Leonid Sheps

List of Publications by Year
in descending order

42	1,756	304743 22	276875 41
papers	citations	h-index	g-index

44	44	44	1433
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rate Coefficients of C1 and C2 Criegee Intermediate Reactions with Formic and Acetic Acid Near the Collision Limit: Direct Kinetics Measurements and Atmospheric Implications. Angewandte Chemie - International Edition, 2014, 53, 4547-4550.	13.8	219
2	UV absorption probing of the conformer-dependent reactivity of a Criegee intermediate CH₃CHOO. Physical Chemistry Chemical Physics, 2014, 16, 26701-26706.	2.8	154
3	Absolute Ultraviolet Absorption Spectrum of a Criegee Intermediate CH2OO. Journal of Physical Chemistry Letters, 2013, 4, 4201-4205.	4.6	145
4	Direct observation and kinetics of a hydroperoxyalkyl radical (QOOH). Science, 2015, 347, 643-646.	12.6	130
5	Low-temperature combustion chemistry of biofuels: pathways in the initial low-temperature (550) Tj ETQq1 1 0.784314 rgBT /Overlock	2.8	88
6	The reaction of Criegee intermediate CH₂OO with water dimer: primary products and atmospheric impact. Physical Chemistry Chemical Physics, 2017, 19, 21970-21979.	2.8	83
7	Direct kinetic measurements and theoretical predictions of an isoprene-derived Criegee intermediate. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9733-9740.	7.1	63
8	The Reaction between CH₃O₂ and OH Radicals: Product Yields and Atmospheric Implications. Environmental Science & Technology, 2017, 51, 2170-2177.	10.0	51
9	Probing the low-temperature chain-branching mechanism of n -butane autoignition chemistry via time-resolved measurements of ketohydroperoxide formation in photolytically initiated n- C 4 H 10 oxidation. Proceedings of the Combustion Institute, 2015, 35, 291-298.	3.9	48
10	Low-temperature combustion chemistry of biofuels: Pathways in the low-temperature (550â€“700K) oxidation chemistry of isobutanol and tert-butanol. Proceedings of the Combustion Institute, 2013, 34, 493-500.	3.9	46
11	Recombination Dynamics and Hydrogen Abstraction Reactions of Chlorine Radicals in Solution. Journal of Physical Chemistry A, 2005, 109, 4296-4302.	2.5	41
12	Unimolecular decomposition kinetics of the stabilised Criegee intermediates CH₂OO and CD₂OO. Physical Chemistry Chemical Physics, 2018, 20, 24940-24954.	2.8	41
13	Low-Temperature Combustion Chemistry of n-Butanol: Principal Oxidation Pathways of Hydroxybutyl Radicals. Journal of Physical Chemistry A, 2013, 117, 11983-12001.	2.5	40
14	Pressure-Dependent Competition among Reaction Pathways from First- and Second-O₂ Additions in the Low-Temperature Oxidation of Tetrahydrofuran. Journal of Physical Chemistry A, 2016, 120, 6582-6595.	2.5	40
15	Multiscale Informatics for Low-Temperature Propane Oxidation: Further Complexities in Studies of Complex Reactions. Journal of Physical Chemistry A, 2015, 119, 7095-7115.	2.5	37
16	Relaxation of the Câ€“H stretching fundamental vibrations of CHI3, CH2I2, and CH3I in solution. Journal of Chemical Physics, 2002, 117, 8917-8925.	3.0	34
17	Influence of oxygenation in cyclic hydrocarbons on chain-termination reactions from R + O2: tetrahydropyran and cyclohexane. Proceedings of the Combustion Institute, 2017, 36, 597-606.	3.9	33
18	New Insights into Low-Temperature Oxidation of Propane from Synchrotron Photoionization Mass Spectrometry and Multiscale Informatics Modeling. Journal of Physical Chemistry A, 2015, 119, 7116-7129.	2.5	32

#	Article	IF	Citations
19	Time-Resolved Spectroscopic Study of the Reaction Cl + n-C5H12 â†' HCl + C5H11 in Solution. Journal of Physical Chemistry A, 2006, 110, 3087-3092.	2.5	29
20	Câ€"H Bond Strengths and Acidities in Aromatic Systems: Effects of Nitrogen Incorporation in Mono-, Di-, and Triazines. Journal of the American Chemical Society, 2012, 134, 6584-6595.	13.7	29
21	Direct experimental probing and theoretical analysis of the reaction between the simplest Criegee intermediate CH₂OO and isoprene. Physical Chemistry Chemical Physics, 2017, 19, 8541-8551.	2.8	24
22	Solvent-Mediated Electron Hopping: Long-Range Charge Transfer in IBr ^{â^'} (CO) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 T	12.6	23
23	Influence of the Ether Functional Group on Ketohydroperoxide Formation in Cyclic Hydrocarbons: Tetrahydropyran and Cyclohexane. Journal of Physical Chemistry A, 2019, 123, 3634-3646.	2.5	23
24	To Boldly Look Where No One Has Looked Before: Identifying the Primary Photoproducts of Acetylacetone. Journal of Physical Chemistry A, 2019, 123, 5472-5490.	2.5	22
25	A Combined Experimental and Theoretical Study of the Reaction OH + 2-Butene in the 400â€"800 K Temperature Range. Journal of Physical Chemistry A, 2015, 119, 7742-7752.	2.5	21
26	Time-resolved measurements of product formation in the low-temperature (550â€"675 K) oxidation of neopentane: a probe to investigate chain-branching mechanism. Physical Chemistry Chemical Physics, 2017, 19, 13731-13745.	2.8	20
27	Reaction mechanisms of a cyclic ether intermediate: Ethyloxirane. International Journal of Chemical Kinetics, 2021, 53, 43-59.	1.6	20
28	Photoionization Mass Spectrometric Measurements of Initial Reaction Pathways in Low-Temperature Oxidation of 2,5-Dimethylhexane. Journal of Physical Chemistry A, 2014, 118, 10188-10200.	2.5	19
29	Quantitative Detection of Products and Radical Intermediates in Low-Temperature Oxidation of Cyclopentane. Journal of Physical Chemistry A, 2021, 125, 4467-4479.	2.5	19
30	Electronic States of the Quasilinear Molecule Propargylene (HCCCH) from Negative Ion Photoelectron Spectroscopy. Journal of the American Chemical Society, 2014, 136, 10361-10372.	13.7	18
31	Seasonality of Formic Acid (HCOOH) in London during the ClearfLo Campaign. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,488.	3.3	18
32	Isomerâ€dependent reaction mechanisms of cyclic ether intermediates: cisâ€2,3â€dimethyloxirane and transâ€2,3â€dimethyloxirane. International Journal of Chemical Kinetics, 2021, 53, 127-145.	1.6	17
33	Sensitive Mass Spectrometer for Time-Resolved Gas-Phase Chemistry Studies at High Pressures. Journal of Physical Chemistry A, 2019, 123, 10804-10814.	2.5	16
34	Non-Boltzmann Effects in Chain Branching and Pathway Branching for Diethyl Ether Oxidation. Energy & Fuels, 2021, 35, 17890-17908.	5.1	16
35	Direct time-resolved detection and quantification of key reactive intermediates in diethyl ether oxidation at T = 450â€"600 K. Physical Chemistry Chemical Physics, 2020, 22, 24649-24661.	2.8	12
36	Simulated production of OH, HO2, CH2O, and CO2 during dilute fuel oxidation can predict 1st-stage ignition delays. Combustion and Flame, 2020, 216, 472-484.	5.2	12

#	Article	IF	Citations
37	Resonance Stabilization Effects on Ketone Autoxidation: Isomer-Specific Cyclic Ether and Ketohydroperoxide Formation in the Low-Temperature (400â€“625 K) Oxidation of Diethyl Ketone. Journal of Physical Chemistry A, 2016, 120, 8625-8636.	2.5	11
38	Solvent-mediated charge redistribution in photodissociation of IBrâ¯ and IBrâ¯(CO2). Journal of Chemical Physics, 2011, 134, 184311.	3.0	10
39	The impact of the third O2 addition reaction network on ignition delay times of neo-pentane. Proceedings of the Combustion Institute, 2021, 38, 299-307.	3.9	8
40	Insertion products in the reaction of carbonyl oxide Criegee intermediates with acids: Chloro(hydroperoxy)methane formation from reaction of CH2OO with HCl and DCl. Molecular Physics, 0, , .	1.7	3
41	Prospects and Limitations of Predicting Fuel Ignition Properties from Low-Temperature Speciation Data. Energy & Fuels, 2022, 36, 3229-3238.	5.1	1
42	Bayesian model calibration for vacuum-ultraviolet photoionisation mass spectrometry. Combustion Theory and Modelling, 0, , 1-28.	1.9	0