Long pathlength differential optical absorption spectros gaseous HONO, NO2 and HCNO in the California South

Research on Chemical Intermediates

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Citation Report

#	Article	IF	Citations
1	Measurement of Nitrous Acid in Motor Vehicle Exhaust. Environmental Science & Technology, 1996, 30, 2843-2849.	10.0	172
2	Development and application of a new air pollution modeling system-part I: Gas-phase simulations. Atmospheric Environment, 1996, 30, 1939-1963.	4.1	106
3	Measurement of nitrous acid in milan, italy, by doas and diffusion denuders. Atmospheric Environment, 1996, 30, 3599-3609.	4.1	102
4	The reactions of ozone with alkenes: An important source of HOxin the boundary layer. Geophysical Research Letters, 1996, 23, 3727-3730.	4.0	251
5	Tropospheric cycle of nitrous acid. Journal of Geophysical Research, 1996, 101, 14429-14439.	3.3	214
6	Solubility of Nitrous Acid (HONO) in Sulfuric Acid Solutions. The Journal of Physical Chemistry, 1996, 100, 14984-14990.	2.9	75
7	Tropospheric Air Pollution: Ozone, Airborne Toxics, Polycyclic Aromatic Hydrocarbons, and Particles. Science, 1997, 276, 1045-1051.	12.6	990
8	Estimating the ozone-forming potential of urban trees and shrubs. Atmospheric Environment, 1998, 32, 53-68.	4.1	156
9	Heterogeneous NO2 conversion processes on acid surfaces. Atmospheric Environment, 1998, 32, 2721-2729.	4.1	216
10	Investigation of the heterogeneous NO2 conversion on perchloric acid surfaces. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 3289-3292.	1.7	29
11	Heterogeneous formation of nitrous acid (HONO) on soot aerosol particles. Journal of Geophysical Research, 1999, 104, 13825-13832.	3.3	126
12	Overview of the Chemistry of Polluted and Remote Atmospheres. , 2000, , 1-14.		19
13	Chemistry of Inorganic Nitrogen Compounds. , 2000, , 264-293.		14
14	Analytical Methods and Typical Atmospheric Concentrations for Gases and Particles. , 2000, , 547-656.		11
15	Infrared Absorption Cross-Section Measurements for Nitrous Acid (HONO) at Room Temperature. Journal of Physical Chemistry A, 2000, 104, 1692-1699.	2.5	61
16	A Unique Method for Laboratory Quantification of Gaseous Nitrous Acid (HONO) Using the Reaction HONO + HCl â†' ClNO + H2O. Journal of Physical Chemistry A, 2000, 104, 329-335.	2.5	21
17	Enhancement of N2O4on Porous Glass at Room Temperature:Â A Key Intermediate in the Heterogeneous Hydrolysis of NO2?. Journal of Physical Chemistry A, 2000, 104, 171-175.	2.5	59
18	Laboratory studies of sources of HONO in polluted urban atmospheres. Geophysical Research Letters, 2000, 27, 3229-3232.	4.0	56

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19	Detection of Nitrous Acid by Cavity Ring-Down Spectroscopy. Environmental Science & Technology, 2000, 34, 4221-4227.	10.0	56
20	Protonated nitrous acid (H2ONO+): Molecular structure, vibrational frequencies, and proton affinity. Journal of Chemical Physics, 2001, 115, 2117-2122.	3.0	21
21	H + NO2Channels in the Photodissociation of HONO at 193.3 nmâ€. Journal of Physical Chemistry A, 2001, 105, 1465-1475.	2.5	17
22	Impact of nitrous acid photolysis on the total hydroxyl radical budget during the Limitation of Oxidant Production/Pianura Padana Produzione di Ozono study in Milan. Journal of Geophysical Research, 2002, 107, LOP 9-1.	3.3	269
23	Contribution of HONO sources to the NOx/HOx/O3 chemistry in the polluted boundary layer. Atmospheric Environment, 2003, 37, 487-498.	4.1	160
24	Measured and simulated vertical profiles of nitrous acidâ€"Part II. Model simulations and indications for a photolytic source. Atmospheric Environment, 2003, 37, 2957-2966.	4.1	148
25	Tropospheric Photochemistry. , 0, , 156-187.		3
26	OH formation by HONO photolysis during the BERLIOZ experiment. Journal of Geophysical Research, 2003, 108, PHO 3-1.	3.3	265
27	The heterogeneous hydrolysis of NO2 in laboratory systems and in outdoor and indoor atmospheres: An integrated mechanism. Physical Chemistry Chemical Physics, 2003, 5, 223-242.	2.8	577
28	Laboratory Studies of Potential Mechanisms of Renoxification of Tropospheric Nitric Acid. Environmental Science & Technology, 2003, 37, 548-554.	10.0	77
29	Hydrogen bonded complexes between nitrogen dioxide, nitric acid, nitrous acid and water with SiH3OH and Si(OH)4. Physical Chemistry Chemical Physics, 2003, 5, 2970-2975.	2.8	19
30	HONO decomposition on borosilicate glass surfaces: implications for environmental chamber studies and field experiments. Physical Chemistry Chemical Physics, 2003, 5, 5236.	2.8	52
31	A Review of Instrumentation and Measurement Techniques for Ground-Based and Airborne Field Studies of Gas-Phase Tropospheric Chemistry. Critical Reviews in Environmental Science and Technology, 2004, 34, 1-108.	12.8	105
32	Heterogeneous Reaction of Nitric Acid with Nitric Oxide on Glass Surfaces under Simulated Atmospheric Conditions. Journal of Physical Chemistry A, 2004, 108, 5793-5799.	2.5	47
33	The photochemical production of HONO during the heterogeneous hydrolysis of NO2. Physical Chemistry Chemical Physics, 2004, 6, 3836.	2.8	136
34	The nature of water on surfaces of laboratory systems and implications for heterogeneous chemistry in the troposphere. Physical Chemistry Chemical Physics, 2004, 6, 604.	2.8	214
35	Real-time measurements of ammonia, acidic trace gases and water-soluble inorganic aerosol species at a rural site in the Amazon Basin. Atmospheric Chemistry and Physics, 2004, 4, 967-987.	4.9	178
36	A transboundary transport episode of nitrogen dioxide as observed from GOME and its impact in the Alpine region. Atmospheric Chemistry and Physics, 2005, 5, 23-37.	4.9	24

#	Article	IF	Citations
37	Reduction of NO2 to nitrous acid on illuminated titanium dioxide aerosol surfaces: implications for photocatalysis and atmospheric chemistry. Chemical Communications, 2006, , 3936.	4.1	102
38	Photochemical Processes Induced by Vibrational Overtone Excitations:Â Dynamics Simulations forcis-HONO,trans-HONO, HNO3, and HNO3â‹¯H2Oâ€. Journal of Physical Chemistry A, 2006, 110, 5342-5354.	2.5	49
39	New Experimental and Theoretical Approach to the Heterogeneous Hydrolysis of NO2:Â Key Role of Molecular Nitric Acid and Its Complexesâ€. Journal of Physical Chemistry A, 2006, 110, 6886-6897.	2.5	113
40	Development of a photo-fragmentation/laser-induced fluorescence measurement of atmospheric nitrous acid. Atmospheric Environment, 2006, 40, 17-26.	4.1	32
41	Seasonal, diurnal and nocturnal behaviors of lower carbonyl compounds in the urban environment of Beirut, Lebanon. Atmospheric Environment, 2006, 40, 2459-2468.	4.1	73
42	Atmospheric variation of nitrous acid at different sites in Europe. Environmental Chemistry, 2007, 4, 242.	1.5	28
43	A novel heterogeneous reaction for generating gaseous nitrous acid. Science Bulletin, 2007, 52, 3056-3060.	1.7	4
44	Seasonal Differences in Atmospheric Nitrous Acid near Mediterranean Urban Areas. Water, Air, and Soil Pollution, 2008, 188, 81-92.	2.4	12
45	A comparison of CMAQ HONO predictions with observations from the Northeast Oxidant and Particle Study. Atmospheric Environment, 2008, 42, 5760-5770.	4.1	105
46	Complexes of HNO3 and NO3â‹¯ with NO2 and N2O4, and their potential role in atmospheric HONO formation. Physical Chemistry Chemical Physics, 2008, 10, 6019.	2.8	39
47	Nitrous acid (HONO) and its daytime sources at a rural site during the 2004 PRIDEâ€PRD experiment in China. Journal of Geophysical Research, 2008, 113, .	3.3	152
48	Differential Optical Absorption Spectroscopy. , 2008, , .		154
49	Heterogeneous Photochemistry Relevant to the Troposphere: H₂O₂ Production during the Photochemical Reduction of NO₂ to HONO on UVâ€Illuminated TiO₂ Surfaces. ChemPhysChem, 2009, 10, 331-333.	2.1	38
50	Reactions at surfaces in the atmosphere: integration of experiments and theory as necessary (but not) Tj ETQq1 1 0.784314 rgBT /Ov Physics, 2009, 11, 7760.	2.8	217
51	In Situ Measurements of Atmospheric Nitrous Acid by Chemical Ionization Mass Spectrometry Using Chloride Ion Transfer Reactions. Analytical Chemistry, 2009, 81, 8380-8386.	6.5	16
52	Measurement of atmospheric nitrous acid at Bodgett Forest during BEARPEX2007. Atmospheric Chemistry and Physics, 2010, 10, 6283-6294.	4.9	55
53	Impacts of HONO sources on the photochemistry in Mexico City during the MCMA-2006/MILAGO Campaign. Atmospheric Chemistry and Physics, 2010, 10, 6551-6567.	4.9	222
54	Catalytic Role for Water in the Atmospheric Production of ClNO. Journal of Physical Chemistry A, 2010, 114, 4609-4618.	2.5	40

#	Article	IF	Citations
55	Heterogeneous Reaction of NO₂ on Fresh and Coated Soot Surfaces. Journal of Physical Chemistry A, 2010, 114, 7516-7524.	2.5	90
56	Thermal and photochemical oxidation of self-assembled monolayers on alumina particles exposed to nitrogen dioxide. Physical Chemistry Chemical Physics, 2011, 13, 604-611.	2.8	4
57	Observation and Research on the Typical Atmosphere of Beijing Olympic Games by Optical Remote Sensing. , 2011, , .		0
58	Denuder sampling techniques for the determination of gas-phase carbonyl compounds: A comparison and characterisation of in situ and ex situ derivatisation methods. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2011, 879, 1402-1411.	2.3	27
59	Examining the Impact of Nitrous Acid Chemistry on Ozone and PM over the Pearl River Delta Region. Advances in Meteorology, 2012, 2012, 1-18.	1.6	57
60	Isomerization and ionization of N2O4 on model ice and silica surfaces. Chemical Physics, 2012, 405, 52-59.	1.9	13
61	Impact of HONO sources on the performance of mesoscale air quality models. Atmospheric Environment, 2012, 54, 168-176.	4.1	41
62	Effective line strengths of trans-nitrous acid near 1275 cmâ¯1 and cis-nitrous acid at 1660 cmâ¯1. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1905-1912.	2.3	16
63	Long-term observation of atmospheric nitrous acid (HONO) and its implication to local NO2 levels in Shanghai, China. Atmospheric Environment, 2013, 77, 718-724.	4.1	63
64	Atmospheric reactions on electrically charged surfaces. Physical Chemistry Chemical Physics, 2013, 15, 10749.	2.8	4
65	Role of photoexcited nitrogen dioxide chemistry on ozone formation and emission control strategy over the Pearl River Delta, China. Atmospheric Research, 2013, 132-133, 332-344.	4.1	20
66	Urban measurements of atmospheric nitrous acid: A caveat on the interpretation of the HONO photostationary state. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,274.	3.3	34
67	Soil surface acidity plays a determining role in the atmospheric-terrestrial exchange of nitrous acid. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18472-18477.	7.1	75
68	Novel Tracer Method To Measure Isotopic Labeled Gas-Phase Nitrous Acid (HO¹⁵NO) in Biogeochemical Studies. Environmental Science & Technology, 2014, 48, 8021-8027.	10.0	19
69	Daytime HONO formation in the suburban area of the megacity Beijing, China. Science China Chemistry, 2014, 57, 1032-1042.	8.2	53
70	Computational Studies of Atmospherically-Relevant Chemical Reactions in Water Clusters and on Liquid Water and Ice Surfaces. Accounts of Chemical Research, 2015, 48, 399-406.	15.6	89
71	A measurement strategy for non-dispersive ultra-violet detection of formaldehyde in indoor air: spectral analysis and interferent gases. Measurement Science and Technology, 2016, 27, 015802.	2.6	5
72	Theoretical study of the gaseous hydrolysis of NO2 in the presence of NH3 as a source of atmospheric HONO. Environmental Chemistry, 2016, 13, 611.	1.5	21

#	Article	IF	Citations
73	Comparison of atmospheric nitrous acid during severe haze and clean periods in Beijing, China. Atmospheric Environment, 2016, 124, 199-206.	4.1	95
74	NitroMAC: An instrument for the measurement of HONO and intercomparison with a long-path absorption photometer. Journal of Environmental Sciences, 2016, 40, 105-113.	6.1	14
75	The Role of Iron-Bearing Minerals in NO₂ to HONO Conversion on Soil Surfaces. Environmental Science & Technology, 2016, 50, 8649-8660.	10.0	39
76	Measurements of nitrous acid (HONO) in urban area of Shanghai, China. Environmental Science and Pollution Research, 2016, 23, 5818-5829.	5.3	25
77	Photoinitiated Dynamics in Amorphous Solid Water via Nanoimprint Lithography. Journal of Physical Chemistry A, 2017, 121, 4968-4981.	2.5	2
78	Introductory lecture: atmospheric chemistry in the Anthropocene. Faraday Discussions, 2017, 200, 11-58.	3.2	17
79	Contributions of vehicular emissions and secondary formation to nitrous acid concentrations in ambient urban air in Tokyo in the winter. Science of the Total Environment, 2017, 592, 178-186.	8.0	17
80	Broadband chemical species tomography: Measurement theory and a proof-of-concept emission detection experiment. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 198, 145-154.	2.3	13
81	Evidence for Quinone Redox Chemistry Mediating Daytime and Nighttime NO₂-to-HONO Conversion on Soil Surfaces. Environmental Science & Technology, 2017, 51, 9633-9643.	10.0	23
82	Uptake of nitrogen dioxide (NO2) on acidic aqueous humic acid (HA) solutions as a missing daytime nitrous acid (HONO) surface source. Journal of Atmospheric Chemistry, 2017, 74, 283-321.	3.2	16
83	Determination of nitrous acid emission factors from a gasoline vehicle using a chassis dynamometer combined with incoherent broadband cavity-enhanced absorption spectroscopy. Science of the Total Environment, 2017, 575, 287-293.	8.0	28
87	Characteristics, sources, and reactions of nitrous acid during winter at an urban site in the Central Plains Economic Region in China. Atmospheric Chemistry and Physics, 2020, 20, 7087-7102.	4.9	15
88	Characteristics of HONO and its impact on O3 formation in the Seoul Metropolitan Area during the Korea-US Air Quality study. Atmospheric Environment, 2021, 247, 118182.	4.1	7
89	Production of HONO from NO₂ uptake on illuminated TiO₂ aerosol particles and following the illumination of mixed TiO₂âˆ•ammonium nitrate particles. Atmospheric Chemistry and Physics, 2021, 21, 5755-5775.	4.9	14
90	Atmospheric nitrous acid (HONO) in an alternate process of haze pollution and ozone pollution in urban Beijing in summertime: Variations, sources and contribution to atmospheric photochemistry. Atmospheric Research, 2021, 260, 105689.	4.1	17
91	Nitrous acid emission from soil bacteria and related environmental effect over the North China Plain. Chemosphere, 2022, 287, 132034.	8.2	3
93	Use of proper variables to describe some aspects of urban pollution. , 1996, , 295-315.		2
94	Assessment of HONO Measurements: The FIONA Campaign at EUPHORE. NATO Science for Peace and Security Series C: Environmental Security, 2013, , 45-58.	0.2	14

#	Article	IF	Citations
100	Nitrous acid (HONO) emission factors for diesel vehicles determined using a chassis dynamometer. Science of the Total Environment, 2022, 806, 150927.	8.0	6
101	Umwandlung von Spurenstoffen und ihre Auswirkungen auf die AtmosphÃre. , 2000, , 195-382.		0
103	The Effect of Heterogeneous Reactions on Model Performance for Nitrous Acid. NATO Security Through Science Series C: Environmental Security, 2008, , 349-357.	0.1	1
104	Modification of a conventional photolytic converter for improving aircraft measurements of NO₂ via chemiluminescence. Atmospheric Measurement Techniques, 2021, 14, 6759-6776.	3.1	14
105	Contribution of Vehicle Emission and NO₂ Surface Conversion to Nitrous Acid (HONO) in Urban Environments: Implications from Tests in a Tunnel. Environmental Science & Technology, 2021, 55, 15616-15624.	10.0	22
106	The influence of a single water molecule on the reaction of IOâ€‰+â€‰HONO. Structural Chemistry, 0, , .	2.0	0
107	Formation Mechanisms and Atmospheric Implications of Summertime Nitrous Acid (HONO) During Clean, Ozone Pollution and Double High Pollution Periods in Beijing. SSRN Electronic Journal, 0, , .	0.4	0
108	Formation mechanisms and atmospheric implications of summertime nitrous acid (HONO) during clean, ozone pollution and double high-level PM2.5 and O3 pollution periods in Beijing. Science of the Total Environment, 2023, 857, 159538.	8.0	9