-7565.	5.1	76
20	Simulating the Sooting Propensity of JP-8 with Surrogate Fuels from Hydrocarbon Fluids. Journal of Propulsion and Power, 2014, 30, 1410-1418.	2.2	19
21	Characterization of Global Combustion Properties with Simple Fuel Property Measurements for Alternative Jet Fuels. , 2014, , .		9
22	Development of Reduced Kinetic Models for Petroleum-Derived and Alternative Jet Fuels. , 2014, , .		11
23	The combustion properties of 2,6,10-trimethyl dodecane and a chemical functional group analysis. Combustion and Flame, 2014, 161, 826-834.	5.2	100
24	Importance of a Cycloalkane Functionality in the Oxidation of a Real Fuel. Energy & Fuels, 2014, 28, 7649-7661.	5.1	44
25	Emulating the Combustion Behavior of Real Jet Aviation Fuels by Surrogate Mixtures of Hydrocarbon Fluid Blends: Implications for Science and Engineering. Energy & Fuels, 2014, 28, 3474-3485.	5.1	70
26	Gasification of Miscanthus x giganteus in an Air-Blown Bubbling Fluidized Bed: A Preliminary Study of Performance and Agglomeration. Energy & Fuels, 2014, 28, 1121-1131.	5.1	31
27	Dehydration Rate Measurements for tertiary-Butanol in a Variable Pressure Flow Reactor. Journal of Physical Chemistry A, 2013, 117, 8997-9004.	2.5	4
28	A comparative study of the chemical kinetic characteristics of small methyl esters in diffusion flame extinction. Proceedings of the Combustion Institute, 2013, 34, 821-829.	3.9	78
29	The combustion properties of 1,3,5-trimethylbenzene and a kinetic model. Fuel, 2013, 109, 125-136.	6.4	41
30	Reduced Kinetic Models for the Combustion of Jet Propulsion Fuels. , 2013, , .		15
31	Emulating the Sooting Propensity of JP-8 with Surrogate Fuels from Solvent Mixtures. , 2012, , .		3
32	Flow Reactor Autoignition Studies of Iso-octane at High Pressures and Low to Intermediate Temperatures. , 2012, , .		0
33	Measurements and Modeling of the Laminar Flame Speeds of n-Propyl and 1,3,5-TriMethyl Benzenes at Moderate Pressures. , 2012, , .		0
34	The combustion kinetics of a synthetic paraffinic jet aviation fuel and a fundamentally formulated, experimentally validated surrogate fuel. Combustion and Flame, 2012, 159, 3014-3020.	5.2	124
35	An Experimentally Validated Surrogate Fuel for the Combustion Kinetics of S-8, a Synthetic Paraffinic Jet Aviation Fuel. , 2012, , .		3
36	Laminar flame speeds and extinction stretch rates of selected aromatic hydrocarbons. Fuel, 2012, 97, 695-702.	6.4	56

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37	A detailed experimental and kinetic modeling study of n-decane oxidation at elevated pressures. Combustion and Flame, 2012, 159, 30-43.	5.2	59
38	A radical index for the determination of the chemical kinetic contribution to diffusion flame extinction of large hydrocarbon fuels. Combustion and Flame, 2012, 159, 541-551.	5.2	100
39	Methyl butanoate inhibition of n-heptane diffusion flames through an evaluation of transport and chemical kinetics. Combustion and Flame, 2012, 159, 1371-1384.	5.2	42
40	A chemical kinetic study of tertiary-butanol in a flow reactor and a counterflow diffusion flame. Combustion and Flame, 2012, 159, 968-978.	5.2	46
41	The experimental evaluation of a methodology for surrogate fuel formulation to emulate gas phase combustion kinetic phenomena. Combustion and Flame, 2012, 159, 1444-1466.	5.2	355
42	A kinetic model for methyl decanoate combustion. Combustion and Flame, 2012, 159, 1793-1805.	5.2	82
43	Numerical Simulations of Low Temperature Ignition Chemistry with Flow, Temperature, and Species Fluctuations in High Pressure Counterflow Flames. , 2012, , .		1
44	Radical Index on Extinction Limits of Diffusion Flames for Large Hydrocarbon Fuels. , 2011, , .		0
45	Kinetic effects of aromatic molecular structures on diffusion flame extinction. Proceedings of the Combustion Institute, 2011, 33, 1163-1170.	3.9	80
46	A jet fuel surrogate formulated by real fuel properties. Combustion and Flame, 2010, 157, 2333-2339.	5.2	484
47	Enthalpies of Formation, Bond Dissociation Energies and Reaction Paths for the Decomposition of Model Biofuels:Â Ethyl Propanoate and Methyl Butanoateâ€. Journal of Physical Chemistry A, 2007, 111, 3727-3739.	2.5	145