

Criegee intermediates: production, detection and reactivity

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Impact of Criegee Intermediate Reactions with Peroxy Radicals on Tropospheric Organic Aerosol. ACS Earth and Space Chemistry, 2020, 4, 1743-1755.	2.7	16
2	Infrared characterization of the products and the rate coefficient of the reaction between Criegee intermediate CH_2OO and HCl. Physical Chemistry Chemical Physics, 2021, 23, 11082-11090.	2.8	15
3	The effect of ammonia and formic acid on the oxidation of CO <i>via</i> a simple Criegee intermediate. Physical Chemistry Chemical Physics, 2021, 23, 5392-5406.	2.8	6
4	Important Oxidants and Their Impact on the Environmental Effects of Aerosols. Journal of Physical Chemistry A, 2021, 125, 3813-3825.	2.5	15
5	Investigation of the Production of Trifluoroacetic Acid from Two Halocarbons, HFC-134a and HFO-1234yf and Its Fates Using a Global Three-Dimensional Chemical Transport Model. ACS Earth and Space Chemistry, 2021, 5, 849-857.	2.7	19
6	Fates of Organic Hydroperoxides in Atmospheric Condensed Phases. Journal of Physical Chemistry A, 2021, 125, 4513-4523.	2.5	23
7	Substituent Effect in the Reactions between Criegee Intermediates and 3-Aminopropanol. Journal of Physical Chemistry A, 2021, 125, 6580-6590.	2.5	5
8	Photodissociation Dynamics of CH_2OO on Multiple Potential Energy Surfaces: Experiment and Theory. Journal of Physical Chemistry A, 2021, 125, 6571-6579.	2.5	16
9	Reaction mechanism and kinetics of Criegee intermediate and hydroperoxymethyl formate. Journal of Environmental Sciences, 2021, 105, 128-137.	6.1	6
10	Gas-phase and aqueous-surface reaction mechanism of Criegee radicals with serine and nucleation of products: A theoretical study. Chemosphere, 2021, 280, 130709.	8.2	4
11	Reactivity and internal dynamics in the Criegee intermediate CH_2OO CO_2 system: A rotational study. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 260, 119945.	3.9	1
12	Aqueous-phase fates of α -alkoxyalkyl-hydroperoxides derived from the reactions of Criegee intermediates with alcohols. Physical Chemistry Chemical Physics, 2021, 23, 4605-4614.	2.8	13
13	Expanded scope of Griesbaum co-ozonolysis for the preparation of structurally diverse sensors of ferrous iron. RSC Advances, 2021, 11, 34338-34342.	3.6	3
14	Spectroscopic characterization and photochemistry of the Criegee intermediate $\text{CF}_3\text{C(H)OO}$. Journal of Environmental Sciences, 2022, 114, 160-169.	6.1	2
15	Decomposition mechanism of α -alkoxyalkyl-hydroperoxides in the liquid phase: temperature dependent kinetics and theoretical calculations. Environmental Science Atmospheres, 2022, 2, 241-251.	2.4	3
16	Low-temperature reaction dynamics of paramagnetic species in the gas phase. Chemical Communications, 2022, 58, 3240-3254.	4.1	3
17	Temperature-dependent kinetics of the atmospheric reaction between CH_2OO and acetone. Physical Chemistry Chemical Physics, 2022, 24, 13066-13073.	2.8	14
18	Decomposition of multifunctionalized α -alkoxyalkyl-hydroperoxides derived from the reactions of Criegee intermediates with diols in liquid phases. Physical Chemistry Chemical Physics, 2022, 24, 11562-11572.	2.8	5

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19	Estimation of mechanistic parameters in the gas-phase reactions of ozone with alkenes for use in automated mechanism construction. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 6167-6195.	4.9	5
20	Identification, monitoring, and reaction kinetics of reactive trace species using time-resolved mid-infrared quantum cascade laser absorption spectroscopy: development, characterisation, and initial results for the CH ₂ OO Criegee intermediate. <i>Atmospheric Measurement Techniques</i> , 2022, 15, 2875-2887.	3.1	2
21	Optical Frequency Combs for Molecular Spectroscopy, Kinetics, and Sensing. <i>ACS Symposium Series</i> , 0, , 61-88.	0.5	2
22	Techniques for measuring indoor radicals and radical precursors. <i>Applied Spectroscopy Reviews</i> , 2022, 57, 580-624.	6.7	2
23	Electronic Absorption Spectroscopy and Photochemistry of Criegee Intermediates. <i>Photochemistry and Photobiology</i> , 2023, 99, 4-18.	2.5	11
24	Proton-Catalyzed Decomposition of Multifunctionalized Organic Hydroperoxides Derived from the Reactions of Criegee Intermediates with Ethylene Glycol in Aqueous Organic Media. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 1937-1947.	2.7	3
25	Multiple evaluations of atmospheric behavior between Criegee intermediates and HCHO: Gas-phase and air-water interface reaction. <i>Journal of Environmental Sciences</i> , 2023, 127, 308-319.	6.1	5
26	Mechanism and kinetics of the reaction of the Criegee intermediate CH ₂ OO with acetic acid studied using a step-scan Fourier-transform IR spectrometer. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 18568-18581.	2.8	8
27	Stability of Terpenoid-Derived Secondary Ozonides in Aqueous Organic Media. <i>Journal of Physical Chemistry A</i> , 2022, 126, 5386-5397.	2.5	6
28	Infrared Characterization of the Products and Rate Coefficient of the Reaction between Criegee Intermediate CH ₂ OO and HNO ₃ . <i>Journal of Physical Chemistry A</i> , 0, , .	2.5	4
29	Characterization and Quantification of Particle-Bound Criegee Intermediates in Secondary Organic Aerosol. <i>Environmental Science & Technology</i> , 2022, 56, 12945-12954.	10.0	4
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31	Unimolecular Kinetics of Stabilized CH ₃ CHOO Criegee Intermediates: <i>syn</i> -CH ₃ CHOO Decomposition and <i>anti</i> -CH ₃ CHOO Isomerization. <i>Journal of Physical Chemistry A</i> , 2022, 126, 6984-6994.	2.5	7
32	Photoionization energetics and dissociation pathways of hydroperoxyethyl formate produced in the reaction of CH ₃ CHOO + Formic acid. <i>Chemical Physics Letters</i> , 2022, 809, 140179.	2.6	1
33	Recent advances in quantum fragmentation approaches to complex molecular and condensed-phase systems. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2023, 13, .	14.6	10
34	Enthalpies of formation for Criegee intermediates: A correlation energy convergence study. <i>Journal of Chemical Physics</i> , 2023, 158, .	3.0	0
35	Temperature-dependent kinetics of the reactions of CH ₂ OO with acetone, biacetyl, and acetylacetone. <i>International Journal of Chemical Kinetics</i> , 2023, 55, 154-166.	1.6	1
36	Organic Peroxides in Aerosol: Key Reactive Intermediates for Multiphase Processes in the Atmosphere. <i>Chemical Reviews</i> , 2023, 123, 1635-1679.	47.7	29

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37	Electronic Spectroscopy and Dissociation Dynamics of Vinyl-Substituted Criegee Intermediates: 2-Butenal Oxide and Comparison with Methyl Vinyl Ketone Oxide and Methacrolein Oxide Isomers. Journal of Physical Chemistry A, 2023, 127, 203-215.	2.5	6
38	Interfacial Extraction to Trap and Characterize the Criegee Intermediates from Phospholipid Ozonolysis. Analytical Chemistry, 2023, 95, 5018-5023.	6.5	3
39	Kinetics of the Simplest Criegee Intermediate CH ₂ OO Reaction with <i>tert</i> -Butylamine. Journal of Physical Chemistry A, 2023, 127, 2432-2439.	2.5	1
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42	The simplest Criegee intermediate CH ₂ OO reaction with dimethylamine and trimethylamine: kinetics and atmospheric implications. Physical Chemistry Chemical Physics, 2023, 25, 23187-23196.	2.8	0
43	OH Roaming and Beyond in the Unimolecular Decay of the Methyl-Ethyl-Substituted Criegee Intermediate: Observations and Predictions. Journal of the American Chemical Society, 2023, 145, 19405-19420.	13.7	6
44	Substituent dependence on the reactions of Criegee intermediates with carbon dioxide and carbon monoxide. ChemPlusChem, 0, .	2.8	0
45	Infrared Characterization of the Products of the Reaction between the Criegee Intermediate CH ₃ CHOO and HCl. Journal of Physical Chemistry A, 2023, 127, 6902-6915.	2.5	1
46	Kinetics of the Simplest Criegee Intermediate Reaction with Water Vapor: Revisit and Isotope Effect. Journal of Physical Chemistry A, 2023, 127, 8059-8072.	2.5	1
47	Criegee Intermediate-Mediated Oxidation of Dimethyl Disulfide: Effect of Formic Acid and Its Atmospheric Relevance. Journal of Physical Chemistry A, 2023, 127, 8415-8426.	2.5	0
48	Kinetic study of C1 criegee intermediate with diethylamine and ethylamine and their atmospheric implications. Chemical Physics Letters, 2023, 832, 140885.	2.6	0
49	OH Roaming during the Ozonolysis of $\hat{1}\pm$ -Pinene: A New Route to Highly Oxygenated Molecules?. Journal of Physical Chemistry A, 0, .	2.5	0
50	Reaction between Criegee Intermediate CH ₂ OO and Isobutyraldehyde: Kinetics and Atmospheric Implications. ChemistrySelect, 2023, 8, .	1.5	0
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52	A possible unaccounted source of nitrogen-containing compound formation in aerosols: amines reacting with secondary ozonides. Atmospheric Chemistry and Physics, 2024, 24, 155-166.	4.9	0
53	Impact of temperature on the role of Criegee intermediates and peroxy radicals in dimer formation from $\hat{1}\pm$ -pinene ozonolysis. Atmospheric Chemistry and Physics, 2024, 24, 167-184.	4.9	0
54	Mechanistic insights into Criegee intermediates with benzoic acid at gas-phase and air-water interface and nucleation of product. Atmospheric Environment, 2024, 320, 120338.	4.1	0

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55	New insights into the mechanism and kinetics of the addition reaction of unsaturated Criegee intermediates to CF ₃ COOH and tropospheric implications. Environmental Sciences: Processes and Impacts, 2024, 26, 751-764.	3.5	0
56	Temperature-Dependent Kinetics of the Reactions of the Criegee Intermediate CH ₂ OO with Hydroxyketones. Journal of Physical Chemistry A, 2024, 128, 1880-1891.	2.5	0