Ranajit K Talukdar

List of Publications by Year
in descending order

84 papers	4,153 citations	93792 39 h-index	139680 61 g-index
84 all docs	84 docs citations	84 times ranked	3635 citing authors

#	Article	IF	Citations
1	Effects of gasâ€“wall interactions on measurements of semivolatile compounds and small polar molecules. Atmospheric Measurement Techniques, 2019, 12, 3137-3149.	1.2	45
2	Measurements of delays of gas-phase compounds in a wide variety of tubing materials due to gasâ€“wall interactions. Atmospheric Measurement Techniques, 2019, 12, 3453-3461.	1.2	64
3	Model Evaluation of New Techniques for Maintaining High-NO Conditions in Oxidation Flow Reactors for the Study of OH-Initiated Atmospheric Chemistry. ACS Earth and Space Chemistry, 2018, 2, 72-86.	1.2	26
4	Characterization of a catalyst-based conversion technique to measure total particulate nitrogen and organic carbon and comparison to a particle mass measurement instrument. Atmospheric Measurement Techniques, 2018, 11, 2749-2768.	1.2	21
5	Nocturnal loss and daytime source of nitrous acid through reactive uptake and displacement. Nature Geoscience, 2015, 8, 55-60.	5.4	89
6	Deposition and rainwater concentrations of trifluoroacetic acid in the United States from the use of HFOâ€1234yf. Journal of Geophysical Research D: Atmospheres, 2014, 119, 14,059.	1.2	32
7	Uptake of HNO₃ on Aviation Kerosene and Aircraft Engine Soot: Influences of H₂O or/and H₂SO₄. Journal of Physical Chemistry A, 2013, 117, 4928-4936.	1.1	3
8	Nitryl Chloride (ClNO2): UV/Vis Absorption Spectrum between 210 and 296 K and O(3P) Quantum Yield at 193 and 248 nm. Journal of Physical Chemistry A, 2012, 116, 5796-5805.	1.1	39
9	Heterogeneous Interaction of N2O5 with HCl Doped H2SO4 under Stratospheric Conditions: ClNO2 and Cl2 Yields. Journal of Physical Chemistry A, 2012, 116, 6003-6014.	1.1	12
10	Atmospheric Chemistry of CF₃CFâ•CH₂ and (<i>Z</i>)-CF₃CFâ•CHF: Cl and NO₃ Rate Coefficients, Cl Reaction Product Yields, and Thermochemical Calculations. Journal of Physical Chemistry A, 2011, 115, 167-181.	1.1	37
11	Rate coefficients for the reaction of methylglyoxal (CH₃COCHO) with OH and NO₃ and glyoxal (HCO)₂ with NO₃. Atmospheric Chemistry and Physics, 2011, 11, 10837-10851.	1.9	15
12	Kinetics and Products of the Reaction O₂(¹Î£_g ⁺) with N₂O. Zeitschrift Fur Physikalische Chemie, 2010, 224, 989-1007.	1.4	6
13	Rate coefficients for the reactions of OH with <i>n</i>â€propanol and <i>iso</i>â€propanol between 237 and 376 K. International Journal of Chemical Kinetics, 2010, 42, 10-24.	1.0	15
14	Rate Coefficients for the Gas-Phase Reaction of the Hydroxyl Radical with CH₂â•CHF and CH₂â•CF₂. Journal of Physical Chemistry A, 2010, 114, 4619-4633.	1.1	41
15	(CH3)3COOH (tert-butyl hydroperoxide): OH reaction rate coefficients between 206 and 375 K and the OH photolysis quantum yield at 248 nm. Physical Chemistry Chemical Physics, 2010, 12, 12101.	1.3	48
16	Rate coefficients for the OH + acetaldehyde (CH₃CHO) reaction between 204 and 373 K. International Journal of Chemical Kinetics, 2008, 40, 635-646.	1.0	18
17	High levels of nitryl chloride in the polluted subtropical marine boundary layer. Nature Geoscience, 2008, 1, 324-328.	5.4	403
18	CF₃CFî€CH₂and (Z)-CF₃CFî€CHF: temperature dependent OH rate coefficients and global warming potentials. Physical Chemistry Chemical Physics, 2008, 10, 808-820.	1.3	119

#	Article	IF	Citations
19	Rate Coefficients for the OH + HC(O)C(O)H (Glyoxal) Reaction between 210 and 390 K. Journal of Physical Chemistry A, 2008, 112, 73-82.	1.1	45
20	Rate Coefficients for the OH + Pinonaldehyde (C10H16O2) Reaction between 297 and 374 K. Environmental Science & Technology, 2007, 41, 3959-3965.	4.6	12
21	Uptake of HNO3on Hexane and Aviation Kerosene Soots. Journal of Physical Chemistry A, 2006, 110, 9643-9653.	1.1	9
22	Kinetic Studies of the Reactions of O2(bÎ£g+) with Several Atmospheric Molecules. Journal of Physical Chemistry A, 2005, 109, 3912-3920.	1.1	34
23	Kinetics of the Removal of OH(v= 1) and OD(v= 1) by HNO3and DNO3from 253 to 383 K. Journal of Physical Chemistry A, 2003, 107, 7762-7769.	1.1	21
24	Reaction of Hydroxyl Radical with Acetone. 2. Products and Reaction Mechanism. Journal of Physical Chemistry A, 2003, 107, 5021-5032.	1.1	58
25	Kinetics of O2(1Î£g+) Reaction with H2 and an Upper Limit for OH Production. Journal of Physical Chemistry A, 2002, 106, 8461-8470.	1.1	8
26	Reactive uptake of NO3by liquid and frozen organics. Journal of Geophysical Research, 2002, 107, AAC 6-1.	3.3	66
27	Reaction of Hydroxyl Radical with Nitric Acid:Â Insights into Its Mechanismâ€. Journal of Physical Chemistry A, 2001, 105, 1605-1614.	1.1	47
28	Kinetics of the reaction OH + CO under atmospheric conditions. Geophysical Research Letters, 2001, 28, 3135-3138.	1.5	33
29	Kinetics of the reactions of OH with several alkyl halidesElectronic Supplementary Information available. See http://www.rsc.org/suppdata/cp/b1/b105188c/. Physical Chemistry Chemical Physics, 2001, 3, 4529-4535.	1.3	23
30	Quantification of the Tropospheric Removal of Chloral (CCl3CHO):Â Rate Coefficient for the Reaction with OH, UV Absorption Cross Sections, and Quantum Yields. Journal of Physical Chemistry A, 2001, 105, 5188-5196.	1.1	7
31	Rate Coefficients for the OH + CF3I Reaction between 271 and 370 K. Journal of Physical Chemistry A, 2000, 104, 8945-8950.	1.1	17
32	Rate constants for the reaction OH+NO2+M â†’ HNO3+M under atmospheric conditions. Chemical Physics Letters, 1999, 299, 277-284.	1.2	109
33	Role of nitrogen oxides in the stratosphere: A reevaluation based on laboratory studies. Geophysical Research Letters, 1999, 26, 2387-2390.	1.5	46
34	Reconsideration of the Rate Constant for the Reaction of Hydroxyl Radicals with Nitric Acid. Journal of Physical Chemistry A, 1999, 103, 3031-3037.	1.1	111
35	Rate Coefficients for the Reactions of OH and OD with HCl and DCl between 200 and 400 K. Journal of Physical Chemistry A, 1999, 103, 3237-3244.	1.1	46
36	Quantum yields of O(Â¹D) in the photolysis of ozone between 289 and 329 nm as a function of temperature. Geophysical Research Letters, 1998, 25, 143-146.	1.5	91

#	Article	IF	Citations
37	Multiphase chemistry of NO3in the remote troposphere. Journal of Geophysical Research, 1998, 103, 16133-16143.	3.3	34
38	Oxidation of atmospheric reduced sulphur compounds: perspective from laboratory studies. Philosophical Transactions of the Royal Society B: Biological Sciences, 1997, 352, 171-182.	1.8	86
39	Atmospheric fate of several alkyl nitrates Part 2UV absorption cross-sections and photodissociation quantum yields. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 2797-2805.	1.7	94
40	Atmospheric fate of several alkyl nitrates Part 1Rate coefficients of the reactions of alkyl nitrates with isotopically labelled hydroxyl radicals. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 2787.	1.7	66
41	Uptake of NO3on Water Solutions:Â Rate Coefficients for Reactions of NO3with Cloud Water Constituents. Journal of Physical Chemistry A, 1997, 101, 2316-2322.	1.1	21
42	Rate Coefficients for the Reactions of Hydroxyl Radicals with Methane and Deuterated Methanes. Journal of Physical Chemistry A, 1997, 101, 3125-3134.	1.1	135
43	Photolysis of ozone at 308 and 248 nm: Quantum yield of O(Â^{1}D) as a function of temperature. Geophysical Research Letters, 1997, 24, 1091-1094.	1.5	33
44	Atmospheric fate of methyl vinyl ketone and methacrolein. Journal of Photochemistry and Photobiology A: Chemistry, 1997, 110, 1-10.	2.0	98
45	Atmospheric fate and greenhouse warming potentials of HFC 236fa and HFC 236ea. Journal of Geophysical Research, 1996, 101, 12905-12911.	3.3	8
46	Reactive uptake of NO3on pure water and ionic solutions. Journal of Geophysical Research, 1996, 101, 21023-21031.	3.3	116
47	Kinetics of Hydroxyl Radical Reactions with Isotopically Labeled Hydrogen. The Journal of Physical Chemistry, 1996, 100, 3037-3043.	2.9	76
48	Uptake of NO3 on KI solutions: rate coefficient for the NO3 + Iâˆ' reaction and gas-phase diffusion coefficients for NO3. Chemical Physics Letters, 1996, 261, 467-473.	1.2	50
49	Rate coefficients for O(1D) + H2, D2, HD reactions and H atom yield in O(1D) + HD reaction. Chemical Physics Letters, 1996, 253, 177-183.	1.2	65
50	UV laser photodissociation of CF2ClBr and CF2Br2 at 298 K: quantum yields of Cl, Br, and CF2. Chemical Physics Letters, 1996, 262, 669-674.	1.2	14
51	Reactions of O(3P) with Alkyl Iodides:Â Rate Coefficients and Reaction Products. The Journal of Physical Chemistry, 1996, 100, 14005-14015.	2.9	90
52	Rate Coefficients for Reactions of NO3with a Few Olefins and Oxygenated Olefins. The Journal of Physical Chemistry, 1996, 100, 5374-5381.	2.9	61
53	Reaction of Methylbutenol with the OH Radical: Mechanism and Atmospheric Implications. The Journal of Physical Chemistry, 1995, 99, 12188-12194.	2.9	67
54	Investigation of the loss processes for peroxyacetyl nitrate in the atmosphere: UV photolysis and reaction with OH. Journal of Geophysical Research, 1995, 100, 14163.	3.3	165

#	Article	IF	Citations
55	Kinetics of the reactions of OH with alkanes. International Journal of Chemical Kinetics, 1994, 26, 973-990.	1.0	44
56	Temperature dependence of the C1ONO2UV absorption spectrum. Geophysical Research Letters, 1994, 21, 585-588.	1.5	37
57	Kinetics of the reactions of HBr with O3and HO2: The yield of HBr from HO2+ BrO. Journal of Geophysical Research, 1994, 99, 22949.	3.3	36
58	Temperature Dependence of the NO3 Absorption Spectrum. The Journal of Physical Chemistry, 1994, 98, 13144-13150.	2.9	132
59	Temperature dependence of the ozone absorption spectrum over the wavelength range 410 to 760 nm. Geophysical Research Letters, 1994, 21, 581-584.	1.5	91
60	Study of the kinetics of the reactions of NO3 with HO2 and OH. International Journal of Chemical Kinetics, 1993, 25, 25-39.	1.0	16
61	Temperature dependence of the HNO₃ UV absorption cross sections. Journal of Geophysical Research, 1993, 98, 22937-22948.	3.3	86
62	Condensation of SF6 in seeded supersonic jets. Molecular Physics, 1993, 80, 127-134.	0.8	3
63	Rate coefficients for reactions of several hydrofluorocarbons with hydroxyl and oxygen atom(1D) and their atmospheric lifetimes. The Journal of Physical Chemistry, 1993, 97, 8976-8982.	2.9	66
64	Response to the comment on "Reported errors in the rate constant for the reaction hydroxyl pentafluoroethane". The Journal of Physical Chemistry, 1992, 96, 3561-3562.	2.9	2
65	Photodissociation of bromocarbons at 193, 222, and 248 nm: Quantum yields of Br atom at 298 K. Journal of Chemical Physics, 1992, 96, 8194-8201.	1.2	42
66	Kinetics of the OH Reaction with Methyl Chloroform and Its Atmospheric Implications. Science, 1992, 257, 227-230.	6.0	38
67	Atmospheric lifetimes and ozone depletion potentials of methyl bromide (CH₃Br) and dibromomethane (CH₂Br₂). Geophysical Research Letters, 1992, 19, 2059-2062.	1.5	103
68	Correction to â€œAtmospheric lifetimes and ozone deplehon potentials of methyl bromide (CH3Br) and dibromomethane (CH2Br2) by A. Mellouki, Ranajit K. Talukdar, Anne-Marie Schmoltner, Tomasz Gierczak, Michael J. Mills, Susan Solomon, and A. R. Ravishankara. Geophysical Research Letters, 1992, 19, 2279-2280.	1.5	1
69	Rate coefficients for the reaction of OH with HONO between 298 and 373 K. International Journal of Chemical Kinetics, 1992, 24, 711-725.	1.0	35
70	Kinetics of the reaction of H(2S) with HBr. International Journal of Chemical Kinetics, 1992, 24, 973-982.	1.0	26
71	Atmospheric fate of CF₃Br, CF₂Br₂, CF₂ClBr, and CF₂BrCF₂BR. Journal of Geophysical Research, 1991, 96, 5025-5043.	3.3	53
72	Atmospheric fate of hydrofluoroethanes and hydrofluorochloroethanes: 1. Rate coefficients for reactions with OH. Journal of Geophysical Research, 1991, 96, 5001-5011.	3.3	52

#	Article	IF	Citations
73	Atmospheric Lifetime of CHF2Br, a Proposed Substitute for Halons. Science, 1991, 252, 693-695.	6.0	18
74	Atmospheric fate of difluoromethane, 1,1,1-trifloroethane, pentafluoroethane, and 1,1-dichloro-1-fluoroethane: rate coefficients for reactions with hydroxyl and UV absorption cross sections of 1,1-dichloro-1-fluoroethane. The Journal of Physical Chemistry, 1991, 95, 5815-5821.	2.9	72
75	Infrared diode laser absorption study of free jets of NH3. Journal of Molecular Structure, 1989, 194, 117-133.	1.8	8
76	Observation of autoionization resonances in uranium by step-wise laser photoionization. Applied Physics B, Photophysics and Laser Chemistry, 1989, 48, 525-530.	1.5	18
77	Associative ionisation of laser-excited uranium with molecular oxygen. Chemical Physics Letters, 1988, 144, 407-411.	1.2	2
78	Two colour multiphoton ionization spectroscopy of uranium from a metastable state. Applied Physics B, Photophysics and Laser Chemistry, 1988, 47, 55-59.	1.5	15
79	Understanding single-color multiphoton ionization spectra by pumpâ€"probe technique. Journal of the Optical Society of America B: Optical Physics, 1988, 5, 1257.	0.9	10
80	Observation of new high-lying odd levels of U i in a two-color multiphoton ionization spectrum. Journal of the Optical Society of America B: Optical Physics, 1987, 4, 1835.	0.9	19
81	Thermal stability and IR-laser-driven selective photochemistry of a volatile uranyl compound at natural abundance. Chemical Physics, 1987, 113, 159-165.	0.9	3
82	Relaxation in pure and seeded supersonic jets of SF6. Chemical Physics, 1985, 95, 145-155.	0.9	13
83	Infrared diode laser diagnostic of supersonic free jets. Chemical Physics Letters, 1983, 101, 397-400.	1.2	14
84	Molecular beam study of photoionization of uranium and uranium oxide. Optics Communications, 1983, 45, 179-182.	1.0	3