Matthew S Johnson

List of Publications by Year in descending order

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117625 155660 3,926 133 34 55 citations g-index h-index papers 151 151 151 4554 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Airborne environmental DNA for terrestrial vertebrate community monitoring. Current Biology, 2022, 32, 701-707.e5.	3.9	91
2	The effect of body position while coughing on the airborne transmission of pathogens. Physics of Fluids, 2022, 34, .	4.0	3
3	Perturbation of the UV transitions of formaldehyde by TiO2 photocatalysts and Aun nanoclusters. Physical Chemistry Chemical Physics, 2022, , .	2.8	0
4	Indoor Air Quality: Status and Standards. , 2021, , 135-162.		2
5	Bypassing the multireference character of singlet molecular oxygen, part 1:1,4â€cycloâ€addition. International Journal of Quantum Chemistry, 2021, 121, e26523.	2.0	2
6	Chemistry and Photochemistry of Pyruvic Acid at the Air–Water Interface. Journal of Physical Chemistry A, 2021, 125, 1036-1049.	2.5	29
7	Formation of Formaldehyde and Other Byproducts by TiO2 Photocatalyst Materials. Sustainability, 2021, 13, 4821.	3.2	6
8	Do Gas Nanobubbles Enhance Aqueous Photocatalysis? Experiment and Analysis of Mechanism. Catalysts, 2021, 11, 511.	3.5	10
9	The Sulfolene Protecting Group: Observation of a Direct Photoinitiated Cheletropic Ring Opening. ChemPhotoChem, 2021, 5, 863-870.	3.0	1
10	Electrospun Nanofibre Air Filters for Particles and Gaseous Pollutants. Sustainability, 2021, 13, 6553.	3.2	8
11	Correlation of Respiratory Aerosols and Metabolic Carbon Dioxide. Sustainability, 2021, 13, 12203.	3.2	11
12	Industrial Emissions Control Technologies: Introduction. , 2021, , 477-511.		2
13	Airborne Nanoparticles: Control and Detection. , 2021, , 85-133.		3
14	Photochemical method for removing methane interference for improved gas analysis. Atmospheric Measurement Techniques, 2021, 14, 8041-8067.	3.1	3
15	Predicting the Safety and Effectiveness of Inferior Vena Cava Filters Study: Design of a unique safety and effectiveness study of inferior vena cava filters in clinical practice. Journal of Vascular Surgery: Venous and Lymphatic Disorders, 2020, 8, 187-194.e1.	1.6	20
16	Modeling the degradation and disinfection of water pollutants by photocatalysts and composites: A critical review. Science of the Total Environment, 2020, 698, 134197.	8.0	105
17	New Method of Destroying Waste Anesthetic Gases Using Gas-Phase Photochemistry. Anesthesia and Analgesia, 2020, 131, 288-297.	2.2	18
18	Enhanced biodegradation of styrene vapors in the biotrickling filter inoculated with biosurfactant-generating bacteria under H2O2 stimulation. Science of the Total Environment, 2020, 704, 135325.	8.0	36

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19	Novel Materials for Combined Nitrogen Dioxide and Formaldehyde Pollution Control under Ambient Conditions. Catalysts, 2020, 10, 1040.	3.5	4
20	Photolytic fractionation of seven singly and doubly substituted nitrous oxide isotopocules measured by quantum cascade laser absorption spectroscopy. Atmospheric Environment: X, 2020, 8, 100094.	1.4	2
21	Monitoring Excess Exposure to Air Pollution for Professional Drivers in London Using Low-Cost Sensors. Atmosphere, 2020, 11, 749.	2.3	12
22	What can we learn from N ₂ O isotope data? – Analytics, processes and modelling. Rapid Communications in Mass Spectrometry, 2020, 34, e8858.	1.5	67
23	Chemical analysis and origin of the smell of line-dried laundry. Environmental Chemistry, 2020, 17, 355.	1.5	6
24	The unexpected effect of aqueous ion pairs on the forbidden n → π* transition in nitrate. Physical Chemistry Chemical Physics, 2020, 22, 11678-11685.	2.8	2
25	Laboratory Comparison of Low-Cost Particulate Matter Sensors to Measure Transient Events of Pollution. Sensors, 2020, 20, 2219.	3.8	58
26	Compact Algorithms for Predicting of Atmospheric Visibility Using PM2.5, Relative Humidity and NO2. Aerosol and Air Quality Research, 2020, , .	2.1	1
27	Airborne Nanoparticles: Control and Detection. , 2020, , 1-49.		0
28	Air Pollution and Climate Change: Sustainability, Restoration, and Ethical Implications., 2020, , 1-48.		2
29	Air Pollution Sources, Statistics, and Health Effects, Introduction. , 2020, , 1-3.		1
30	The riddle of the forbidden UV absorption of aqueous nitrate: the oscillator strength of the n → Ï€* transition in NO ₃ ^{â^'} including second order vibronic coupling. Physical Chemistry Chemical Physics, 2019, 21, 23466-23472.	2.8	2
31	Industrial Emissions Control Technologies: Introduction. , 2019, , 1-35.		3
32	Low-Cost Sensors for Indoor and Outdoor Pollution. , 2019, , 1-31.		2
33	Microstructure and Chemical Composition of Particles from Small-scale Gas Flaring. Aerosol and Air Quality Research, 2019, 19, 2205-2221.	2.1	24
34	Urban Air Quality: Sources and Concentrations. , 2019, , 1-23.		1
35	Indoor Air Quality: Status and Standards. , 2019, , 1-28.		0
36	Ozone-assisted regeneration of magnetic carbon nanotubes for removing organic water pollutants. Chemical Engineering Journal, 2018, 335, 384-391.	12.7	37

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37	Exit-channel recoil resonances by imaging the photodissociation of single quantum-state-selected OCS molecules. Physical Review A, 2018, 98, .	2.5	5
38	Photodegradation of pharmaceuticals and personal care products in water treatment using carbonaceous-TiO2 composites: A critical review of recent literature. Water Research, 2018, 142, 26-45.	11.3	299
39	On adduct formation and reactivity in the OCS + OH reaction: A combined theoretical and experimental study. Chemical Physics Letters, 2017, 675, 111-117.	2.6	2
40	Reactions of Three Lactones with Cl, OD, and O ₃ : Atmospheric Impact and Trends in Furan Reactivity. Journal of Physical Chemistry A, 2017, 121, 4123-4131.	2.5	6
41	Atmospheric oxidation of selected chlorinated alkenes by O 3 , OH, NO 3 and Cl. Atmospheric Environment, 2017, 170, 12-21.	4.1	5
42	Recoil Inversion in the Photodissociation of Carbonyl Sulfide near 234Ânm. Physical Review Letters, 2017, 118, 253001.	7.8	11
43	Treatment of reduced sulphur compounds and SO2 by Gas Phase Advanced Oxidation. Chemical Engineering Journal, 2017, 307, 427-434.	12.7	11
44	Clumped isotope effects during OH and Cl oxidation of methane. Geochimica Et Cosmochimica Acta, 2017, 196, 307-325.	3.9	33
45	Chemical and isotopic composition of secondary organic aerosol generated by & amp; t;i>α& t; i>-pinene ozonolysis. Atmospheric Chemistry and Physics, 2017, 17, 6373-6391.	4.9	14
46	Temperature-dependent quantum efficiency degradation of K-Cs-Sb bialkali antimonide photocathodes grown by a triple-element codeposition method. Physical Review Accelerators and Beams, 2017, 20, .	1.6	21
47	Green and facile approach for enhancing the inherent magnetic properties of carbon nanotubes for water treatment applications. PLoS ONE, 2017, 12, e0180636.	2.5	24
48	Global modeling of tropospheric iodine aerosol. Geophysical Research Letters, 2016, 43, 10012-10019.	4.0	17
49	Kinetic isotope effects of ¹² CH ₃ D  + OH and ¹³ CH ₃ D  + OH from 313 K. Atmospheric Chemistry and Physics. 2016. 16. 4439-4449.	l n ⁴ 278 to	7
50	Gas-phase advanced oxidation as an integrated air pollution control technique. AIMS Environmental Science, 2016, 3, 141-158.	1.4	14
51	Water vapor inhibits hydrogen sulfide detection in pulsed fluorescence sulfur monitors. Atmospheric Measurement Techniques, 2016, 9, 2669-2673.	3.1	4
52	Clumped isotope perturbation in tropospheric nitrous oxide from stratospheric photolysis. Geophysical Research Letters, 2015, 42, 3546-3552.	4.0	13
53	Isotopic effects of nitrate photochemistry in snow: a field study at Dome C, Antarctica. Atmospheric Chemistry and Physics, 2015, 15, 11243-11256.	4.9	32
54	Photoabsorption crossâ€section measurements of ³² S, ³³ S, ³⁴ S, and ³⁶ S sulfur dioxide from 190 to 220 nm. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2546-2557.	3.3	35

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55	Tropospheric Photolysis Rates of the Acetaldehyde Isotopologues CD3CHO and CD3CDO Relative to CH3CHO Measured at the European Photoreactor Facility. Journal of Physical Chemistry A, 2015, 119, 2562-2567.	2.5	0
56	Active and widespread halogen chemistry in the tropical and subtropical free troposphere. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9281-9286.	7.1	91
57	Atmospheric Chemistry. , 2015, , .		2
58	Laboratory study of nitrate photolysis in Antarctic snow. II. Isotopic effects and wavelength dependence. Journal of Chemical Physics, 2014, 140, 244306.	3.0	57
59	Laboratory study of nitrate photolysis in Antarctic snow. I. Observed quantum yield, domain of photolysis, and secondary chemistry. Journal of Chemical Physics, 2014, 140, 244305.	3.0	51
60	Filtration efficiency of an electrostatic fibrous filter: Studying filtration dependency on ultrafine particle exposure and composition. Journal of Aerosol Science, 2014, 72, 14-20.	3.8	51
61	Gas-Phase Advanced Oxidation for Effective, Efficient in Situ Control of Pollution. Environmental Science & Environmental Scie	10.0	41
62	Pressure dependent isotopic fractionation in the photolysis of formaldehyde-d ₂ . Atmospheric Chemistry and Physics, 2014, 14, 551-558.	4.9	6
63	SO ₂ photoexcitation mechanism links mass-independent sulfur isotopic fractionation in cryospheric sulfate to climate impacting volcanism. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17656-17661.	7.1	50
64	Carbon dioxide photolysis from 150 to 210 nm: Singlet and triplet channel dynamics, UV-spectrum, and isotope effects. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17691-17696.	7.1	73
65	OCS photolytic isotope effects from first principles: sulfur and carbon isotopes, temperature dependence and implications for the stratosphere. Atmospheric Chemistry and Physics, 2013, 13, 1511-1520.	4.9	25
66	Communication: Multi-state analysis of the OCS ultraviolet absorption including vibrational structure. Journal of Chemical Physics, 2012, 136, 131101.	3.0	29
67	An isotopic analysis of ionising radiation as a source of sulphuric acid. Atmospheric Chemistry and Physics, 2012, 12, 5319-5327.	4.9	14
68	Photoabsorption crossâ \in section measurements of $<$ sup $>$ 32 $<$ /sup $>$ S, $<$ sup $>$ 33 $<$ /sup $>$ S, $<$ sup $>$ 34 $<$ /sup $>$ S, and $<$ sup $>$ 36 $<$ /sup $>$ S sulfur dioxide for the $<$ i>B $<$ /i> $<$ sup $>$ 1 $<$ /sup $>$ $<$ i>B $<$ /i> $<$ sub $>$ 1 $<$ /sub $>$ 1 $<$ sub $>$	3.3	27
69	Atmospheric Chemistry of Ethyl Propionate. Journal of Physical Chemistry A, 2012, 116, 5164-5179.	2.5	27
70	Isotope Effect in the Carbonyl Sulfide Reaction with O(³ <i>P</i>). Journal of Physical Chemistry A, 2012, 116, 3521-3526.	2.5	20
71	The fate of mercury in Arctic terrestrial and aquatic ecosystems, a review. Environmental Chemistry, 2012, 9, 321.	1.5	106
72	Rate coefficients for the chemical reactions of CH2F2, CHClF2, CH2FCF3 and CH3CCl3 with O(1D) at 298K. Chemical Physics Letters, 2012, 554, 27-32.	2.6	5

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73	Photodissociation of N ₂ O: Excitation of ¹ A″ States. Journal of Physical Chemistry A, 2012, 116, 11083-11087.	2.5	6
74	Predictions of the sulfur and carbon kinetic isotope effects in the OH + OCS reaction. Chemical Physics Letters, 2012, 531, 64-69.	2.6	17
75	Atmospheric Chemistry of Two Biodiesel Model Compounds: Methyl Propionate and Ethyl Acetate. Journal of Physical Chemistry A, 2011, 115, 8906-8919.	2.5	35
76	Ultraviolet absorption cross sections of carbonyl sulfide isotopologues OC ³² S, OC ³³ S, OC ¹³ CS: isotopic fractionation in photolysis and atmospheric implications. Atmospheric Chemistry and Physics, 2011, 11, 10293-10303.	4.9	45
77	Isotope effects in N ₂ O photolysis from first principles. Atmospheric Chemistry and Physics, 2011, 11, 8965-8975.	4.9	36
78	Photodissociation of N2O: Triplet states and triplet channel. Journal of Chemical Physics, 2011, 135, 194303.	3.0	16
79	Pressure dependence of the deuterium isotope effect in the photolysis of formaldehyde by ultraviolet light. Atmospheric Chemistry and Physics, 2010, 10, 3455-3462.	4.9	18
80	Theoretical study of the gas phase reaction of methyl acetate with the hydroxyl radical: Structures, mechanisms, rates and temperature dependencies. Chemical Physics Letters, 2010, 490, 116-122.	2.6	26
81	Kinetics of the reaction of Cl atoms with CHCl3 over the temperature range 253–313K. Chemical Physics Letters, 2010, 494, 160-162.	2.6	1
82	Gaseous mercury in coastal urban areas. Environmental Chemistry, 2010, 7, 537.	1.5	3
83	Global Concentrations of Gaseous Elemental Mercury and Reactive Gaseous Mercury in the Marine Boundary Layer. Environmental Science & Environmental Sc	10.0	87
84	Carbonyl sulfide isotopologues: Ultraviolet absorption cross sections and stratospheric photolysis. Journal of Chemical Physics, 2009, 131, 024307.	3.0	24
85	Geological sulfur isotopes indicate elevated OCS in the Archean atmosphere, solving faint young sun paradox. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14784-14789.	7.1	136
86	Kinetics of the gasâ€phase reactions of chlorine atoms with CH ₂ F ₂ , CH ₃ , and CF ₃ CFH ₂ over the temperature range 253â€"553 K. International Journal of Chemical Kinetics, 2009, 41, 401-406.	1.6	5
87	Methyl acetate reaction with OH and Cl: Reaction rates and products for a biodiesel analogue. Chemical Physics Letters, 2009, 472, 23-29.	2.6	9
88	Atmospheric chemistry of cis-CF3CHCHF: Kinetics of reactions with OH radicals and O3 and products of OH radical initiated oxidation. Chemical Physics Letters, 2009, 473, 233-237.	2.6	35
89	On the origin of the asymmetric shape of the HCl photodissociation cross section. Chemical Physics Letters, 2009, 480, 168-172.	2.6	6
90	Relative Tropospheric Photolysis Rates of Acetaldehyde and Formaldehyde Isotopologues Measured at the European Photoreactor Facility. Journal of Physical Chemistry A, 2009, 113, 3498-3504.	2.5	11

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91	Isotope Effects in the Reactions of Chloroform Isotopologues with Cl, OH, and OD. Journal of Physical Chemistry A, 2009, 113, 1731-1739.	2.5	6
92	Freezing of water droplets colliding with kaolinite particles. Atmospheric Chemistry and Physics, 2009, 9, 4295-4300.	4.9	32
93	Atmospheric chemistry of trans-CF3CHCHCl: Kinetics of the gas-phase reactions with Cl atoms, OH radicals, and O3. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 199, 92-97.	3.9	43
94	Ab initio study of sulfur isotope fractionation in the reaction of OCS with OH. Chemical Physics Letters, 2008, 450, 214-220.	2.6	27
95	Highâ€precision spectroscopy of ³² S, ³³ S, and ³⁴ S sulfur dioxide: Ultraviolet absorption cross sections and isotope effects. Journal of Geophysical Research, 2008, 113, .	3.3	101
96	Applications of Theoretical Methods to Atmospheric Science. Advances in Quantum Chemistry, 2008, 55, 1-4.	0.8	2
97	Isotope Effects in Photodissociation: Chemical Reaction Dynamics and Implications for Atmospheres. Advances in Quantum Chemistry, 2008, 55, 101-135.	0.8	10
98	Atmospheric photochemical loss of H and H2from formaldehyde: the relevance of ultrafast processes. Physical Chemistry Chemical Physics, 2008, 10, 674-680.	2.8	21
99	Evidence for the Role of Ions in Aerosol Nucleation. Journal of Physical Chemistry A, 2008, 112, 10305-10309.	2.5	24
100	¹³ C, ¹⁸ O, and D Fractionation Effects in the Reactions of CH ₃ OH Isotopologues with Cl and OH Radicals. Journal of Physical Chemistry A, 2008, 112, 11099-11114.	2.5	15
101	On the performance of quantum chemical methods to predict solvatochromic effects: The case of acrolein in aqueous solution. Journal of Chemical Physics, 2008, 128, 194503.	3.0	76
102	Performance of a new diffusive sampler for HgO determination in the troposphere. Environmental Chemistry, 2007, 4, 75.	1.5	29
103	Atmospheric deuterium fractionation: HCHO and HCDO yields in the CH ₂ reaction. Atmospheric Chemistry and Physics, 2007, 7, 5873-5881.	4.9	33
104	UV and IR Absorption Cross-sections of HCHO, HCDO, and DCDO. Journal of Physical Chemistry A, 2007, 111, 11506-11513.	2.5	50
105	Relative Tropospheric Photolysis Rates of HCHO and HCDO Measured at the European Photoreactor Facility. Journal of Physical Chemistry A, 2007, 111, 9034-9046.	2.5	41
106	HCl and DCl: A case study of different approaches for determining photo fractionation constants. Physical Chemistry Chemical Physics, 2006, 8, 4798.	2.8	12
107	Rate coefficients for the gas-phase reaction of isoprene with NO3 and NO2. International Journal of Chemical Kinetics, 2005, 37, 57-65.	1.6	15
108	The 13C and D kinetic isotope effects in the reaction of CH4 with Cl. International Journal of Chemical Kinetics, 2005, 37, 110-118.	1.6	49

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109	Relative rates of reaction of 13C16O, 12C18O, 12C17O and 13C18O with OH and OD radicals. Physical Chemistry Chemical Physics, 2005, 7, 2318.	2.8	20
110	Relative Tropospheric Photolysis Rates of HCHO, H13CHO, HCH18O, and DCDO Measured at the European Photoreactor Facility. Journal of Physical Chemistry A, 2005, 109, 8314-8319.	2.5	32
111	Relative Reaction Rates of HCHO, HCDO, DCDO, H13CHO, and HCH18O with OH, Cl, Br, and NO3 Radicals. Journal of Physical Chemistry A, 2004, 108, 7393-7398.	2.5	41
112	Analysis of the Ultraviolet Absorption Cross Sections of Six Isotopically Substituted Nitrous Oxide Species Using 3D Wave Packet Propagationâ€. Journal of Physical Chemistry A, 2004, 108, 8905-8913.	2.5	56
113	¹⁴ N ¹⁴ NO, ¹⁵ N ¹⁴ NO, ¹⁴ N ¹⁵ NO and ¹⁵ NO, Atmospheric	4.9	36
114	Chemistry and Physics, 2004, 4, 1237-1253. Global modeling of the isotopic analogues of N2O: Stratospheric distributions, budgets, and the17O–18O mass-independent anomaly. Journal of Geophysical Research, 2003, 108, .	3.3	61
115	The Kinetic Isotope Effects in the Reactions of Four Ethene Isotopologues with Chlorine and Bromine Atoms. Journal of Physical Chemistry A, 2003, 107, 7667-7670.	2.5	4
116	Multiphoton Ionization Spectroscopy of AlArN Clusters. Journal of Physical Chemistry A, 2003, 107, 6948-6965.	2.5	6
117	DRIFTS and Knudsen cell study of the heterogeneous reactivity of SO ₂ and NO ₂ on mineral dust. Atmospheric Chemistry and Physics, 2003, 3, 2043-2051.	4.9	133
118	Isotopic processes in atmospheric chemistry. Chemical Society Reviews, 2002, 31, 313-323.	38.1	67
119	CO + OH â†' CO2 + H: The relative reaction rate of five CO isotopologues. Physical C Physics, 2002, 4, 4687-4693.	hemistry (Chemical
120	UV absorption spectra of HO2, CH3O2, C2H5O2, and CH3C(O)CH2O2 radicals and mechanism of the reactions of F and Cl atoms with CH3C(O)CH3. International Journal of Chemical Kinetics, 2002, 34, 283-291.	1.6	30
121	High-Resolution Infrared Study of the $\hat{l}/211$ Band of Allene. Journal of Molecular Spectroscopy, 2002, 216, 197-202.	1.2	11
122	High-Resolution Far-Infrared Torsional Spectrum of CH3SiD3 Using a Synchrotron Source. Journal of Molecular Spectroscopy, 2002, 215, 134-143.	1.2	14
123	Quantum Dressed Classical Mechanics: Application to the HO + CO â†' H + CO2Reaction. Journal of Physical Chemistry A, 2001, 105, 11171-11176.	2.5	21
124	Photolysis of Nitrous Oxide Isotopomers Studied by Time-Dependent Hermite Propagation. Journal of Physical Chemistry A, 2001, 105, 8672-8680.	2.5	71
125	Coherent synchrotron radiation in the far infrared from a 1-mm electron bunch. Optical Engineering, 2000, 39, 3099.	1.0	34
126	<title>Observation of coherent synchrotron radiation from a 1-mm electron bunch at the MAX-I storage ring</title> ., 1999,,.		16

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127	The ν5Band of HClO4. Journal of Molecular Spectroscopy, 1998, 190, 269-273.	1.2	18
128	High-resolution gas phase spectroscopy with a synchrotron radiation source. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1998, 20, 449-462.	0.4	18
129	Vibrational spectrum of lâ^'(H2O). Chemical Physics Letters, 1996, 260, 551-557.	2.6	109
130	Vibrational spectroscopy of NO+(H2O)n: Evidence for the intracluster reaction NO+(H2O)nâ†'H3O+(H2O)nâ^'2 (HONO) at n≥4. Journal of Chemical Physics, 1994, 100, 7153-7165.	3.0	76
131	Infrared spectrum of the silicon hydride cation SiH7+. The Journal of Physical Chemistry, 1993, 97, 5215-5217.	2.9	33
132	Intracluster rearrangement of protonated nitric acid: Infrared spectroscopic studies of H+(HNO3)(H2O)n. Journal of Chemical Physics, 1993, 99, 9307-9309.	3.0	36
133	Chemistry of the atmosphere. , 0, , 140-168.		1