

# Michel J Rossi

## List of Publications by Year in descending order

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159  
papers

11,543  
citations

66336

42  
h-index

30920

102  
g-index

184  
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184  
docs citations

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times ranked

7595  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluated kinetic and photochemical data for atmospheric chemistry: Volume I - gas phase reactions of O <sub>3</sub> , HO <sub>2</sub> , NO <sub>2</sub> and SO <sub>2</sub> species. Atmospheric Chemistry and Physics, 2004, 4, 1461-1738.	4.9	1,597
2	Evaluated kinetic and photochemical data for atmospheric chemistry: Volume II " gas phase reactions of organic species. Atmospheric Chemistry and Physics, 2006, 6, 3625-4055.	4.9	1,508
3	Evaluated Kinetic, Photochemical and Heterogeneous Data for Atmospheric Chemistry: Supplement V. IUPAC Subcommittee on Gas Kinetic Data Evaluation for Atmospheric Chemistry. Journal of Physical and Chemical Reference Data, 1997, 26, 521-1011.	4.2	903
4	Evaluated Kinetic and Photochemical Data for Atmospheric Chemistry: Supplement VI. IUPAC Subcommittee on Gas Kinetic Data Evaluation for Atmospheric Chemistry. Journal of Physical and Chemical Reference Data, 1997, 26, 1329-1499.	4.2	661
5	An overview of current issues in the uptake of atmospheric trace gases by aerosols and clouds. Atmospheric Chemistry and Physics, 2010, 10, 10561-10605.	4.9	352
6	Evaluated Kinetic and Photochemical Data for Atmospheric Chemistry, Organic Species: Supplement VII. Journal of Physical and Chemical Reference Data, 1999, 28, 191-393.	4.2	338
7	Reaction of Chlorine Nitrate with Hydrogen Chloride and Water at Antarctic Stratospheric Temperatures. Science, 1987, 238, 1258-1260.	12.6	315
8	Evaluated kinetic and photochemical data for atmospheric chemistry: Volume V " heterogeneous reactions on solid substrates. Atmospheric Chemistry and Physics, 2010, 10, 9059-9223.	4.9	312
9	IUPAC Critical Evaluation of Thermochemical Properties of Selected Radicals. Part I. Journal of Physical and Chemical Reference Data, 2005, 34, 573-656.	4.2	283
10	Evaluated kinetic and photochemical data for atmospheric chemistry: Volume IV " gas phase reactions of organic halogen species. Atmospheric Chemistry and Physics, 2008, 8, 4141-4496.	4.9	221
11	Heterogeneous Reactions on Salts. Chemical Reviews, 2003, 103, 4823-4882.	47.7	194
12	Evaluated Kinetic and Photochemical Data for Atmospheric Chemistry: Supplement VIII, Halogen Species Evaluation for Atmospheric Chemistry. Journal of Physical and Chemical Reference Data, 2000, 29, 167-266.	4.2	183
13	Evaluated kinetic and photochemical data for atmospheric chemistry: Volume VI " heterogeneous reactions with liquid substrates. Atmospheric Chemistry and Physics, 2013, 13, 8045-8228.	4.9	167
14	Heterogeneous interactions of chlorine nitrate, hydrogen chloride, and nitric acid with sulfuric acid surfaces at stratospheric temperatures. Geophysical Research Letters, 1988, 15, 847-850.	4.0	161
15	Energy-dependent energy transfer: Deactivation of azulene (S <sub>0</sub> , Evib) by 17 collider gases. Journal of Chemical Physics, 1983, 78, 6695-6708.	3.0	159
16	Antarctic Ozone Depletion Chemistry: Reactions of N <sub>2</sub> O <sub>5</sub> with H <sub>2</sub> O and HCl on Ice Surfaces. Science, 1988, 240, 1018-1021.	12.6	143
17	Formation of highly oxygenated organic molecules from aromatic compounds. Atmospheric Chemistry and Physics, 2018, 18, 1909-1921.	4.9	133
18	Adverse Effects of Industrial Multiwalled Carbon Nanotubes on Human Pulmonary Cells. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2008, 72, 60-73.	2.3	129

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19	The chemical kinetics of HONO formation resulting from heterogeneous interaction of NO <sub>2</sub> with flame soot. <i>Geophysical Research Letters</i> , 1998, 25, 2453-2456.	4.0	108
20	Kinetic and mechanistic aspects of the NO oxidation by O <sub>2</sub> in aqueous phase. <i>International Journal of Chemical Kinetics</i> , 1994, 26, 1207-1227.	1.6	98
21	Kinetics of Nitric Acid Uptake by Salt. <i>The Journal of Physical Chemistry</i> , 1994, 98, 9801-9810.	2.9	97
22	Heterogeneous Kinetics of N <sub>2</sub> O <sub>5</sub> Uptake on Salt, with a Systematic Study of the Role of Surface Presentation (for N <sub>2</sub> O <sub>5</sub> and HNO <sub>3</sub> ). <i>The Journal of Physical Chemistry</i> , 1996, 100, 1008-1019.	2.9	97
23	Absolute rate constants for metathesis reactions of allyl and benzyl radicals with hydriodic acid (hydriodic acid-d). Heat of formation of allyl and benzyl radicals. <i>Journal of the American Chemical Society</i> , 1979, 101, 1230-1235.	13.7	89
24	The Heterogeneous Reaction of Ozone on Carbonaceous Surfaces. <i>International Journal of Chemical Kinetics</i> , 1986, 18, 1133-1149.	1.6	89
25	The reactivity of NO <sub>2</sub> and HONO on flame soot at ambient temperature: The influence of combustion conditions. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 5420-5429.	2.8	87
26	Paper I: Design and construction of a Knudsen-cell reactor for the study of heterogeneous reactions over the temperature range 130–750 K: Performances and limitations. <i>Review of Scientific Instruments</i> , 1997, 68, 3172-3179.	1.3	84
27	The equilibrium constant and rate constant for allyl radical recombination in the gas phase. <i>Journal of the American Chemical Society</i> , 1979, 101, 1223-1230.	13.7	79
28	The thermal decomposition of the new energetic material ammonium dinitramide (NH <sub>4</sub> N(NO <sub>2</sub> ) <sub>2</sub> ) in relation to Nitramide (NH <sub>2</sub> NO <sub>2</sub> ) and NH <sub>4</sub> NO <sub>3</sub> . <i>International Journal of Chemical Kinetics</i> , 1993, 25, 549-570.	1.6	78
29	Coating carbon nanotubes with a polystyrene-based polymer protects against pulmonary toxicity. <i>Particle and Fibre Toxicology</i> , 2011, 8, 3.	6.2	74
30	The heterogeneous chemical kinetics of N <sub>2</sub> O <sub>5</sub> on CaCO <sub>3</sub> and other atmospheric mineral dust surrogates. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 1373-1388.	4.9	70
31	Real-Time Kinetics of the Uptake of ClONO <sub>2</sub> on Ice and in the Presence of HCl in the Temperature Range 160 K – 200 K. <i>Journal of Physical Chemistry A</i> , 1997, 101, 1903-1911.	2.5	69
32	Uptake of CO <sub>2</sub> , SO <sub>2</sub> , HNO <sub>3</sub> and HCl on Calcite (CaCO <sub>3</sub> ) at 300 K: Mechanism and the Role of Adsorbed Water. <i>Journal of Physical Chemistry A</i> , 2006, 110, 6789-6802.	2.5	64
33	Infrared multiphoton generation of radicals: A new technique for obtaining absolute rate constants. Application to reactions of CF <sub>3</sub> . <i>Journal of Chemical Physics</i> , 1979, 71, 3722-3727.	3.0	59
34	Concerning the Conformation of Isolated Benzylideneaniline. <i>Helvetica Chimica Acta</i> , 1976, 59, 486-498.	1.6	57
35	Experimental evidence for the efficient dry deposition of nitric acid on calcite. <i>Atmospheric Environment</i> , 1995, 29, 3365-3372.	4.1	57
36	The heterogeneous chemical kinetics of NO <sub>3</sub> on atmospheric mineral dust surrogates. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 3150.	2.8	57

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37	Infrared multiphoton decomposition: photochemistry and photophysics. <i>Accounts of Chemical Research</i> , 1981, 14, 56-62.	15.6	56
38	Perspectives on the Future of Ice Nucleation Research: Research Needs and Unanswered Questions Identified from Two International Workshops. <i>Atmosphere</i> , 2017, 8, 138.	2.3	56
39	Thermochemical properties of free radicals from G3MP2B3 calculations. <i>International Journal of Chemical Kinetics</i> , 2002, 34, 550-560.	1.6	53
40	Comparison of Three Acellular Tests for Assessing the Oxidation Potential of Nanomaterials. <i>Aerosol Science and Technology</i> , 2013, 47, 218-227.	3.1	52
41	The Kinetics of H <sub>2</sub> O Vapor Condensation and Evaporation on Different Types of Ice in the Range 130-210 K. <i>Journal of Physical Chemistry A</i> , 2006, 110, 3042-3058.	2.5	47
42	Infrared multiphoton dissociation yields via a versatile new technique: intensity, fluence, and wavelength dependence for CF <sub>3</sub> I. <i>Chemical Physics Letters</i> , 1979, 65, 523-526.	2.6	46
43	Infrared fluorescence and collisional energy transfer parameters for vibrationally excited azulene*(So): dependence on internal energy (E <sub>vib</sub> ). <i>Chemical Physics Letters</i> , 1982, 85, 21-26.	2.6	45
44	Heterogeneous Chemistry of the NO <sub>3</sub> Free Radical and N <sub>2</sub> O <sub>5</sub> on Decane Flame Soot at Ambient Temperature: Reaction Products and Kinetics. <i>Journal of Physical Chemistry A</i> , 2007, 111, 1914-1926.	2.5	44
45	Gas-phase UV spectroscopy of anthracene, xanthone, pyrene, 1-bromopyrene and 1,2,4-trichlorobenzene at elevated temperatures. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1997, 104, 25-33.	3.9	43
46	Aliphatic carbon-hydrogen bond scission processes in diphenylmethane and 2-benzyl- and 4-benzylpyridine. The heat of formation of the diphenylmethyl and .alpha.-phenylethyl radical in the gas phase. <i>The Journal of Physical Chemistry</i> , 1984, 88, 5031-5039.	2.9	42
47	Real-Time Kinetic Measurements of the Condensation and Evaporation of D <sub>2</sub> O Molecules on Ice at 140 K <T< 220 K. <i>Journal of Physical Chemistry A</i> , 1998, 102, 10300-10309.	2.5	41
48	Reactivity of NO <sub>2</sub> and H <sub>2</sub> O on soot generated in the laboratory: a diffusion tube study at ambient temperature. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 5584-5593.	2.8	41
49	Flame soot generated under controlled combustion conditions: Heterogeneous reaction of NO <sub>2</sub> on hexane soot. <i>International Journal of Chemical Kinetics</i> , 2002, 34, 620-631.	1.6	41
50	Biomarkers of oxidative stress and its association with the urinary reducing capacity in bus maintenance workers. <i>Journal of Occupational Medicine and Toxicology</i> , 2011, 6, 18.	2.2	39
51	Heterogeneous Kinetics of the Uptake of HOBr on Solid Alkali Metal Halides at Ambient Temperature. <i>Journal of Physical Chemistry A</i> , 1998, 102, 4819-4828.	2.5	38
52	Heterogeneous Kinetics of the Uptake of ClONO <sub>2</sub> on NaCl and KBr. <i>The Journal of Physical Chemistry</i> , 1996, 100, 7494-7501.	2.9	37
53	The heterogeneous reaction of NO <sub>3</sub> with NaCl and KBr: A nonphotolytic source of halogen atoms. <i>Geophysical Research Letters</i> , 1997, 24, 2757-2760.	4.0	37
54	Rate of decomposition of hexafluoroazomethane and the absolute rate of recombination of trifluoromethyl radical at higher temperatures. <i>International Journal of Chemical Kinetics</i> , 1979, 11, 775-788.	1.6	36

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55	Heterogeneous Kinetics of HONO on H <sub>2</sub> SO <sub>4</sub> Solutions and on Ice: Activation of HCl. The Journal of Physical Chemistry, 1996, 100, 13765-13775.	2.9	36
56	The rate of water vapor evaporation from ice substrates in the presence of HCl and HBr: implications for the lifetime of atmospheric ice particles. Atmospheric Chemistry and Physics, 2003, 3, 1131-1145.	4.9	35
57	Thermochemical properties from G3MP2B3 calculations, Set-2: Free radicals with special consideration of CH <sub>2</sub> CH <sub>2</sub> C, cyclo-C <sub>5</sub> H <sub>5</sub> , CH <sub>2</sub> OOH, HO <sub>2</sub> CO, and HC(O)O. International Journal of Chemical Kinetics, 2004, 36, 661-686.	1.6	35
58	Absolute rate of recombination of CF <sub>3</sub> radicals. Chemical Physics Letters, 1986, 124, 68-72.	2.6	34
59	Heterogeneous chemical reaction of chlorine nitrate and water on sulfuric acid surfaces at room temperature. Geophysical Research Letters, 1987, 14, 127-130.	4.0	33
60	The kinetics of condensation and evaporation of H <sub>2</sub> O from pure ice in the range 173–223 K: a quartz crystal microbalance study. Physical Chemistry Chemical Physics, 2004, 6, 4665-4676.	2.8	33
61	Properties of the HCl/Ice, HBr/Ice, and H <sub>2</sub> O/Ice Interface at Stratospheric Temperatures (200 K) and Its Importance for Atmospheric Heterogeneous Reactions. Journal of Physical Chemistry A, 2000, 104, 11739-11750.	2.5	32
62	Heterogeneous reactions of HNO <sub>3</sub> with flame soot generated under different combustion conditions. Reaction mechanism and kinetics. Physical Chemistry Chemical Physics, 2002, 4, 5110-5118.	2.8	32
63	The use of heterogeneous chemistry for the characterization of functional groups at the gas/particle interface of soot and TiO <sub>2</sub> nanoparticles. Physical Chemistry Chemical Physics, 2009, 11, 6205.	2.8	31
64	Photoenhanced electron attachment of vinylchloride and trifluoroethylene at 193 nm. Applied Physics Letters, 1985, 47, 576-578.	3.3	30
65	<sup>15</sup> N measurement of organic and inorganic substances by EA-IRMS: a speciation-dependent procedure. Analytical and Bioanalytical Chemistry, 2013, 405, 159-176.	3.7	30
66	Homogeneous decomposition of vinyl ethers. The heat of formation of ethanal-2-yl. International Journal of Chemical Kinetics, 1979, 11, 715-730.	1.6	29
67	Paper II: Simulation of flow conditions in low-pressure flow reactors (Knudsen cells) using a Monte Carlo technique. Review of Scientific Instruments, 1997, 68, 3180-3186.	1.3	29
68	Common Precursor Mechanism for the Heterogeneous Reaction of D <sub>2</sub> O, HCl, HBr, and HOBr with Water Ice in the Range 170–230 K: % Mass Accommodation Coefficients on Ice. Journal of Physical Chemistry A, 2003, 107, 4103-4115.	2.5	28
69	Atom and radical surface sticking coefficients measured using resonance-enhanced multiphoton ionization. Journal of Chemical Physics, 1989, 91, 5037-5049.	3.0	27
70	Real time kinetics and thermochemistry of the uptake of HCl, HBr and HI on water ice in the temperature range 190 to 210 K. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1998, 102, 915-928.	0.9	26
71	Multiple Charge-Transfer Transitions in Alkylbenzene-TCNE Complexes. Helvetica Chimica Acta, 1976, 59, 1039-1053.	1.6	25
72	Can soot particles emitted by airplane exhaust contribute to the formation of aviation contrails and cirrus clouds?. Geophysical Research Letters, 2002, 29, 1-1-1-4.	4.0	24

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73	The heterogeneous kinetics of HOBr and HOCl on acidified sea salt and model aerosol at 40–90% relative humidity and ambient temperature. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 3988-4001.	2.8	24
74	Chemical characterization of atmospheric ions at the high altitude research station Jungfrauoch (Switzerland). <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 2613-2629.	4.9	24
75	Reaction probability for the spontaneous etching of silicon by CF <sub>3</sub> free radicals. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1988, 6, 1632.	1.6	23
76	Sticking coefficient of the SiH <sub>2</sub> free radical on a hydrogenated silicon-carbon surface. <i>Applied Physics Letters</i> , 1989, 54, 185-187.	3.3	23
77	The kinetics of the uptake of HNO <sub>3</sub> on ice, solid H <sub>2</sub> SO <sub>4</sub> -H <sub>2</sub> O and solid ternary solutions of H <sub>2</sub> SO <sub>4</sub> -HNO <sub>3</sub> -H <sub>2</sub> O in the temperature range 180–211 K. <i>Physical Chemistry Chemical Physics</i> , 2001, 3, 3707-3716.	2.8	23
78	Chemical Kinetics of the Interaction of H <sub>2</sub> O Vapor with Soot in the Range 190 K ≤ T ≤ 300 K: A Diffusion Tube Study. <i>Journal of Physical Chemistry A</i> , 2004, 108, 10667-10680.	2.5	23
79	Probing Functional Groups at the Gas-Aerosol Interface Using Heterogeneous Titration Reactions: A Tool for Predicting Aerosol Health Effects?. <i>ChemPhysChem</i> , 2010, 11, 3823-3835.	2.1	23
80	Level-to-level vibrational energy transfer studies: energy dependence and observation of product species for azulenes(SO, Evib) + CO <sub>2</sub> . <i>Chemical Physics Letters</i> , 1982, 90, 99-104.	2.6	22
81	The kinetics of the heterogeneous reaction of BrONO <sub>2</sub> with solid alkali halides at ambient temperature. A comparison with the interaction of ClONO <sub>2</sub> on NaCl and KBr. <i>Physical Chemistry Chemical Physics</i> , 1999, 1, 4337-4346.	2.8	22
82	Rate Constants for the Reactions t-C <sub>4</sub> H <sub>9</sub> +DX→i-C <sub>4</sub> H <sub>9</sub> D+X (X = Br,I), 295T(K) < 384: Heat of Formation of the tert-Butyl Radical. <i>Journal of the American Chemical Society</i> , 1989, 111, 956-962.	13.7	21
83	Heterogeneous reactivity of the nitrate radical: reactions on halogen salt at ambient temperature and on ice in the presence of HX (X=Cl, Br, I) at 190 K. <i>Physical Chemistry Chemical Physics</i> , 1999, 1, 2257-2266.	2.8	21
84	Influence of Monolayer Amounts of HNO <sub>3</sub> on the Evaporation Rate of H <sub>2</sub> O over Ice in the Range 179 to 208 K: A Quartz Crystal Microbalance Study. <i>Journal of Physical Chemistry A</i> , 2005, 109, 7151-7165.	2.5	21
85	Relationship between bond dissociation energies and activation energies for bond scission reactions. <i>International Journal of Chemical Kinetics</i> , 1994, 26, 211-217.	1.6	20
86	A molecular diffusion tube study of N <sub>2</sub> O <sub>5</sub> and HONO <sub>2</sub> interacting with NaCl and KBr at ambient temperature. <i>Physical Chemistry Chemical Physics</i> , 1999, 1, 2687-2694.	2.8	19
87	Transient mid-IR study of electron dynamics in TiO <sub>2</sub> conduction band. <i>Analyst</i> , 2013, 138, 1966.	3.5	19
88	Controls on the surface chemical reactivity of volcanic ash investigated with probe gases. <i>Earth and Planetary Science Letters</i> , 2016, 450, 254-262.	4.4	19
89	Reactive Uptake of Sulfur Dioxide and Ozone on Volcanic Glass and Ash at Ambient Temperature. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 10,077.	3.3	19
90	Infrared multiphoton photophysics: Decomposition of C <sub>n</sub> F <sub>2n+1</sub> I (n = 1, 2, 3). <i>Journal of Chemical Physics</i> , 1982, 76, 406-416.	3.0	18

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91	Laser-induced kinetics: Arrhenius parameters for $\text{C}_4\text{H}_9 + \text{X} \rightarrow \text{C}_4\text{H}_9\text{X} + \text{I}$ (X = H,D) and the Heat of Formation of the <i>tert</i> -butyl radical. <i>International Journal of Chemical Kinetics</i> , 1983, 15, 1283-1300.	1.6	18
92	The heterogeneous interaction of $\text{NO}_2$ with amorphous carbon. <i>Geophysical Research Letters</i> , 1993, 20, 1431-1434.	4.0	18
93	Quantitative Aspects of the Interfacial Catalytic Oxidation of Dithiothreitol by Dissolved Oxygen in the Presence of Carbon Nanoparticles. <i>Environmental Science &amp; Technology</i> , 2016, 50, 996-1004.	10.0	18
94	Multiphoton ionization of vinylchloride, trifluoroethylene, and benzene at 193 nm. <i>Journal of Chemical Physics</i> , 1987, 87, 902-909.	3.0	17
95	In situ radical detection under very low pressure photolysis conditions using resonance-enhanced multiphoton ionization. Kinetics of trifluoromethyl radicals produced from IR multiphoton dissociation of hexafluoroacetone. <i>The Journal of Physical Chemistry</i> , 1988, 92, 5338-5347.	2.9	17
96	The heterogeneous formation of $\text{N}_2\text{O}$ in the presence of acidic solutions: Experiments and modeling. <i>International Journal of Chemical Kinetics</i> , 1997, 29, 869-891.	1.6	17
97	The absolute rate constant for the metathesis $\text{C}_4\text{H}_9 + \text{DI} \rightarrow \text{C}_4\text{H}_9\text{D} + \text{I}$ and the heat of formation of the <i>tert</i> -butyl radical. <i>International Journal of Chemical Kinetics</i> , 1979, 11, 969-976.	1.6	16
98	Heterogeneous Reaction of $\text{NO}_3$ with Ice and Sulfuric Acid Solutions: Upper Limits for the Uptake Coefficients. <i>Journal of Physical Chemistry A</i> , 1997, 101, 4110-4113.	2.5	16
99	The heterogeneous reaction of $\text{N}_2\text{O}_5$ with HBr on Ice comparison with $\text{N}_2\text{O}_5 + \text{HCl}$ . <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1998, 102, 811-820.	0.9	16
100	Electronic Structure, Molecular Conformation and Reactivity of Benzonorbornadiene Systems. <i>Helvetica Chimica Acta</i> , 1976, 59, 278-290.	1.6	15
101	Real-time measurement of residence times of gas molecules on solid surfaces. <i>Chemical Physics Letters</i> , 1997, 275, 253-260.	2.6	15
102	The heterogeneous decomposition of ozone on atmospheric mineral dust surrogates at ambient temperature. <i>International Journal of Chemical Kinetics</i> , 2006, 38, 407-419.	1.6	15
103	Molecular Characterization of the Gas-Particle Interface of Soot Sampled from a Diesel Engine Using a Titration Method. <i>Environmental Science &amp; Technology</i> , 2016, 50, 2946-2955.	10.0	15
104	Quantitative aspects of benzene photoionization at 248 nm. <i>Chemical Physics Letters</i> , 1985, 120, 118-123.	2.6	14
105	Direct Measurement of Surface Residence Times: Nitryl Chloride and Chlorine Nitrate on Alkali Halides at Room Temperature. <i>Journal of Physical Chemistry A</i> , 1998, 102, 9193-9201.	2.5	14
106	Reinvestigation of the Elementary Chemical Kinetics of the Reaction $\text{C}_2\text{H}_5 + \text{HBr} (\text{HI}) \rightarrow \text{C}_2\text{H}_6 + \text{Br} (\text{I})$ in the Range 293-623 K and Its Implication on the Thermochemical Parameters of $\text{C}_2\text{H}_5$ Free Radical. <i>Journal of Physical Chemistry A</i> , 2013, 117, 11383-11402.	2.5	14
107	$\text{N}_2\text{O}_5$ photolysis products investigated by fluorescence and optoacoustic techniques. <i>International Journal of Chemical Kinetics</i> , 1985, 17, 991-1006.	1.6	12
108	A pulsed halogen atom source for kinetic measurements in a Knudsen cell reactor. <i>Review of Scientific Instruments</i> , 1990, 61, 1217-1222.	1.3	12

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109	The heterogeneous formation of N <sub>2</sub> O over bulk condensed phases in the presence of SO <sub>2</sub> at high humidities. <i>Journal of Atmospheric Chemistry</i> , 1996, 25, 229-250.	3.2	12
110	The heterogeneous reaction of HONO and HBr on ice and on sulfuric acid. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1997, 101, 943-955.	0.9	12
111	Reactivity of BrNO <sub>2</sub> and ClNO <sub>2</sub> with Solid Alkali Salt Substrates. <i>Journal of Physical Chemistry A</i> , 1998, 102, 7470-7479.	2.5	12
112	Heterogeneous Chemistry of HOBr on Different Types of Ice and on Ice Doped with HCl, HBr, and HNO <sub>3</sub> at 175 K < T < 215 K. <i>Journal of Physical Chemistry A</i> , 2000, 104, 7268-7277.	2.5	12
113	Heterogeneous Hydrolysis and Reaction of BrONO <sub>2</sub> and Br <sub>2</sub> O on Pure Ice and Ice Doped with HBr. <i>Journal of Physical Chemistry A</i> , 2002, 106, 5891-5901.	2.5	12
114	Thermochemical properties from ab initio calculations: $\dot{\text{C}}$ and $\dot{\text{F}}$ Free radicals of importance in soot formation: $\text{C}_3\text{H}_3$ (propargyl), $\text{C}_4\text{H}_3$ , $\text{C}_{13}\text{H}_9$ (phenalenyl), $\text{C}_6\text{H}_5$ (phenyl), $\text{C}_{10}\text{H}_7$ (naphthyl), $\text{C}_{14}\text{H}_9$ (anthryl),	1.6	12
115	$\text{C}_{14}\text{H}_9$ (phenanthryl), $\text{C}_{16}\text{H}_9$ Characterization of surface functional groups present on laboratory-generated and ambient aerosol particles by means of heterogeneous titration reactions. <i>Journal of Aerosol Science</i> , 2009, 40, 534-548.	3.8	12
116	The use of heterogeneous chemistry for the characterization of functional groups at the gas/particle interface of soot from a diesel engine at a particular running condition. <i>Environmental Science and Pollution Research</i> , 2015, 22, 4863-4872.	5.3	12
117	Metastable Nitric Acid Trihydrate in Ice Clouds. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3276-3280.	13.8	12
118	Physical and Chemical Interaction of Homoconjugated Dienes with Tetracyanoethylene. <i>Helvetica Chimica Acta</i> , 1976, 59, 2635-2652.	1.6	11
119	[3+2] resonance enhanced multiphoton ionization of I and Br formed from the infrared multiphoton decomposition of CF <sub>3</sub> I and CF <sub>3</sub> Br. <i>Journal of Chemical Physics</i> , 1988, 89, 2925-2931.	3.0	11
120	On the Correlation between Ionization Potentials and Excitation Energies, part III: Pyrazine. <i>Helvetica Chimica Acta</i> , 1973, 56, 2889-2899.	1.6	10
121	Reaction of CF <sub>3</sub> radicals on fused silica between 320 and 530 K. <i>Journal of Chemical Physics</i> , 1986, 84, 2400-2407.	3.0	10
122	Kinetics of surface reactions of CF <sub>3</sub> radicals. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1987, 5, 3351-3358.	2.1	10
123	Interaction of chlorine atom(2P <sub>3/2</sub> ) and chlorine atom(2P <sub>1/2</sub> ) with polycrystalline nickel surfaces. <i>The Journal of Physical Chemistry</i> , 1991, 95, 825-834.	2.9	10
124	The nature of the interface and the diffusion coefficient of HCl/ice and HBr/ice in the temperature range 190-205 K. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 4157-4169.	2.8	10
125	The interaction of Cl(2P <sub>3/2</sub> ) and Cl(2P <sub>1/2</sub> ) with $\text{Si}(100)$ : Spontaneous etching. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1991, 9, 217-222.	2.1	9
126	Corrigendum to "Evaluated kinetic and photochemical data for atmospheric chemistry: Volume V "heterogeneous reactions on solid substrates"; published in <i>Atmos. Chem. Phys.</i> 10, 9059-9223, 2010. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 7359-7359.	4.9	9



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127	The Reinvestigation of the Kinetics of the Metathesis Reactions $t\text{-C}_4\text{H}_9 + \text{HBr} \rightleftharpoons i\text{-C}_4\text{H}_9 + \text{Br}$ (Free Radical Thermochemistry. <i>Journal of Physical Chemistry A</i> , 2014, 118, 5135-5148.	2.5	9
128	Pulsed field desorption mass spectrometry: A technique for investigating field desorption ion formation mechanisms. <i>International Journal of Mass Spectrometry and Ion Physics</i> , 1983, 49, 319-335.	1.3	8
129	The heterogeneous interaction of $\text{Br}(2P_{3/2})$ and $\text{Br}(2P_{1/2})$ with surfaces of Teflon and polycrystalline nickel. <i>International Journal of Chemical Kinetics</i> , 1995, 27, 403-418.	1.6	8
130	The metastable $\text{HCl} \cdot 6\text{H}_2\text{O}$ phase IR spectroscopy, phase transitions and kinetic/thermodynamic properties in the range 170-205 K. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 11905-11923.	4.9	8
131	The mid-IR Absorption Cross Sections of $\text{HNO}_3$ and $\text{HNO}_3 \cdot 2\text{H}_2\text{O}$ in the range 170 to 185 K and of metastable $\text{NAD} (\text{HNO}_3 \cdot 2\text{H}_2\text{O})$ in the range 172 to 182 K. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 11,707.	3.8	8
132	Chemical characterization of diesel and hydrotreated vegetable oil (HVO) soot after reactive gas probing using diffuse reflectance FTIR spectroscopy (DRIFTS). <i>Environmental Science and Pollution Research</i> , 2017, 24, 7534-7543.	5.3	8
133	Laser-induced chemical kinetics: Absolute rate constants for the reactions $\text{C}_2\text{F}_2 + \text{Br}_2 \rightarrow \text{C}_2\text{F}_5\text{Br} + \text{Br}$ and $\text{n-C}_3\text{F}_7 + \text{Br}_2 \rightarrow \text{n-C}_3\text{F}_7\text{Br} + \text{Br}$ . <i>International Journal of Chemical Kinetics</i> , 1982, 14, 499-506.	1.6	7
134	$\text{H}_2\text{O}$ and $\text{HCl}$ trace gas kinetics on crystalline $\text{HCl}$ hydrates and amorphous $\text{HCl} / \text{H}_2\text{O}$ in the range 170 to 205 K: the $\text{HCl} / \text{H}_2\text{O}$ phase diagram revisited. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 5183-5204.	4.9	7
135	Heterogeneous interaction of $\text{Br}_2$ , $\text{Cl}_2$ and $\text{Cl}_2\text{O}$ with solid $\text{KBr}$ and $\text{NaCl}$ substrates: The role of adsorbed $\text{H}_2\text{O}$ and halogens. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 3447.	2.8	6
136	The heterogeneous interaction of $\text{HOCl}$ with solid $\text{KBr}$ substrates: The catalytic role of adsorbed halogens. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 2599.	2.8	6
137	The Measurement of the Rate Parameters for the Reactions $i\text{-C}_3\text{H}_7 + \text{HI} \rightarrow i\text{-C}_3\text{H}_8 + \text{I}$ over the Temperature Range 293-623 K: Implications for the Standard Heat of Formation of the Propyl Radicals. <i>International Journal of Chemical Kinetics</i> , 2014, 46, 305-320.	1.6	6
138	The Heterogeneous Reaction of $\text{NO}_2$ with $\text{NH}_4\text{Cl}$ : A Molecular Diffusion Tube Study. <i>Journal of Atmospheric Chemistry</i> , 2005, 50, 171-194.	3.2	5
139	The Kinetics of the Reaction $\text{C}_2\text{H}_5 + \text{HCl} \rightarrow \text{C}_2\text{H}_6 + \text{Cl}$ over an Extended Temperature Range (213-623 K): Experiment and Modeling. <i>Zeitschrift Fur Physikalische Chemie</i> , 2015, 229, 1475-1501.	2.8	5
140	UV photon-assisted incineration of polycyclic aromatic hydrocarbons at elevated temperatures between 150 and 800 °C. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1997, 109, 267-280.	3.9	4
141	High density chemiluminescence studies: explosive decomposition of solid phase tetramethyldioxetane. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1988, 42, 73-85.	3.9	3
142	Summary Abstract: Spontaneous thermal etching of silicon by $\text{CF}_3$ radicals. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1988, 6, 1407-1408.	2.1	3
143	Enhanced Thermal Destruction of Anthracene Vapor upon Laser Irradiation at 248 nm in the 150-800 °C Range. <i>Environmental Science &amp; Technology</i> , 1996, 30, 1789-1793.	10.0	3
144	Heterogeneous kinetics of $\text{H}_2\text{O}$ , $\text{HNO}_3$ and $\text{HCl}$ on $\text{HNO}_3$ hydrates ( $\text{HNO}_3 \cdot \text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 2\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 3\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 4\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 5\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 6\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 7\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 8\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 9\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 10\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 11\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 12\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 13\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 14\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 15\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 16\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 17\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 18\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 19\text{H}_2\text{O}$ , $\text{HNO}_3 \cdot 20\text{H}_2\text{O}$ ) in the range 175-200 K. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 11937-11960.	4.9	3

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145	Coexistence of reactive functional groups at the interface of a powdered activated amorphous carbon: a molecular view. <i>Molecular Physics</i> , 2021, 119, .	1.7	3
146	Flowing Gas Experiments Reveal Mechanistic Details of Interfacial Reactions on a Molecular Level at Knudsen Flow Conditions. <i>Frontiers in Astronomy and Space Sciences</i> , 0, 9, .	2.8	3
147	Optical switching of a dc discharge using an excimer laser. <i>Journal of Applied Physics</i> , 1988, 63, 4849-4853.	2.5	2
148	Pump-and-probe lidar for in-situ probing of atmospheric chemistry. , 1992, 1714, 291.		2
149	The heterogeneous generation of N <sub>2</sub> O from exhaust gases of combustion: A laboratory study. <i>Geophysical Research Letters</i> , 1995, 22, 3509-3512.	4.0	2
150	Effusive molecular beam-sampled Knudsen flow reactor coupled to vacuum ultraviolet single photon ionization mass spectrometry using an external free radical source. <i>Review of Scientific Instruments</i> , 2013, 84, 114104.	1.3	2
151	IUPAC Critical Evaluation of Thermochemical Properties of Selected Radicals. Part 1.. <i>ChemInform</i> , 2005, 36, no.	0.0	1
152	Frontispiece: Metastable Nitric Acid Trihydrate in Ice Clouds. <i>Angewandte Chemie - International Edition</i> , 2016, 55, .	13.8	1
153	The influence of HCl on the evaporation rates of H <sub>2</sub> O over water ice in the range 188 to 210 K at small average concentrations. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 15903-15919.	4.9	1
154	Atom- and Radical-Surface Sticking Coefficients Measured Using Resonance Enhanced Multiphoton Ionization (REMPI). <i>Materials Research Society Symposia Proceedings</i> , 1988, 131, 251.	0.1	0
155	Chemiluminescence From Laser-Heated Solid And Gaseous Tetramethyldioxetane. , 1988, , .		0
156	Kinetic model for non-sticky collisions in pulsed molecular diffusion tube experiments. <i>Surface Science</i> , 2003, 542, 150-159.	1.9	0
157	Heterogeneous Chemistry of Cl <sub>2</sub> O and HOCl on Frozen Natural Sea Salt, Recrystallized Sea Salt, KCl and NaCl Solutions at 200 and 215 K. <i>Zeitschrift Fur Physikalische Chemie</i> , 2010, 224, 1119-1150.	2.8	0
158	Metastabiles Salpetersäuretrihydrat in Eiswolken. <i>Angewandte Chemie</i> , 2016, 128, 3334-3338.	2.0	0
159	Frontispiz: Metastabiles Salpetersäuretrihydrat in Eiswolken. <i>Angewandte Chemie</i> , 2016, 128, .	2.0	0