Heterogeneous Photo-oxidation of SO₂ in t Mineral Dust Particles: Gobi and Arizona Dust

Environmental Science & Technology

51, 9605-9613

DOI: 10.1021/acs.est.7b00588

#	Article	IF	Citations
2	Modeling Heterogeneous Oxidation of NO_x, SO₂and Hydrocarbons in the Presence of Mineral Dust Particles under Various Atmospheric Environments. ACS Symposium Series, 2018, , 301-326.	0.5	2
3	Simulation of heterogeneous photooxidation of SO₂ and NO_{<i>x</i>} in the presence of Gobi Desert dust particles under ambient sunlight. Atmospheric Chemistry and Physics, 2018, 18, 14609-14622.	4.9	25
4	Emerging investigator series: heterogeneous reactions of sulfur dioxide on mineral dust nanoparticles: from single component to mixed components. Environmental Science: Nano, 2018, 5, 1821-1833.	4.3	24
6	Adsorption of SO2 on mineral dust particles influenced by atmospheric moisture. Atmospheric Environment, 2018, 191, 153-161.	4.1	26
7	Multiphase Mechanism for the Production of Sulfuric Acid from SO₂ by Criegee Intermediates Formed During the Heterogeneous Reaction of Ozone with Squalene. Journal of Physical Chemistry Letters, 2018, 9, 3504-3510.	4.6	18
8	Nitrate-Enhanced Oxidation of SO₂ on Mineral Dust: A Vital Role of a Proton. Environmental Science & Technology, 2019, 53, 10139-10145.	10.0	25
9	Atmospheric Processes of Aromatic Hydrocarbons in the Presence of Mineral Dust Particles in an Urban Environment. ACS Earth and Space Chemistry, 2019, 3, 2404-2414.	2.7	11
10	Contrary Role of H₂O and O₂ in the Kinetics of Heterogeneous Photochemical Reactions of SO₂ on TiO₂. Journal of Physical Chemistry A, 2019, 123, 1311-1318.	2.5	26
11	Rates of Wintertime Atmospheric SO₂ Oxidation based on Aircraft Observations during Clearâ€Sky Conditions over the Eastern United States. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6630-6649.	3.3	12
12	Parameterization of heterogeneous reaction of SO2 to sulfate on dust with coexistence of NH3 and NO2 under different humidity conditions. Atmospheric Environment, 2019, 208, 133-140.	4.1	37
13	Effects of NO₂ and C₃H₆ on the heterogeneous oxidation of SO₂ on TiO₂ in the presence or absence of UVâ€“Vis irradiation. Atmospheric Chemistry and Physics, 2019, 19, 14777-14790.	4.9	21
14	Integration of field observation and air quality modeling to characterize Beijing aerosol in different seasons. Chemosphere, 2020, 242, 125195.	8.2	10
15	Irradiation intensity dependent heterogeneous formation of sulfate and dissolution of ZnO nanoparticles. Environmental Science: Nano, 2020, 7, 327-338.	4.3	7
16	Rapid, 3D Chemical Profiling of Individual Atmospheric Aerosols with Stimulated Raman Scattering Microscopy. Small Methods, 2020, 4, 1900600.	8.6	33
17	Photochemical reaction of CO2 on atmospheric mineral dusts. Atmospheric Environment, 2020, 223, 117222.	4.1	12
18	Photoinduced Uptake and Oxidation of SO₂ on Beijing Urban PM_{2.5}. Environmental Science & Technology, 2020, 54, 14868-14876.	10.0	24
19	Atmospheric Progression of Microcystin-LR from Cyanobacterial Aerosols. Environmental Science and Technology Letters, 2020, 7, 740-745.	8.7	11
20	Roles of Sulfur Oxidation Pathways in the Variability in Stable Sulfur Isotopic Composition of Sulfate Aerosols at an Urban Site in Beijing, China. Environmental Science and Technology Letters, 2020, 7, 883-888.	8.7	21

#	Article	IF	Citations
21	Simulating the Impact of Long-Range-Transported Asian Mineral Dust on the Formation of Sulfate and Nitrate during the KORUS-AQ Campaign. ACS Earth and Space Chemistry, 2020, 4, 1039-1049.	2.7	13
22	Estimating historical SO2 level across the whole China during 1973â€“2014 using random forest model. Chemosphere, 2020, 247, 125839.	8.2	26
23	Adsorption and oxidation of SO₂ on the surface of TiO₂ nanoparticles: the role of terminal hydroxyl and oxygen vacancyâ€“Ti³⁺ states. Physical Chemistry Chemical Physics, 2020, 22, 9943-9953.	2.8	21
24	Early detection of viable Francisella tularensis in environmental matrices by culture-based PCR. BMC Microbiology, 2020, 20, 66.	3.3	4
25	Atmospheric organic complexation enhanced sulfate formation and iron dissolution on nano Î±-Fe₂O₃. Environmental Science: Nano, 2021, 8, 698-710.	4.3	6
26	Rapid sulfate formation from synergetic oxidation of SO2 by O3 and NO2 under ammonia-rich conditions: Implications for the explosive growth of atmospheric PM2.5 during haze events in China. Science of the Total Environment, 2021, 772, 144897.	8.0	30
27	Photochemical reaction of NO2 on photoactive mineral dust: Mechanism and irradiation intensity dependence. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 416, 113319.	3.9	8
28	Oxygen vacancies promote sulfur species accumulation on TiO2 mineral particles. Applied Catalysis B: Environmental, 2021, 290, 120024.	20.2	25
29	Seasonal variations, temperature dependence, and sources of size-resolved PM components in Nanjing, east China. Journal of Environmental Sciences, 2022, 121, 175-186.	6.1	5
30	Photo-enhanced uptake of SO₂ on Icelandic volcanic dusts. Environmental Science Atmospheres, 2022, 2, 375-387.	2.4	2
31	SO2-enhanced nitrate photolysis on TiO2 minerals: A vital role of photochemically reactive holes. Applied Catalysis B: Environmental, 2022, 308, 121217.	20.2	9
32	Research Progress on Heterogeneous Reactions of Pollutant Gases on the Surface of Atmospheric Mineral Particulate Matter in China. Atmosphere, 2022, 13, 1283.	2.3	4
33	The positive effect of formaldehyde on the photocatalytic renoxification of nitrate on TiO₂ particles. Atmospheric Chemistry and Physics, 2022, 22, 11347-11358.	4.9	0
34	Ordering Transitions of Liquid Crystals Triggered by Metal Oxide-catalyzed Reactions of Sulfur Oxide Species. Journal of the American Chemical Society, 2022, 144, 16378-16388.	13.7	4
35	Significant formation of sulfate aerosols contributed by the heterogeneous drivers of dust surface. Atmospheric Chemistry and Physics, 2022, 22, 13467-13493.	4.9	18
36	Reactive uptake coefficients for multiphase reactions determined by a dynamic chamber system. Atmospheric Measurement Techniques, 2022, 15, 6433-6446.	3.1	0
37	Atmospheric fates of SO₂ at the gasâ€“solid interface of iron oxyhydroxide (FeOOH) minerals: effects of crystal structure, oxalate coating and light irradiance. Environmental Science: Nano, 0, , .	4.3	0
38	Impact of flow velocity on the heterogeneous reaction of SO2 over Fe2O3. Atmospheric Environment, 2023, 294, 119491.	4.1	2

#	Article	IF	Citations
39	Insight into the Mechanism and Kinetics of the Heterogeneous Reaction between SO₂ and NO₂ on Diesel Black Carbon under Light Irradiation. Environmental Science & Technology, 0, , .	10.0	0
40	A review on the heterogeneous oxidation of SO₂ on solid atmospheric particles: Implications for sulfate formation in haze chemistry. Critical Reviews in Environmental Science and Technology, 2023, 53, 1888-1911.	12.8	4
41	Dithiothreitolâ€Measured Oxidative Potential of Reference Materials of Mineral Dust: Implications for the Toxicity of Mineral Dust Aerosols in the Atmosphere. GeoHealth, 2023, 7, .	4.0	2
42	Nitrate formation and iron dissolution in the heterogeneous reactions of NH₃ on nano Î±-Fe₂O₃. Environmental Science: Nano, 0, , .	4.3	0
43	Review of Smog Chamber Research Trends. Journal of Korean Society for Atmospheric Environment, 2023, 39, 866-904.	1.1	0
44	Impact of mineral dust photocatalytic heterogeneous chemistry on the formation of the sulfate and nitrate: A modelling study over East Asia. Atmospheric Environment, 2024, 316, 120166.	4.1	0
45	Critical Roles of Surface-Enhanced Heterogeneous Oxidation of SO2 in Haze Chemistry: Review of Extended Pathways for Complex Air Pollution. Current Pollution Reports, 2024, 10, 70-86.	6.6	0
46	Unveiling the Role of Carbonate Radical Anions in Dustâ€Driven SO₂ Oxidation. Journal of Geophysical Research D: Atmospheres, 2024, 129, .	3.3	0
47	Heterogeneous photochemical uptake of SO2 on typical brown carbon species: A significant sulfate source. Atmospheric Environment, 2024, 324, 120425.	4.1	0