Donald Dabdub

List of Publications by Year
in descending order

68 papers	3,328 citations	182225 30 h-index	182931 54 g-index
80 all docs	80 docs citations	80 times ranked	3786 citing authors

#	Article	IF	Citations
1	Modeling Reactive Ammonia Uptake by Secondary Organic Aerosol in a Changing Climate: A WRF-CMAQ Evaluation. Frontiers in Environmental Science, 2022, 10, .	1.5	2
2	Chemistry Across Multiple Phases (CAMP) version 1.0: an integrated multiphase chemistry model. Geoscientific Model Development, 2022, 15, 3663-3689.	1.3	3
3	An Episodic Assessment of Vehicle Emission Regulations on Saving Lives in California. Environmental Science & Technology, 2021, 55, 547-552.	4.6	9
4	Modeling Ammonia and Its Uptake by Secondary Organic Aerosol Over China. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034109.	1.2	15
5	Benefits of near-zero freight: The air quality and health impacts of low-NO_x compressed natural gas trucks. Journal of the Air and Waste Management Association, 2021, 71, 1428-1444.	0.9	3
6	Health Benefits in California of Strengthening the Fine Particulate Matter Standards. Environmental Science & Technology, 2021, 55, 12223-12232.	4.6	1
7	Effect of Humidity on the Reactive Uptake of Ammonia and Dimethylamine by Nitrogen-Containing Secondary Organic Aerosol. Atmosphere, 2021, 12, 1502.	1.0	3
8	Evaluating the Impacts of Cloud Processing on Resuspended Aerosol Particles After Cloud Evaporation Using a Particleâ€Resolved Model. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034992.	1.2	0
9	An uncertainty for clean air: Air quality modeling implications of underestimating VOC emissions in urban inventories. Atmospheric Environment, 2019, 211, 256-267.	1.9	27
10	Comprehensively assessing the drivers of future air quality in California. Environment International, 2019, 125, 386-398.	4.8	24
11	Considering future regional air quality impacts of the transportation sector. Energy Policy, 2019, 124, 63-80.	4.2	26
12	Effect of relative humidity on the composition of secondary organic aerosol from the oxidation of toluene. Atmospheric Chemistry and Physics, 2018, 18, 1643-1652.	1.9	64
13	Modeling reactive ammonia uptake by secondary organic aerosol in CMAQ: application to the continental US. Atmospheric Chemistry and Physics, 2018, 18, 3641-3657.	1.9	21
14	Reactive Uptake of Ammonia by Biogenic and Anthropogenic Organic Aerosols. ACS Symposium Series, 2018, , 127-147.	0.5	6
15	Simulated sensitivity of secondary organic aerosol in the South Coast Air Basin of California to nitrogen oxides and other chemical parameters. Aerosol Science and Technology, 2018, 52, 679-692.	1.5	3
16	Reactive uptake of ammonia by secondary organic aerosols: Implications for air quality. Atmospheric Environment, 2018, 189, 1-8.	1.9	14
17	Impact of global climate change on ozone, particulate matter, and secondary organic aerosol concentrations in California: A model perturbation analysis. Atmospheric Environment, 2017, 153, 1-17.	1.9	22
18	Secondary organic aerosol from atmospheric photooxidationÂofÂindole. Atmospheric Chemistry and Physics, 2017, 17, 11605-11621.	1.9	21

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19	Description and evaluation of the Multiscale Online Nonhydrostatic AtmospheRe CHemistry model (NMMB-MONARCH) version 1.0: gas-phase chemistry at global scale. Geoscientific Model Development, 2017, 10, 609-638.	1.3	41
20	Development of aroCACM/MPMPO 1.0: a model to simulate secondary organic aerosol from aromatic precursors in regional models. Geoscientific Model Development, 2016, 9, 2143-2151.	1.3	19
21	Air quality impacts of fuel cell electric hydrogen vehicles with high levels of renewable power generation. International Journal of Hydrogen Energy, 2016, 41, 16592-16603.	3.8	33
22	Assessment of the emissions and air quality impacts of biomass and biogas use in California. Journal of the Air and Waste Management Association, 2016, 66, 134-150.	0.9	18
23	The future of airborne sulfur-containing particles in the absence of fossil fuel sulfur dioxide emissions. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13514-13519.	3.3	76
24	Air quality impacts of liquefied natural gas in the South Coast Air Basin of California. Journal of Natural Gas Science and Engineering, 2014, 21, 680-690.	2.1	5
25	Emission factor estimation in regional air quality studies of residential natural gas fuel interchangeability. Fuel, 2014, 119, 129-140.	3.4	5
26	Secondary organic aerosol formation from naphthalene roadway emissions in the South Coast Air Basin of California. International Journal of Environment and Pollution, 2013, 52, 206.	0.2	4
27	Emission estimates of HCFCs and HFCs in California from the 2010 CalNex study. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2019-2030.	1.2	10
28	Images reveal that atmospheric particles can undergo liquidâ€“liquid phase separations. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13188-13193.	3.3	205
29	Nonequilibrium atmospheric secondary organic aerosol formation and growth. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2836-2841.	3.3	261
30	Projecting full build-out environmental impacts and roll-out strategies associated with viable hydrogen fueling infrastructure strategies. International Journal of Hydrogen Energy, 2011, 36, 14309-14323.	3.8	25
31	Highâ€“resolution pollutant transport in the San Pedro Bay of California. Atmospheric Pollution Research, 2011, 2, 237-246.	1.8	18
32	Heterogeneous Atmospheric Chemistry, Ambient Measurements, and Model Calculations of N₂O₅: A Review. Aerosol Science and Technology, 2011, 45, 665-695.	1.5	212
33	Central power generation versus distributed generation â€“ An air quality assessment in the South Coast Air Basin of California. Atmospheric Environment, 2010, 44, 3215-3223.	1.9	22
34	Partitioning phase preference for secondary organic aerosol in an urban atmosphere. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6705-6710.	3.3	17
35	A New Aerosol Flow System for Photochemical and Thermal Studies of Tropospheric Aerosols. Aerosol Science and Technology, 2010, 44, 329-338.	1.5	34
36	Chlorine activation indoors and outdoors via surface-mediated reactions of nitrogen oxides with hydrogen chloride. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13647-13654.	3.3	107

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37	Potential for Atmospheric-Driven Lead Paint Degradation in the South Coast Air Basin of California. Environmental Science & Technology, 2009, 43, 8881-8887.	4.6	6
38	Determining Air Quality and Greenhouse Gas Impacts of Hydrogen Infrastructure and Fuel Cell Vehicles. Environmental Science & Technology, 2009, 43, 9022-9029.	4.6	38
39	Rethinking Ozone Production. Science, 2008, 319, 1624-1625.	6.0	65
40	A methodology for developing Distributed Generation scenarios in urban areas using geographical information systems. International Journal of Energy Technology and Policy, 2008, 6, 413.	0.1	8
41	Contribution of gas phase oxidation of volatile organic compounds to atmospheric carbon monoxide levels in two areas of the United States. Journal of Geophysical Research, 2007, 112, .	3.3	43
42	Air Quality Modeling in the South Coast Air Basin of California: What Do the Numbers Really Mean?. Journal of the Air and Waste Management Association, 2006, 56, 1184-1195.	0.9	22
43	Enhanced photolysis in aerosols: evidence for important surface effects. Physical Chemistry Chemical Physics, 2006, 8, 4700.	1.3	72
44	Simulation and analysis of secondary organic aerosol dynamics in the South Coast Air Basin of California. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	53
45	Gas-Phase Molecular Halogen Formation from NaCl and NaBr Aerosols:â€‰ When Are Interface Reactions Important?. Journal of Physical Chemistry A, 2006, 110, 1859-1867.	1.1	50
46	Calculations of Incremental Secondary Organic Aerosol Reactivity. Environmental Science & Technology, 2005, 39, 1724-1730.	4.6	16
47	Development and initial evaluation of a dynamic species-resolved model for gas phase chemistry and size-resolved gas/particle partitioning associated with secondary organic aerosol formation. Journal of Geophysical Research, 2005, 110, .	3.3	74
48	Modeling the Oxidative Capacity of the Atmosphere of the South Coast Air Basin of California. 1. Ozone Formation Metrics. Environmental Science & Technology, 2004, 38, 746-752.	4.6	16
49	IMAGES-SCAPE2: A modeling study of size- and chemically resolved aerosol thermodynamics in a global chemical transport model. Journal of Geophysical Research, 2004, 109, .	3.3	49
50	Three-dimensional simulations of inorganic aerosol distributions in east Asia during spring 2001. Journal of Geophysical Research, 2004, 109, .	3.3	80
51	Multiscale simulations of tropospheric chemistry in the eastern Pacific and on the U.S. West Coast during spring 2002. Journal of Geophysical Research, 2004, 109, .	3.3	30
52	Development and analysis of a non-splitting solution for three-dimensional air quality models. Atmospheric Environment, 2003, 37, 3741-3748.	1.9	8
53	A Coupled Hydrophobic-Hydrophilic Model for Predicting Secondary Organic Aerosol Formation. Journal of Atmospheric Chemistry, 2003, 44, 171-190.	1.4	118
54	Comparison of photochemical mechanisms for air quality modeling. Atmospheric Environment, 2003, 37, 4179-4194.	1.9	85

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55	Monte Carlo uncertainty and sensitivity analysis of the CACM chemical mechanism. Journal of Geophysical Research, 2003, 108, .	3.3	16
56	Impact of Chlorine Emissions from Sea-Salt Aerosol on Coastal Urban Ozone. Environmental Science & Technology, 2003, 37, 275-284.	4.6	159
57	Semi-Lagrangian Flux Scheme for the Solution of the Aerosol Condensation/Evaporation Equation. Aerosol Science and Technology, 2002, 36, 407-418.	1.5	52
58	Secondary organic aerosol 1. Atmospheric chemical mechanism for production of molecular constituents. Journal of Geophysical Research, 2002, 107, AAC 3-1-AAC 3-26.	3.3	183
59	Secondary organic aerosol 3. Urban/regional scale model of size- and composition-resolved aerosols. Journal of Geophysical Research, 2002, 107, AAC 5-1-AAC 5-14.	3.3	71
60	Modeling Cl2formation from aqueous NaCl particles: Evidence for interfacial reactions and importance of Cl2decomposition in alkaline solution. Journal of Geophysical Research, 2002, 107, ACH 8-1.	3.3	76
61	NO x and VOC Control and Its Effects on the Formation of Aerosols. Aerosol Science and Technology, 2002, 36, 560-572.	1.5	53
62	Two-level time-marching scheme using splines for solving the advection equation. Atmospheric Environment, 2001, 35, 1627-1637.	1.9	49
63	Effect of alveolar volume and sequential filling on the diffusing capacity of the lungs: II. Experiment. Respiration Physiology, 2000, 120, 251-271.	2.8	22
64	Estimate of global atmospheric organic aerosol from oxidation of biogenic hydrocarbons. Geophysical Research Letters, 1999, 26, 2721-2724.	1.5	325
65	Modeling bronchial circulation with application to soluble gas exchange: description and sensitivity analysis. Journal of Applied Physiology, 1998, 84, 2070-2088.	1.2	33
66	Performance and portability of an air quality model. Parallel Computing, 1997, 23, 2187-2200.	1.3	16
67	Parallel computation in atmospheric chemical modeling. Parallel Computing, 1996, 22, 111-130.	1.3	34
68	Air quality modeling on massively parallel computers. Atmospheric Environment, 1994, 28, 1679-1687.	1.9	27