Steven Zabarnick

List of Publications by Year
in descending order

51	2,085	218677	243625
papers	citations	26 h-index	44 g-index

53	53	53	1123
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Chemical, Thermal Stability, Seal Swell, and Emissions Studies of Alternative Jet Fuels. Energy & Fuels, 2011, 25, 955-966.	5.1	231
2	Simulations of Flowing Mildly-Cracked Normal Alkanes Incorporating Proportional Product Distributions. Journal of Propulsion and Power, 2004, 20, 394-402.	2.2	174
3	Supercritical fuel deposition mechanisms. Industrial & Engineering Chemistry Research, 1993, 32, 3117-3122.	3.7	141
4	Pressure Effects on Flowing Mildly-Cracked n-Decane. Journal of Propulsion and Power, 2005, 21, 344-355.	2.2	123
5	Oxidation of jet fuels and the formation of deposit. Fuel, 1994, 73, 35-43.	6.4	115
6	Development of an advanced, thermally stable, coal-based jet fuel. Fuel Processing Technology, 2008, 89, 364-378.	7.2	99
7	Chemical kinetic modeling of jet fuel autoxidation and antioxidant chemistry. Industrial & Engineering Chemistry Research, 1993, 32, 1012-1017.	3.7	86
8	Analysis of Polar Species in Jet Fuel and Determination of Their Role in Autoxidative Deposit Formationâ€. Energy & Fuels, 2006, 20, 2564-2571.	5.1	77
9	Use of Measured Species Class Concentrations with Chemical Kinetic Modeling for the Prediction of Autoxidation and Deposition of Jet Fuels. Energy & Fuels, 2007, 21, 530-544.	5.1	71
10	Kinetic study of the reaction CH(Xâ€‰2Î)+H2â‡„CH2(Xâ€‰3B1)+H in the temperature range 372 to 675 K. Journal of Chemical Physics, 1986, 85, 4373-4376.	3.0	68
11	Hydrocarbon Group-Type Analysis of Petroleum-Derived and Synthetic Fuels Using Two-Dimensional Gas Chromatography. Energy & Fuels, 2014, 28, 5696-5706.	5.1	66
12	Pseudo-Detailed Chemical Kinetic Modeling of Antioxidant Chemistry for Jet Fuel Applications. Energy & Fuels, 1998, 12, 547-553.	5.1	54
13	Modeling the liquid-phase oxidation of hydrocarbons over a range of temperatures and dissolved oxygen concentrations with pseudo-detailed chemical kinetics. Fuel, 2004, 83, 1795-1801.	6.4	54
14	Density Functional Theory Calculations of the Energetics and Kinetics of Jet Fuel Autoxidation Reactions. Energy & Fuels, 2006, 20, 488-497.	5.1	44
15	Studies of Jet Fuel Thermal Stability and Oxidation Using a Quartz Crystal Microbalance and Pressure Measurements. Industrial & Engineering Chemistry Research, 1994, 33, 1348-1354.	3.7	42
16	Studies of Jet Fuel Additives using the Quartz Crystal Microbalance and Pressure Monitoring at 140.degree.C. Industrial & Engineering Chemistry Research, 1994, 33, 2771-2777.	3.7	39
17	Kinetics of CN(X 2Î£+) radical reactions with HCN, BrCN and CH3CN. Chemical Physics, 1989, 134, 185-191.	1.9	37
18	Kinetics of hydroxyl radical reactions with formaldehyde and 1,3,5-trioxane between 290 and 600 K. International Journal of Chemical Kinetics, 1988, 20, 117-129.	1.6	35

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19	Identification of Polar Species in Aviation Fuels using Multidimensional Gas Chromatography-Time of Flight Mass Spectrometry. Energy & Fuels, 2009, 23, 5474-5482.	5.1	35
20	Turbulent Flow, Heat Transfer Deterioration, and Thermal Oxidation of Jet Fuel. Journal of Thermophysics and Heat Transfer, 2013, 27, 668-678.	1.6	33
21	Reactions of alkoxy radicals with O2. I. C2H5O radicals. International Journal of Chemical Kinetics, 1985, 17, 455-476.	1.6	32
22	Laser-induced fluorescence diagnostics and chemical kinetic modeling of a CH4/NO2/O2 flame at 55 torr. Combustion and Flame, 1991, 85, 27-50.	5.2	30
23	A Comparison of CH4/NO/02and CH4/N20 Flames by LIF Diagnostics and Chemical Kinetic Modeling. Combustion Science and Technology, 1992, 83, 115-134.	2.3	29
24	Studies of Jet Fuel Thermal Stability, Oxidation, and Additives Using an Isothermal Oxidation Apparatus Equipped with an Oxygen Sensor. Energy & Fuels, 1999, 13, 756-760.	5.1	29
25	Fischer-Tropsch Jet Fuels - Characterization for Advanced Aerospace Applications. , 2004, , .		28
26	Determination of Hydroperoxides in Jet Fuel via Reaction with Triphenylphosphine. Industrial & Engineering Chemistry Research, 2005, 44, 3377-3383.	3.7	28
27	Studies of the Role of Heteroatomic Species in Jet Fuel Thermal Stability: Model Fuel Mixtures and Real Fuels. Energy & Fuels, 2019, 33, 8557-8565.	5.1	28
28	Effect of Aromatics on the Thermal-Oxidative Stability of Synthetic Paraffinic Kerosene. Energy & Fuels, 2014, 28, 3696-3703.	5.1	26
29	Experimental and Modeling Studies of Heat Transfer, Fluid Dynamics, and Autoxidation Chemistry in the Jet Fuel Thermal Oxidation Tester (JFTOT). Energy & Fuels, 2015, 29, 7036-7047.	5.1	24
30	Chemical Analysis of Jet Fuel Polar, Heteroatomic Species via High-Performance Liquid Chromatography with Electrospray Ionizationâ€“Mass Spectrometric Detection. Energy & Fuels, 2013, 27, 2390-2398.	5.1	22
31	Investigation of Water Interactions with Petroleum-Derived and Synthetic Aviation Turbine Fuels. Energy & Fuels, 2018, 32, 1166-1178.	5.1	21
32	Studies of Jet Fuel Freezing by Differential Scanning Calorimetry. Energy & Fuels, 2001, 15, 1447-1453.	5.1	20
33	Direct measurement of rate constants for the reactions of CH and CD with HCN and DCN. Chemical Physics, 1991, 150, 109-115.	1.9	18
34	The reactions of alkoxy radicals with O2. II.n-C3H7O radicals. International Journal of Chemical Kinetics, 1985, 17, 477-501.	1.6	15
35	Studies of the Impact of Fuel Deoxygenation on the Formation of Autoxidative Deposits. Energy & Fuels, 2020, 34, 13814-13821.	5.1	13
36	Kinetics of the reaction OH + NO + M â† HONO + M as a function of temperature and pressure in the presence of argon, SF6, and N2 bath gas. Chemical Physics, 1993, 171, 265-273.	1.9	12

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37	Effects of Flow Passage Expansion or Contraction on Jet-Fuel Surface Deposition. Journal of Propulsion and Power, 2012, 28, 694-706.	2.2	11
38	Improvement in Jet Aircraft Operation with the Use of High-Performance Drop-in Fuels. , 2019, , .		11
39	Properties Calculator and Optimization for Drop-in Alternative Jet Fuel Blends. , 2019, , .		11
40	Reactions of alkoxy radicals with O2. III.i-C4H9O radicals. International Journal of Chemical Kinetics, 1985, 17, 503-524.	1.6	10
41	Homogeneous Catalysis of Liquid-Phase Hydroperoxide Decomposition in Hydrocarbons. Energy & Fuels, 2011, 25, 897-904.	5.1	9
42	Chemical kinetics of NOx production in a well stirred reactor. , 1994, , .		6
43	Studies of Urea Treatment on the Low-Temperature Properties of Jet Fuel. Energy & Fuels, 2002, 16, 1565-1570.	5.1	6
44	Compatibility of DiEGME and TriEGME Fuel System Icing Inhibitor Additives with BMS 10-39 Aircraft Tank Topcoat Material. Energy & Fuels, 2010, 24, 2614-2627.	5.1	6
45	Comment on â€œLaser-induced fluorescence diagnostics and chemical kinetic modeling of a CH 4 /NO 2 /O 2 flame at 55 torrâ€•by S. Zabarnick. Combustion and Flame, 1994, 98, 309-311.	5.2	4
46	Silver Corrosion and Sulfur Detection Using a Quartz Crystal Microbalance with Silver Electrode Surfaces. Industrial & Engineering Chemistry Research, 1996, 35, 2576-2580.	3.7	4
47	Equilibrium Partitioning of Di-ethylene Glycol Monomethyl Ether (DiEGME) between Fuel and Aqueous Phases at Sub-Ambient Temperatures. Energy & Fuels, 2014, 28, 4501-4510.	5.1	4
48	Experimental and Computational Studies of Jet Fuel Flow near the Freeze Point. Journal of Propulsion and Power, 2006, 22, 534-541.	2.2	3
49	Jet Fuel Deposition and Oxidation: Dilution, Materials, Oxygen, and Temperature Effects. , 1995, , .		0
50	Aspects of Jet Fuel Oxidation. , 1997, , .		0
51	Flow and Chemical Kinetics Simulations of Endothermic Fuels. , 2003, , 1931.		0