

# Leonid Sheps

## List of Publications by Year in descending order

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42  
papers

1,756  
citations

304743

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276875

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times ranked

1433  
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#	ARTICLE	IF	CITATIONS
1	Prospects and Limitations of Predicting Fuel Ignition Properties from Low-Temperature Speciation Data. <i>Energy &amp; Fuels</i> , 2022, 36, 3229-3238.	5.1	1
2	Reaction mechanisms of a cyclic ether intermediate: Ethyloxirane. <i>International Journal of Chemical Kinetics</i> , 2021, 53, 43-59.	1.6	20
3	Isomer-dependent reaction mechanisms of cyclic ether intermediates: <i>cis</i> -2,3-dimethyloxirane and <i>trans</i> -2,3-dimethyloxirane. <i>International Journal of Chemical Kinetics</i> , 2021, 53, 127-145.	1.6	17
4	The impact of the third O <sub>2</sub> addition reaction network on ignition delay times of neo-pentane. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 299-307.	3.9	8
5	Quantitative Detection of Products and Radical Intermediates in Low-Temperature Oxidation of Cyclopentane. <i>Journal of Physical Chemistry A</i> , 2021, 125, 4467-4479.	2.5	19
6	Non-Boltzmann Effects in Chain Branching and Pathway Branching for Diethyl Ether Oxidation. <i>Energy &amp; Fuels</i> , 2021, 35, 17890-17908.	5.1	16
7	Direct time-resolved detection and quantification of key reactive intermediates in diethyl ether oxidation at $T = 450\text{--}600$ K. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 24649-24661.	2.8	12
8	Simulated production of OH, HO <sub>2</sub> , CH <sub>2</sub> O, and CO <sub>2</sub> during dilute fuel oxidation can predict 1st-stage ignition delays. <i>Combustion and Flame</i> , 2020, 216, 472-484.	5.2	12
9	Direct kinetic measurements and theoretical predictions of an isoprene-derived Criegee intermediate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 9733-9740.	7.1	63
10	Sensitive Mass Spectrometer for Time-Resolved Gas-Phase Chemistry Studies at High Pressures. <i>Journal of Physical Chemistry A</i> , 2019, 123, 10804-10814.	2.5	16
11	To Boldly Look Where No One Has Looked Before: Identifying the Primary Photoproducts of Acetylacetone. <i>Journal of Physical Chemistry A</i> , 2019, 123, 5472-5490.	2.5	22
12	Influence of the Ether Functional Group on Ketohydroperoxide Formation in Cyclic Hydrocarbons: Tetrahydropyran and Cyclohexane. <i>Journal of Physical Chemistry A</i> , 2019, 123, 3634-3646.	2.5	23
13	Unimolecular decomposition kinetics of the stabilised Criegee intermediates CH <sub>2</sub> OO and CD <sub>2</sub> OO. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 24940-24954.	2.8	41
14	Influence of oxygenation in cyclic hydrocarbons on chain-termination reactions from R + O <sub>2</sub> : tetrahydropyran and cyclohexane. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 597-606.	3.9	33
15	The Reaction between CH <sub>3</sub> O <sub>2</sub> and OH Radicals: Product Yields and Atmospheric Implications. <i>Environmental Science &amp; Technology</i> , 2017, 51, 2170-2177.	10.0	51
16	Direct experimental probing and theoretical analysis of the reaction between the simplest Criegee intermediate CH <sub>2</sub> OO and isoprene. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 8541-8551.	2.8	24
17	Time-resolved measurements of product formation in the low-temperature (550–675 K) oxidation of neopentane: a probe to investigate chain-branching mechanism. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 13731-13745.	2.8	20
18	The reaction of Criegee intermediate CH <sub>2</sub> OO with water dimer: primary products and atmospheric impact. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 21970-21979.	2.8	83

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19	Seasonality of Formic Acid (HCOOH) in London during the ClearLo Campaign. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,488.	3.3	18
20	Pressure-Dependent Competition among Reaction Pathways from First- and Second-Order Additions in the Low-Temperature Oxidation of Tetrahydrofuran. Journal of Physical Chemistry A, 2016, 120, 6582-6595.	2.5	40
21	Resonance Stabilization Effects on Ketone Autoxidation: Isomer-Specific Cyclic Ether and Ketohydroperoxide Formation in the Low-Temperature (400–625 K) Oxidation of Diethyl Ketone. Journal of Physical Chemistry A, 2016, 120, 8625-8636.	2.5	11
22	Direct observation and kinetics of a hydroperoxyalkyl radical (QOOH). Science, 2015, 347, 643-646.	12.6	130
23	A Combined Experimental and Theoretical Study of the Reaction OH + 2-Butene in the 400–800 K Temperature Range. Journal of Physical Chemistry A, 2015, 119, 7742-7752.	2.5	21
24	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
25	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
26	Probing the low-temperature chain-branching mechanism of n-butane autoignition chemistry via time-resolved measurements of ketohydroperoxide formation in photolytically initiated n-C <sub>4</sub> H <sub>10</sub> oxidation. Proceedings of the Combustion Institute, 2015, 35, 291-298.	3.9	48
27	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
28	UV absorption probing of the conformer-dependent reactivity of a Criegee intermediate CH <sub>3</sub> CHOO. Physical Chemistry Chemical Physics, 2014, 16, 26701-26706.	2.8	154
29	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
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	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
32	Low-temperature combustion chemistry of biofuels: Pathways in the low-temperature (550–700K) oxidation chemistry of isobutanol and tert-butanol. Proceedings of the Combustion Institute, 2013, 34, 493-500.	3.9	46
33	Absolute Ultraviolet Absorption Spectrum of a Criegee Intermediate CH <sub>2</sub> OO. Journal of Physical Chemistry Letters, 2013, 4, 4201-4205.	4.6	145
34	Low-temperature combustion chemistry of biofuels: pathways in the initial low-temperature (550 Tj ETQq0 0 0 rgBT /Overlock_10 Tf 50	2.8	88
35	C–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
36	Solvent-mediated charge redistribution in photodissociation of IBr <sup>+</sup> and IBr <sup>+</sup> (CO <sub>2</sub> ). Journal of Chemical Physics, 2011, 134, 184311.	3.0	10

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37	Solvent-Mediated Electron Hopping: Long-Range Charge Transfer in IBr <sup>+</sup> (CO) Tj ETQq1 1 0.784314 19.6 / Overlock 10	19.6	23
38	Time-Resolved Spectroscopic Study of the Reaction Cl + n-C <sub>5</sub> H <sub>12</sub> → HCl + C <sub>5</sub> H <sub>11</sub> in Solution. Journal of Physical Chemistry A, 2006, 110, 3087-3092.	2.5	29
39	Recombination Dynamics and Hydrogen Abstraction Reactions of Chlorine Radicals in Solution. Journal of Physical Chemistry A, 2005, 109, 4296-4302.	2.5	41
40	Relaxation of the C-H stretching fundamental vibrations of CHI <sub>3</sub> , CH <sub>2</sub> I <sub>2</sub> , and CH <sub>3</sub> I in solution. Journal of Chemical Physics, 2002, 117, 8917-8925.	3.0	34
41	Insertion products in the reaction of carbonyl oxide Criegee intermediates with acids: Chloro(hydroperoxy)methane formation from reaction of CH <sub>2</sub> OO with HCl and DCl. Molecular Physics, 0, , .	1.7	3
42	Bayesian model calibration for vacuum-ultraviolet photoionisation mass spectrometry. Combustion Theory and Modelling, 0, , 1-28.	1.9	0