Mehmet T Odman

List of Publications by Year
in descending order

86 papers	2,327 citations	218592 26 h-index	233338 45 g-index
91 all docs	91 docs citations	91 times ranked	2319 citing authors

#	Article	IF	Citations
1	Source apportionment of ozone and fine particulate matter in the United States for 2016 and 2028. Atmospheric Environment, 2022, 285, 119226.	1.9	6
2	Estimating US Background Ozone Using Data Fusion. Environmental Science & Technology, 2021, 55, 4504-4512.	4.6	5
3	Application and evaluation of a low-cost PM sensor and data fusion with CMAQ simulations to quantify the impacts of prescribed burning on air quality in Southwestern Georgia, USA. Journal of the Air and Waste Management Association, 2021, 71, 815-829.	0.9	5
4	Satellite Monitoring for Air Quality and Health. Annual Review of Biomedical Data Science, 2021, 4, 417-447.	2.8	25
5	Biases in air quality models capturing ozone trends at the urban, regional and national scales: Impacts on Relative Response Factors (RRFs). Atmospheric Environment, 2021, 266, 118722.	1.9	2
6	Novel Method for Ozone Isopleth Construction and Diagnosis for the Ozone Control Strategy of Chinese Cities. Environmental Science & Technology, 2021, 55, 15625-15636.	4.6	39
7	Greater Contribution From Agricultural Sources to Future Reactive Nitrogen Deposition in the United States. Earth's Future, 2020, 8, e2019EF001453.	2.4	3
8	Apportioning prescribed fire impacts on PM2.5 among individual fires through dispersion modeling. Atmospheric Environment, 2020, 223, 117260.	1.9	7
9	Interstate transport of ozone in eastern United States: An analysis of the impact of southeastern states’ emissions in 2017. Atmospheric Environment, 2020, 236, 117628.	1.9	7
10	Global Fire Forecasts Using Both Large‐Scale Climate Indices and Local Meteorological Parameters. Global Biogeochemical Cycles, 2019, 33, 1129-1145.	1.9	17
11	The Impacts of Prescribed Fire on PM2.5 Air Quality and Human Health: Application to Asthma-Related Emergency Room Visits in Georgia, USA. International Journal of Environmental Research and Public Health, 2019, 16, 2312.	1.2	25
12	Development of a WebGIS-Based Analysis Tool for Human Health Protection from the Impacts of Prescribed Fire Smoke in Southeastern USA. International Journal of Environmental Research and Public Health, 2019, 16, 1981.	1.2	8
13	African American Exposure to Prescribed Fire Smoke in Georgia, USA. International Journal of Environmental Research and Public Health, 2019, 16, 3079.	1.2	13
14	Relaxing Energy Policies Coupled with Climate Change Will Significantly Undermine Efforts to Attain US Ozone Standards. One Earth, 2019, 1, 229-239.	3.6	13
15	Improving ozone simulations in the Great Lakes Region: The role of emissions, chemistry, and dry deposition. Atmospheric Environment, 2019, 202, 167-179.	1.9	36
16	Machine Learning-Based Integration of High-Resolution Wildfire Smoke Simulations and Observations for Regional Health Impact Assessment. International Journal of Environmental Research and Public Health, 2019, 16, 2137.	1.2	31
17	Examination of Nudging Schemes in the Simulation of Meteorology for Use in Air Quality Experiments: Application in the Great Lakes Region. Journal of Applied Meteorology and Climatology, 2019, 58, 2421-2436.	0.6	9
18	Evaluation of WRF parameterizations for global horizontal irradiation forecasts: A study for Turkey. Atmosfera, 2019, 32, 143-158.	0.3	9

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19	Burned Area Comparisons Between Prescribed Burning Permits in Southeastern United States and Two Satellite‐Derived Products. Journal of Geophysical Research D: Atmospheres, 2018, 123, 4746-4757.	1.2	25
20	Forecasting the Impacts of Prescribed Fires for Dynamic Air Quality Management. Atmosphere, 2018, 9, 220.	1.0	9
21	Recommendations on statistics and benchmarks to assess photochemical model performance. Journal of the Air and Waste Management Association, 2017, 67, 582-598.	0.9	326
22	Source-Impact Forecasting for Dynamic Air Quality Management: Application to Prescribed Burn Management. Springer Proceedings in Complexity, 2016, , 575-579.	0.2	0
23	Atmospheric Plume Modeling with a Three-Dimensional Refinement Adaptive Grid Method. Springer Proceedings in Complexity, 2016, , 409-413.	0.2	0
24	Chemical transport model consistency in simulating regulatory outcomes and the relationship to model performance. Atmospheric Environment, 2015, 116, 159-171.	1.9	13
25	Operational forecasting of source impacts for dynamic air quality management. Atmospheric Environment, 2015, 116, 320-322.	1.9	7
26	Fire emission uncertainties and their effect on smoke dispersion predictions: a case study at Eglin Air Force Base, Florida, USA. International Journal of Wildland Fire, 2015, 24, 276.	1.0	11
27	Simulating smoke transport from wildland fires with a regional-scale air quality model: Sensitivity to spatiotemporal allocation of fire emissions. Science of the Total Environment, 2014, 493, 544-553.	3.9	33
28	Fine particulate matter source apportionment using a hybrid chemical transport and receptor model approach. Atmospheric Chemistry and Physics, 2014, 14, 5415-5431.	1.9	42
29	Development and Evaluation of an Air Quality Model for Predicting the Impacts of Prescribed Burns. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 517-521.	0.1	0
30	Analysis of surface ozone and nitrogen oxides at urban, semi-rural and rural sites in Istanbul, Turkey. Science of the Total Environment, 2013, 443, 920-931.	3.9	49
31	Simulating smoke transport from wildland fires with a regional‐scale air quality model: Sensitivity to uncertain wind fields. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6493-6504.	1.2	34
32	Modeling secondary organic aerosol in CMAQ using multigenerational oxidation of semi-volatile organic compounds. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	26
33	Concentrations and sources of PAHs at three stations in Istanbul, Turkey. Atmospheric Research, 2011, 99, 391-399.	1.8	73
34	Modeling Smoke Plume-Rise and Dispersion from Southern United States Prescribed Burns with Daysmoke. Atmosphere, 2011, 2, 358-388.	1.0	53
35	The impact of anthropogenic and biogenic emissions on surface ozone concentrations in Istanbul. Science of the Total Environment, 2011, 409, 1255-1265.	3.9	53
36	Adaptive Grid Use in Air Quality Modeling. Atmosphere, 2011, 2, 484-509.	1.0	20

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37	The Impact of Anthropogenic and Biogenic Emissions on Surface Ozone Concentrations in Istanbul: A Modeling Study. NATO Science for Peace and Security Series C: Environmental Security, 2011, , 103-106.	0.1	0
38	A variable time–step algorithm for air quality models. Atmospheric Pollution Research, 2010, 1, 229-238.	1.8	6
39	Using synoptic classification to evaluate an operational air quality forecasting system in Atlanta. Atmospheric Pollution Research, 2010, 1, 280-287.	1.8	16
40	An adaptive grid version of CMAQ for improving the resolution of plumes. Atmospheric Pollution Research, 2010, 1, 239-249.	1.8	28
41	Quantifying the sources of ozone, fine particulate matter, and regional haze in the Southeastern United States. Journal of Environmental Management, 2009, 90, 3155-3168.	3.8	23
42	Sensitivity of inverse estimation of 2004 elemental carbon emissions inventory in the United States to the choice of observational networks. Geophysical Research Letters, 2009, 36, .	1.5	26
43	Top–down analysis of the elemental carbon emissions inventory in the United States by inverse modeling using Community Multiscale Air Quality model with decoupled direct method (CMAQ–DDM). Journal of Geophysical Research, 2009, 114, .	3.3	21
44	Extension and evaluation of sensitivity analysis capabilities in a photochemical model. Environmental Modelling and Software, 2008, 23, 994-999.	1.9	65
45	A comparison of mass conservation methods for air quality models. Atmospheric Environment, 2008, 42, 8322-8330.	1.9	3
46	Single-Source Impact Analysis Using Three-Dimensional Air Quality Models. Journal of the Air and Waste Management Association, 2008, 58, 1351-1359.	0.9	24
47	Simulation of Air Quality Impacts from Prescribed Fires on an Urban Area. Environmental Science & Technology, 2008, 42, 3676-3682.	4.6	53
48	Determining the Sources of Regional Haze in the Southeastern United States Using the CMAQ Model. Journal of Applied Meteorology and Climatology, 2007, 46, 1731-1743.	0.6	16
49	Chapter 2.14 Forecasting ozone and PM2.5 in southeastern U.S.. Developments in Environmental Science, 2007, 6, 220-229.	0.5	0
50	Regional Air Quality: Local and Interstate Impacts of NOx and SO2 Emissions on Ozone and Fine Particulate Matter in the Eastern United States. Environmental Science & Technology, 2007, 41, 4677-4689.	4.6	20
51	Study of Air Pollutant Transport in Northern and Western Turkey. , 2007, , 656-658.		0
52	Integrated Assessment Modeling of Atmospheric Pollutants in the Southern Appalachian Mountains: Part II. Fine Particulate Matter and Visibility. Journal of the Air and Waste Management Association, 2006, 56, 12-22.	0.9	31
53	Re-examination of the 2003 North American electrical blackout impacts on regional air quality. Geophysical Research Letters, 2006, 33, .	1.5	7
54	Mass conservation in the Community Multiscale Air Quality model. Atmospheric Environment, 2006, 40, 1199-1204.	1.9	27

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55	Long-range aerosol transport from Europe to Istanbul, Turkey. Atmospheric Environment, 2006, 40, 3536-3547.	1.9	58
56	Evaluation of algorithms developed for adaptive grid air quality modeling using surface elevation data. Computers, Environment and Urban Systems, 2005, 29, 718-734.	3.3	5
57	Airport related emissions and impacts on air quality: Application to the Atlanta International Airport. Atmospheric Environment, 2005, 39, 5787-5798.	1.9	178
58	Integrated Assessment Modeling of Atmospheric Pollutants in the Southern Appalachian Mountains. Part I: Hourly and Seasonal Ozone. Journal of the Air and Waste Management Association, 2005, 55, 1019-1030.	0.9	9
59	Multiscale Air Quality Simulation Platform (MAQSIP): Initial applications and performance for tropospheric ozone and particulate matter. Journal of Geophysical Research, 2005, 110, .	3.3	31
60	Initial Application of the Adaptive Grid Air Quality Model. , 2004, , 319-328.		4
61	Regional, three-dimensional assessment of the ozone formation potential of organic compounds. Atmospheric Environment, 2004, 38, 121-134.	1.9	20
62	Estimates of PM2.5 levels in the southeastern United States for the year 2010: What else can be done?. Fuel Processing Technology, 2004, 85, 631-639.	3.7	4
63	Comment on â€œGeographic Sensitivity of Fine Particle Mass to Emissions of SO2and NOxâ€. Environmental Science & Technology, 2004, 38, 4910-4910.	4.6	2
64	Nonlinearity in atmospheric response: A direct sensitivity analysis approach. Journal of Geophysical Research, 2004, 109, .	3.3	78
65	Adaptive Grids in Air Pollution Modeling: Towards an Operational Model. , 2004, , 541-549.		1
66	Estimates of Future PM2.5 Levels in Southeastern United States. , 2004, , 163-170.		0
67	High-Order, Direct Sensitivity Analysis of Multidimensional Air Quality Models. Environmental Science & Technology, 2003, 37, 2442-2452.	4.6	170
68	Integrated modeling for air quality assessment: The Southern Appalachians Mountains initiative project. European Physical Journal Special Topics, 2002, 12, 211-234.	0.2	9
69	Development of a comprehensive, multiscale â€œone-atmosphereâ€modeling system: application to the Southern Appalachian Mountains. Atmospheric Environment, 2002, 36, 3721-3734.	1.9	38
70	Comment on â€œOn the indicator-based approach to assess ozone sensitivities and emissions featuresâ€by Cheng-Hsuan Lu and Julius S. Chang. Journal of Geophysical Research, 2001, 106, 20941-20944.	3.3	3
71	Simulation of dispersion of a power plant plume using an adaptive grid algorithm. Atmospheric Environment, 2001, 35, 4801-4818.	1.9	18
72	An Adaptive Grid Algorithm for Air-Quality Modeling. Journal of Computational Physics, 2000, 165, 437-472.	1.9	31

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73	Ozone Sensitivity and Uncertainty Analysis Using DDM-3D in a Photochemical Air Quality Model. , 2000, , 183-194.		2
74	Mass Conservative Coupling of Non-Hydrostatic Meteorological Models with Air Quality Models. , 2000, , 651-660.		17
75	An automatic differentiation technique for sensitivity analysis of numerical advection schemes in air quality models. Atmospheric Environment, 1997, 31, 879-888.	1.9	30
76	A quantitative analysis of numerical diffusion introduced by advection algorithms in air quality models. Atmospheric Environment, 1997, 31, 1933-1940.	1.9	28
77	Emerging Air Quality Modeling Technologies for High Performance Computing and Communication Environments. , 1996, , 491-502.		2
78	On local finite element refinements in multiscale air quality modeling. Environmental Software, 1994, 9, 61-66.	0.3	5
79	Multiscale air quality modeling: Application to southern California. Journal of Geophysical Research, 1994, 99, 5385.	3.3	38
80	Airshed Model Evaluation of Reactivity Adjustment Factors Calculated with the Maximum Incremental Reactivity Scale for Transitional-Low Emission Vehicles. Journal of the Air and Waste Management Association, 1994, 44, 900-907.	0.6	9
81	Future directions in photochemical air quality modeling. Water, Air, and Soil Pollution, 1993, 67, 181-193.	1.1	4
82	A nonlinear filtering algorithm for multi-dimensional finite element pollutant advection schemes. Atmospheric Environment Part A General Topics, 1993, 27, 793-799.	1.3	7
83	A comparison of fast chemical kinetic solvers for air quality modeling. Atmospheric Environment Part A General Topics, 1992, 26, 1783-1789.	1.3	39
84	Airshed Calculation of the Sensitivity of Pollutant Formation to Organic Compound Classes and Oxygenates Associated with Alternative Fuels. Journal of the Air and Waste Management Association, 1992, 42, 174-178.	0.2	16
85	A multiscale finite element pollutant transport scheme for urban and regional modeling. Atmospheric Environment Part A General Topics, 1991, 25, 2385-2394.	1.3	29
86	Multiscale modeling of pollutant transport and chemistry. Journal of Geophysical Research, 1991, 96, 7363-7370.	3.3	42