Rita Van Dingenen

List of Publications by Year
in descending order

111 papers	41,845 citations	31949 53 h-index	29127 104 g-index
126 all docs	126 docs citations	126 times ranked	57028 citing authors

#	Article	IF	Citations
1	A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990â€“2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet, The, 2012, 380, 2224-2260.	6.3	9,397
2	Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990â€“2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet, The, 2015, 386, 743-800.	6.3	4,951
3	Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980â€“2015: a systematic analysis for the Global Burden of Disease Study 2015. Lancet, The, 2016, 388, 1459-1544.	6.3	4,934
4	Estimates and 25-year trends of the global burden of disease attributable to ambient air pollution: an analysis of data from the Global Burden of Diseases Study 2015. Lancet, The, 2017, 389, 1907-1918.	6.3	4,187
5	Organic aerosol and global climate modelling: a review. Atmospheric Chemistry and Physics, 2005, 5, 1053-1123.	1.9	2,947
6	Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 188 countries, 1990â€“2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet, The, 2015, 386, 2287-2323.	6.3	2,184
7	Simultaneously Mitigating Near-Term Climate Change and Improving Human Health and Food Security. Science, 2012, 335, 183-189.	6.0	1,107
8	Ambient Air Pollution Exposure Estimation for the Global Burden of Disease 2013. Environmental Science & Technology, 2016, 50, 79-88.	4.6	886
9	A European aerosol phenomenologyâ€”2: chemical characteristics of particulate matter at kerbside, urban, rural and background sites in Europe. Atmospheric Environment, 2004, 38, 2579-2595.	1.9	801
10	A European aerosol phenomenology â€“ 3: Physical and chemical characteristics of particulate matter from 60 rural, urban, and kerbside sites across Europe. Atmospheric Environment, 2010, 44, 1308-1320.	1.9	654
11	Exposure Assessment for Estimation of the Global Burden of Disease Attributable to Outdoor Air Pollution. Environmental Science & Technology, 2012, 46, 652-660.	4.6	606
12	The global impact of ozone on agricultural crop yields under current and future air quality legislation. Atmospheric Environment, 2009, 43, 604-618.	1.9	563
13	A European aerosol phenomenologyâ€”1: physical characteristics of particulate matter at kerbside, urban, rural and background sites in Europe. Atmospheric Environment, 2004, 38, 2561-2577.	1.9	494
14	Healthcare Access and Quality Index based on mortality from causes amenable to personal health care in 195 countries and territories, 1990â€“2015: a novel analysis from the Global Burden of Disease Study 2015. Lancet, The, 2017, 390, 231-266.	6.3	480
15	Health co-benefits from air pollution and mitigation costs of the Paris Agreement: a modelling study. Lancet Planetary Health, The, 2018, 2, e126-e133.	5.1	443
16	Multimodel estimates of intercontinental sourceâ€receptor relationships for ozone pollution. Journal of Geophysical Research, 2009, 114, .	3.3	430
17	Formation and cycling of aerosols in the global troposphere. Atmospheric Environment, 2000, 34, 4215-4240.	1.9	386
18	Household Cooking with Solid Fuels Contributes to Ambient PM _{2.5} Air Pollution and the Burden of Disease. Environmental Health Perspectives, 2014, 122, 1314-1320.	2.8	381

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19	Global Air Quality and Health Co-benefits of Mitigating Near-Term Climate Change through Methane and Black Carbon Emission Controls. Environmental Health Perspectives, 2012, 120, 831-839.	2.8	340
20	The Global Atmospheric Environment for the Next Generation. Environmental Science & Technology, 2006, 40, 3586-3594.	4.6	338
21	Future air pollution in the Shared Socio-economic Pathways. Global Environmental Change, 2017, 42, 346-358.	3.6	277
22	Forty years of improvements in European air quality: regional policy-industry interactions with global impacts. Atmospheric Chemistry and Physics, 2016, 16, 3825-3841.	1.9	255
23	Inorganic bromine in the marine boundary layer: a critical review. Atmospheric Chemistry and Physics, 2003, 3, 1301-1336.	1.9	243
24	Abating ammonia is more cost-effective than nitrogen oxides for mitigating PM _{2.5} air pollution. Science, 2021, 374, 758-762.	6.0	191
25	Source apportionment of urban fine and ultra-fine particle number concentration in a Western Mediterranean city. Atmospheric Environment, 2009, 43, 4407-4415.	1.9	189
26	Characterisation of TSP and PM2.5 at IzaÃ±a and Sta. Cruz de Tenerife (Canary Islands, Spain) during a Saharan Dust Episode (July 2002). Atmospheric Environment, 2005, 39, 4715-4728.	1.9	187
27	Ozone effects on crops and consideration in crop models. European Journal of Agronomy, 2018, 100, 19-34.	1.9	170
28	Ozone pollution will compromise efforts to increase global wheat production. Global Change Biology, 2018, 24, 3560-3574.	4.2	163
29	Air quality co-benefits for human health and agriculture counterbalance costs to meet Paris Agreement pledges. Nature Communications, 2018, 9, 4939.	5.8	163
30	Climate, health, agricultural and economic impacts of tighter vehicle-emission standards. Nature Climate Change, 2011, 1, 59-66.	8.1	153
31	Hygroscopic properties of aerosol formed by oxidation of limonene, Î±-pinene, and Î²-pinene. Journal of Geophysical Research, 1999, 104, 3569-3579.	3.3	151
32	Size-segregated aerosol mass closure and chemical composition in Monte Cimone (I) during MINATROC. Atmospheric Chemistry and Physics, 2004, 4, 889-902.	1.9	139
33	A study on the relationship between mass concentrations, chemistry and number size distribution of urban fine aerosols in Milan, Barcelona and London. Atmospheric Chemistry and Physics, 2007, 7, 2217-2232.	1.9	138
34	Aerosol-ozone correlations during dust transport episodes. Atmospheric Chemistry and Physics, 2004, 4, 1201-1215.	1.9	123
35	Data Integration Model for Air Quality: A Hierarchical Approach to the Global Estimation of Exposures to Ambient Air Pollution. Journal of the Royal Statistical Society Series C: Applied Statistics, 2018, 67, 231-253.	0.5	112
36	Observations of aerosols in the free troposphere and marine boundary layer of the subtropical Northeast Atlantic: Discussion of processes determining their size distribution. Journal of Geophysical Research, 1997, 102, 21315-21328.	3.3	106

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37	Observations and model calculations of trace gas scavenging in a dense Saharan dust plume during MINATROC. Atmospheric Chemistry and Physics, 2005, 5, 1787-1803.	1.9	103
38	Variations of urban aerosols in the western Mediterranean. Atmospheric Environment, 2008, 42, 9052-9062.	1.9	102
39	Urban and rural aerosol characterization of summer smog events during the PIPAPO field campaign in Milan, Italy. Journal of Geophysical Research, 2002, 107, LOP 6-1.	3.3	99
40	Coal-exit health and environmental damage reductions outweigh economic impacts. Nature Climate Change, 2020, 10, 308-312.	8.1	94
41	Simulations of condensation and cloud condensation nuclei from biogenic SO₂ in the remote marine boundary layer. Journal of Geophysical Research, 1992, 97, 12901-12912.	3.3	92
42	Regionalized life cycle impact assessment of air pollution on the global scale: Damage to human health and vegetation. Atmospheric Environment, 2016, 134, 129-137.	1.9	89
43	LCâ€IMPACT: A regionalized life cycle damage assessment method. Journal of Industrial Ecology, 2020, 24, 1201-1219.	2.8	80
44	Evidence for anthropogenic impact on number concentration and sulfate content of cloud-processed aerosol particles over the North Atlantic. Journal of Geophysical Research, 1995, 100, 21057.	3.3	79
45	TM5-FASST: a global atmospheric sourceâ€“receptor model for rapid impact analysis of emission changes on air quality and short-lived climate pollutants. Atmospheric Chemistry and Physics, 2018, 18, 16173-16211.	1.9	79
46	Limited potential of crop management for mitigating surface ozone impacts on global food supply. Atmospheric Environment, 2011, 45, 2569-2576.	1.9	75
47	Nucleation and growth of new particles in the rural atmosphere of Northern Italyâ€”relationship to air quality monitoring. Atmospheric Environment, 2005, 39, 6734-6746.	1.9	72
48	A multi-model assessment of the co-benefits of climate mitigation for global air quality. Environmental Research Letters, 2016, 11, 124013.	2.2	72
49	Ternary nucleation of methane sulphonic acid, sulphuric acid and water vapour. Journal of Aerosol Science, 1993, 24, 1-17.	1.8	71
50	Determination of the Condensation Accommodation Coefficient of Sulfuric Acid on Water-Sulfuric Acid Aerosol. Aerosol Science and Technology, 1991, 15, 93-106.	1.5	69
51	Modelling formation and growth of H2SO4-H2O aerosols: Uncertainty analysis and experimental evaluation. Journal of Aerosol Science, 1992, 23, 759-771.	1.8	68
52	Survey of Ambient Air Pollution Health Risk Assessment Tools. Risk Analysis, 2016, 36, 1718-1736.	1.5	66
53	Physical aerosol properties and their relation to air mass origin at Monte Cimone (Italy) during the first MINATROC campaign. Atmospheric Chemistry and Physics, 2005, 5, 2203-2226.	1.9	61
54	Environmental Modeling and Methods for Estimation of the Global Health Impacts of Air Pollution. Environmental Modeling and Assessment, 2012, 17, 613-622.	1.2	61

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55	Harmful Algal Blooms in Chinese Coastal Waters Will Persist Due to Perturbed Nutrient Ratios. Environmental Science and Technology Letters, 2021, 8, 276-284.	3.9	59
56	Satellite-based Estimates of Ambient Air Pollution and Global Variations in Childhood Asthma Prevalence. Environmental Health Perspectives, 2012, 120, 1333-1339.	2.8	57
57	Contribution and uncertainty of sectorial and regional emissions to regional and global PM_{2.5} health impacts. Atmospheric Chemistry and Physics, 2019, 19, 5165-5186.	1.9	56
58	Aerosol studies during the ESCOMPTE experiment: an overview. Atmospheric Research, 2005, 74, 547-563.	1.8	53
59	Submicron aerosol mass balance at urban and semirural sites in the Milan area (Italy). Journal of Geophysical Research, 2002, 107, LOP 11-1.	3.3	50
60	Health co-benefits and mitigation costs as per the Paris Agreement under different technological pathways for energy supply. Environment International, 2020, 136, 105513.	4.8	46
61	The role of ion-induced aerosol formation in the lower atmosphere. Journal of Aerosol Science, 1986, 17, 466-470.	1.8	45
62	Pronounced decrease of ambient particle number emissions from diesel traffic in Denmark after reduction of the sulphur content in diesel fuel. Atmospheric Environment, 2001, 35, 3549-3552.	1.9	43
63	Lidar and in situ observations of continental and Saharan aerosol: closure analysis of particles optical and physical properties. Atmospheric Chemistry and Physics, 2003, 3, 2161-2172.	1.9	40
64	Peroxynitrate formation during the night-time oxidation of dimethylsulfide: Its role as a reservoir species for aerosol formation. Journal of Atmospheric Chemistry, 1994, 18, 211-237.	1.4	37
65	Quantifying air quality co-benefits of climate policy across sectors and regions. Climatic Change, 2020, 163, 1501-1517.	1.7	36
66	Molecule and aerosol particle wall losses in SMOG chambers made of glass. Journal of Aerosol Science, 1989, 20, 113-122.	1.8	34
67	Daily patterns of the multi-modal structure of the particle number size distribution in Milan, Italy. Atmospheric Environment, 2011, 45, 2434-2442.	1.9	34
68	Processes determining the relationship between aerosol number and non-sea-salt sulfate mass concentrations in the clean and perturbed marine boundary layer. Journal of Geophysical Research, 1999, 104, 8027-8038.	3.3	33
69	Spatially Explicit Inventory of Sources of Nitrogen Inputs to the Yellow Sea, East China Sea, and South China Sea for the Period 1970â€“2010. Earth's Future, 2020, 8, e2020EF001516.	2.4	32
70	Instrument Characterization and First Application of the Single Particle Analysis and Sizing System (SPASS) for Atmospheric Aerosols. Aerosol Science and Technology, 2005, 39, 377-393.	1.5	30
71	Future impacts of ozone driven damages on agricultural systems. Atmospheric Environment, 2020, 231, 117538.	1.9	30
72	Energy Pathways for Sustainable Development. , 0, , 1205-1306.		29

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73	In situ airborne measurements of aerosol optical properties during photochemical pollution events. Journal of Geophysical Research, 2005, 110, .	3.3	28
74	Interaction of mineral dust with gas phase nitric acid and sulfur dioxide during the MINATROC II field campaign: First estimate of the uptake coefficient Î³HNO3from atmospheric data. Journal of Geophysical Research, 2005, 110, .	3.3	28
75	Evaluation and uncertainty estimation of the impact of air quality modelling on crop yields and premature deaths using a multi-model ensemble. Science of the Total Environment, 2018, 633, 1437-1452.	3.9	26
76	Possible evidence for a connection between methyl iodide emissions and Saharan dust. Journal of Geophysical Research, 2007, 112, .	3.3	23
77	Co-benefits of black carbon mitigation for climate and air quality. Climatic Change, 2020, 163, 1519-1538.	1.7	22
78	Influence of Turbulence on the Deposition Rate Constant of the Unattached Radon Decay Products. Aerosol Science and Technology, 1991, 14, 257-265.	1.5	21
79	Future Global Air Quality Indices under Different Socioeconomic and Climate Assumptions. Sustainability, 2018, 10, 3645.	1.6	17
80	Lower air pollution during COVID-19 lock-down: improving models and methods estimating ozone impacts on crops. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20200188.	1.6	17
81	Validation of very high cloud droplet number concentrations in air masses transported thousands of kilometres over the ocean. Tellus, Series B: Chemical and Physical Meteorology, 2000, 52, 801-814.	0.8	16
82	A simple non-linear analytical relationship between aerosol accumulation number and sub-micron volume, explaining their observed ratio in the clean and polluted marine boundary layer. Tellus, Series B: Chemical and Physical Meteorology, 2000, 52, 439-451.	0.8	16
83	Impacts of changes in North Atlantic atmospheric circulation on particulate matter and human health in Europe. Geophysical Research Letters, 2013, 40, 4074-4080.	1.5	16
84	Anthropogenic influences on the chemical and physical properties of aerosols in the Atlantic subtropical region during July 1994 and July 1995. Journal of Geophysical Research, 1999, 104, 14309-14319.	3.3	15
85	Incentives for small clubs of Arctic countries to limit black carbon and methane emissions. Nature Climate Change, 2018, 8, 85-90.	8.1	15
86	Effects of black carbon mitigation on Arctic climate. Atmospheric Chemistry and Physics, 2020, 20, 5527-5546.	1.9	15
87	A simple non-linear analytical relationship between aerosol accumulation number and sub-micron volume, explaining their observed ratio in the clean and polluted marine boundary layer. Tellus, Series B: Chemical and Physical Meteorology, 2022, 52, 439.	0.8	15
88	Spatial Patterns of Crop Yield Change by Emitted Pollutant. Earth's Future, 2019, 7, 101-112.	2.4	13
89	Using FÃ¶hn conditions to characterize urban and regional sources of particles. Atmospheric Research, 2008, 90, 159-169.	1.8	12
90	Comment to the paper â€œAssessing nitrogen dioxide (NO2) levels as a contributing factor to coronavirus (COVID-19) fatalityâ€, by Ogen, 2020. Science of the Total Environment, 2020, 738, 139853.	3.9	11

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91	Comment on â€œThe relationship between DMS flux and CCN concentration in remote marine regionsâ€•by S. N. Pandis, L. M. Russell, and J. H. Seinfeld. Journal of Geophysical Research, 1995, 100, 14355.	3.3	10
92	Coagulation enhancement of H2O-H2SO4 aerosols: experiments and model calculations in the transition regime. Journal of Aerosol Science, 1990, 21, S237-S240.	1.8	6
93	Photolytic aerosol formation in SO2î—¸HNO2î—¸H2Oî—¸AIR mixtures, with and without NH3. Journal of Aerosol Science, 1997, 28, S719-S720.	1.8	5
94	Integrate health into decision-making to foster climate action. Environmental Research Letters, 2021, 16, 041005.	2.2	5
95	Quantifying the reductions in mortality from air-pollution by cancelling new coal power plants. Energy and Climate Change, 2021, 2, 100023.	2.2	5
96	02.O.05 Nucleation studies of H2SO4-particles in a vertical laminar flow reactor: Experimental results and comparison with a numerical model. Journal of Aerosol Science, 1994, 25, 11-12.	1.8	4
97	Chapter 18 Formation and cycling of aerosols in the global troposphere. Developments in Environmental Science, 2002, , 519-563.	0.5	4
98	Deposition of Aerosols and Unattached Radon Daughters in Different Chambers; Theory and Experiment. Radiation Protection Dosimetry, 1988, 24, 217-220.	0.4	4
99	Ultrafine number size distribution measurements and chemical characterisation of the aerosol over the atlantic ocean between 40Â°n and 40Â°s. , 1996, , 439-442.		3
100	Deposition of gases and aerosols in smogchambers made of glass. Journal of Aerosol Science, 1987, 18, 659-661.	1.8	2
101	35 P 06 A new laminar flow reactor for gas/particle interaction studies: first results. Journal of Aerosol Science, 1993, 24, S391-S392.	1.8	2
102	Nonlinear impacts of future anthropogenic aerosol emissions on Arctic warming. Environmental Research Letters, 2019, 14, 034009.	2.2	2
103	Intercomparison of Methods for Investigating the Physical Characteristics of Radon Decay Products in the Indoor Environment. Radiation Protection Dosimetry, 1992, 45, 41-46.	0.4	2
104	rfasst: An R tool to estimate air pollution impacts on health and agriculture. Journal of Open Source Software, 2022, 7, 3820.	2.0	2
105	Modelling and observations of aerosol properties in the clean and polluted marine boundary layer and free troposphere. AIP Conference Proceedings, 2000, , .	0.3	1
106	35 P 15 Physico-chemical aerosol measurements over the North-Atlantic. Journal of Aerosol Science, 1993, 24, S409-S410.	1.8	0
107	Experimental artifacts of size distributions of H2O-H2SO4 aerosol particles formed in a photochemical vertical laminar flow reactor due to its design. Journal of Aerosol Science, 1997, 28, S341-S342.	1.8	0
108	Processes relating aerosol number, aerosol volume and non-seasalt sulfate concentrations in the clean and polluted marine boundary layer. Journal of Aerosol Science, 1998, 29, S1147-S1148.	1.8	0

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109	Primary aerosol characterization during urban morning rush hours. Journal of Aerosol Science, 2000, 31, 311-312.	1.8	0
110	Determination of the sticking probability of H2SO4 ON H2SO4-H2O aerosols. Lecture Notes in Physics, 1988, , 23-26.	0.3	0
111	A boxmodel development to study the relationships between the photo-oxidants and the particles formation in the troposphere. Annali Di Chimica, 2003, 93, 447-56.	0.6	0