Maciej Kryza

List of Publications by Year
in descending order

93 papers	1,135 citations	393982 19 h-index	476904 29 g-index
108 all docs	108 docs citations	108 times ranked	1412 citing authors

#	Article	IF	Citations
1	The impact of data assimilation into the meteorological WRF model on birch pollen modelling. Science of the Total Environment, 2022, 807, 151028.	3.9	1
2	Application of the HYSPLIT model for birch pollen modelling in Poland. Aerobiologia, 2022, 38, 103-121.	0.7	2
3	Topographic Characteristics of Drainage Divides at the Mountain-Range Scaleâ€"A Review of DTM-Based Analytical Tools. ISPRS International Journal of Geo-Information, 2022, 11, 116.	1.4	4
4	Reconstruction of Violent Tornado Environments in Europe: Highâ€Resolution Dynamical Downscaling of ERA5. Geophysical Research Letters, 2022, 49, .	1.5	4
5	Precipitable Water Content Climatology over Poland. Atmosphere, 2022, 13, 988.	1.0	2
6	Extension of WRF-Chem for birch pollen modellingâ€"a case study for Poland. International Journal of Biometeorology, 2021, 65, 513-526.	1.3	6
7	Estimating Health Impacts Due to the Reduction of Particulate Air Pollution from the Household Sector Expected under Various Scenarios. Applied Sciences (Switzerland), 2021, 11, 272.	1.3	3
8	A Decade of Poland-AOD Aerosol Research Network Observations. Atmosphere, 2021, 12, 1583.	1.0	8
9	The Effect of Emission Inventory on Modelling of Seasonal Exposure Metrics of Particulate Matter and Ozone with the WRF-Chem Model for Poland. Sustainability, 2020, 12, 5414.	1.6	10
10	TOMOREF Operator for Assimilation of GNSS Tomography Wet Refractivity Fields in WRF DA System. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032451.	1.2	10
11	The influence of atmospheric circulation conditions on Betula and Alnus pollen concentrations in WrocÅ‚aw, Poland. Aerobiologia, 2020, 36, 261-276.	0.7	13
12	Can Assimilation of Ground Particulate Matter Observations Improve Air Pollution Forecasts for Highly Polluted Area of Europe?. Springer Proceedings in Complexity, 2020, , 267-271.	0.2	0
13	Assimilation of Meteorological Data in Online Integrated Atmospheric Transport Modelâ€"Example of Air Quality Forecasts for Poland. Springer Proceedings in Complexity, 2020, , 273-278.	0.2	0
14	The variability of pollen concentrations at two stations in the city of WrocÅ‚aw in Poland. Aerobiologia, 2019, 35, 421-439.	0.7	12
15	Concomitant occurrence of anthropogenic air pollutants, mineral dust and fungal spores during long-distance transport of ragweed pollen. Environmental Pollution, 2019, 254, 112948.	3.7	36
16	4DVAR assimilation of GNSS zenith path delays and precipitable water into a numerical weather prediction model WRF. Atmospheric Measurement Techniques, 2019, 12, 345-361.	1.2	39
17	Temporal changes in wind conditions at Svalbard for the years 1986â€"2015. Geografiska Annaler, Series A: Physical Geography, 2019, 101, 136-156.	0.6	6
18	Application of degree-day factors for residential emission estimate and air quality forecasting. International Journal of Environment and Pollution, 2019, 65, 325.	0.2	2

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19	Emission projections and limit values of air pollution concentration - a case study using the EMEP4PL model. International Journal of Environment and Pollution, 2019, 65, 164.	0.2	2
20	Can Data Assimilation of Surface PM2.5 and Satellite AOD Improve WRF-Chem Forecasting? A Case Study for Two Scenarios of Particulate Air Pollution Episodes in Poland. Remote Sensing, 2019, 11, 2364.	1.8	16
21	Assimilation of PM2.5 ground base observations to two chemical schemes in WRF-Chem â€“ The results for the winter and summer period. Atmospheric Environment, 2019, 200, 178-189.	1.9	21
22	High-resolution simulation of an isolated tornadic supercell in Poland on 20 June 2016. Atmospheric Research, 2019, 218, 145-159.	1.8	17
23	Spatio-temporal changes in atmospheric precipitation over south-western Poland between the periods 1891â€“1930 and 1981â€“2010. Theoretical and Applied Climatology, 2019, 135, 505-518.	1.3	10
24	Modelling the Atmospheric Concentration and Deposition of Pb and Cd in the UK. Springer Proceedings in Complexity, 2018, , 381-385.	0.2	0
25	The role of precursor emissions on ground level ozone concentration during summer season in Poland. Journal of Atmospheric Chemistry, 2018, 75, 181-204.	1.4	19
26	Residuals of Tropospheric Delays from GNSS Data and Ray-Tracing as a Potential Indicator of Rain and Clouds. Remote Sensing, 2018, 10, 1917.	1.8	15
27	High resolution application of the EMEP MSC-W model over Eastern Europe â€“ Analysis of the EMEP4PL results. Atmospheric Research, 2018, 212, 6-22.	1.8	20
28	High-Resolution Dynamical Downscaling of ERA-Interim Using the WRF Regional Climate Model for the Area of Poland. Part 1: Model Configuration and Statistical Evaluation for the 1981â€“2010 Period. , 2018, , 53-68.		2
29	Spatial Interpolation of Ewertâ€™s Index of Continentality in Poland. , 2018, , 165-184.		0
30	The Role of Auxiliary Variables in Deterministic and Deterministic-Stochastic Spatial Models of Air Temperature in Poland. , 2018, , 137-163.		0
31	Sensitivity Study of Cloud Cover and Ozone Modeling to Microphysics Parameterization. Pure and Applied Geophysics, 2017, 174, 491-510.	0.8	10
32	Aerosol-Radiation Feedback and PM10 Air Concentrations Over Poland. Pure and Applied Geophysics, 2017, 174, 551-568.	0.8	11
33	High-Resolution Dynamical Downscaling of ERA-Interim Using the WRF Regional Climate Model for the Area of Poland. Part 2: Model Performance with Respect to Automatically Derived Circulation Types. Pure and Applied Geophysics, 2017, 174, 527-550.	0.8	13
34	High-Resolution Dynamical Downscaling of ERA-Interim Using the WRF Regional Climate Model for the Area of Poland. Part 1: Model Configuration and Statistical Evaluation for the 1981â€“2010 Period. Pure and Applied Geophysics, 2017, 174, 511-526.	0.8	31
35	The Role of Auxiliary Variables in Deterministic and Deterministic-Stochastic Spatial Models of Air Temperature in Poland. Pure and Applied Geophysics, 2017, 174, 595-621.	0.8	9
36	Are estimates of wind characteristics based on measurements with Pitot tubes and GNSS receivers mounted on consumer-grade unmanned aerial vehicles applicable in meteorological studies?. Environmental Monitoring and Assessment, 2017, 189, 431.	1.3	12

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37	Spatial Interpolation of Ewertâ€™s Index of Continentality in Poland. Pure and Applied Geophysics, 2017, 174, 623-642.	0.8	6
38	Source regions of ragweed pollen arriving in south-western Poland and the influence of meteorological data on the HYSPLIT model results. Aerobiologia, 2017, 33, 315-326.	0.7	22
39	Ammonia Concentrations Over Europe â€“ Application of the WRF-Chem Model Supported with Dynamic Emission. Polish Journal of Environmental Studies, 2017, 26, 1323-1341.	0.6	5
40	An assessment of the quality of near-real time GNSS observations as a potential data source for meteorology. Meteorology Hydrology and Water Management, 2017, 5, 3-13.	0.4	12
41	Spatial and chemical patterns of PM2.5 - differences between a maritime and an inland country. Ecological Chemistry and Engineering S, 2016, 23, 61-69.	0.3	2
42	Using a Dynamical Approach for Implementing Ammonia Emissions into WRF-Chem Over Europe. Springer Proceedings in Complexity, 2016, , 345-350.	0.2	0
43	Calculation of Source-Receptor Matrices for Use in an Integrated Assessment Model and Assessment of Impacts on Natural Ecosystems. Springer Proceedings in Complexity, 2016, , 107-112.	0.2	1
44	Recent and Future Changes in Nitrogen and Sulphur Emission, Deposition and the Exceedance of Critical Loads for the Region of South-West Poland and Eastern Saxony. Springer Proceedings in Complexity, 2016, , 167-171.	0.2	0
45	Application of the WRF-Chem Model for Air Pollution Forecasting in Poland. Springer Proceedings in Complexity, 2016, , 351-356.	0.2	1
46	Mean annual population exposure to atmospheric particulate matter in Poland. International Journal of Environment and Pollution, 2015, 58, 89.	0.2	1
47	Application of WRF-Chem to forecasting PM<SUB align="right">10 concentration over Poland. International Journal of Environment and Pollution, 2015, 58, 280.	0.2	14
48	Comparison of the WRF and Sodar derived planetary boundary layer height. International Journal of Environment and Pollution, 2015, 58, 3.	0.2	6
49	Application of chemical dispersion model during a high ozone episode in South-West Poland. International Journal of Environment and Pollution, 2015, 58, 124.	0.2	0
50	Quality of the Governing Temperature Variables in WRF in relation to Simulation of Primary Biological Aerosols. Advances in Meteorology, 2015, 2015, 1-15.	0.6	9
51	Understanding emissions of ammonia from buildings and the application of fertilizers: an example from Poland. Biogeosciences, 2015, 12, 3623-3638.	1.3	9
52	The uncertainty in modelled air concentrations of NO<SUB align="right">x due to choice of emission inventory. International Journal of Environment and Pollution, 2015, 57, 123.	0.2	2
53	Observed changes in SAT and GDD and the climatological suitability of the Poland-Germany-Czech Republic transboundary region for wine grapes cultivation. Theoretical and Applied Climatology, 2015, 122, 207-218.	1.3	17
54	Footprint areas of pollen from alder (Alnus) and birch (Betula) in the UK (Worcester) and Poland (WrocÅ‚aw) during 2005â€“2014. Acta Agrobotanica, 2015, 68, 315-323.	1.0	18

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55	Evaluation of the WRF meteorological model results during a high ozone episode in SW Poland - the role of model initial conditions. International Journal of Environment and Pollution, 2014, 54, 193.	0.2	8
56	Influence of selected meteorological variables on the questing activity of<i>Ixodes ricinus</i>ticks in Lower Silesia, SW Poland. Journal of Vector Ecology, 2014, 39, 138-145.	0.5	30
57	Quantifying missing annual emission sources of heavy metals in the United Kingdom with an atmospheric transport model. Science of the Total Environment, 2014, 479-480, 171-180.	3.9	27
58	Differences in the Spatial Distribution and Chemical Composition of PM10 Between the UK and Poland. Environmental Modeling and Assessment, 2014, 19, 179-192.	1.2	18
59	Comparison of spatial rainfall data calculated with a meteorological model and from interpolation of measurements - implications for FRAME modelled wet deposition. International Journal of Environment and Pollution, 2014, 55, 201.	0.2	0
60	Modelling the Concentration and Deposition of Heavy Metals in the UK. Springer Proceedings in Complexity, 2014, , 223-227.	0.2	1
61	A Sensitivity Analysis of the WRF Model to Shortwave Radiation Schemes for Air Quality Purposes and Evaluation with Observational Data. Springer Proceedings in Complexity, 2014, , 539-543.	0.2	3
62	Modelling the Emission, Air Concentration and Deposition of Heavy Metals in Poland. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 407-412.	0.1	1
63	HydroProg: a system for hydrologic forecasting in real time based on the multimodelling approach. Meteorology Hydrology and Water Management, 2014, 2, 65-72.	0.4	8
64	Application of the 1 km Ã— 1 km Resolution FRAME Model to Poland for the Assessment of Ammonia and Ammonium Concentrations and Exceedance of Critical Levels. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 95-99.	0.1	0
65	Application and Evaluation of the High-Resolution Regional Scale FRAME Model for Calculation of Ammonia and Ammonium Air Concentrations for Poland for the Years 2002â€"2008. Springer Proceedings in Complexity, 2014, , 311-315.	0.2	0
66	The Impact of Transboundary Transport of Air Pollutants on Air Quality in the United Kingdom and Poland. Springer Proceedings in Complexity, 2014, , 323-327.	0.2	0
67	Modelling future impacts of air pollution using the multi-scale UK Integrated Assessment Model (UKIAM). Environment International, 2013, 61, 17-35.	4.8	48
68	THE IMPACT OF PRECIPITATION ON WET DEPOSITION OF SULPHUR AND NITROGEN COMPOUNDS. Ecological Chemistry and Engineering S, 2013, 20, 733-745.	0.3	11
69	Application and evaluation of the WRF model for high-resolution forecasting of rainfall - a case study of SW Poland. Meteorologische Zeitschrift, 2013, 22, 595-601.	0.5	37
70	Regression-based air temperature spatial prediction models: an example from Poland. Meteorologische Zeitschrift, 2013, 22, 577-585.	0.5	30
71	Calculation of Sulphur and Nitrogen Deposition with the Frame Model and Assessment of the Exceedance of Critical Loads in Poland. Ecological Chemistry and Engineering S, 2013, 20, 279-290.	0.3	5
72	Modelling meteorological conditions for the episode (December 2009) of measured high PM<SUB align="right">10 air concentrations in SW Poland - application of the WRF model. International Journal of Environment and Pollution, 2012, 50, 41.	0.2	11

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73	Modelling emission, concentration and deposition of sodium for Poland. International Journal of Environment and Pollution, 2012, 50, 164.	0.2	5
74	Comparison and evaluation of the 1 km and 5 km resolution FRAME modelled annual concentrations of nitrogen oxides. International Journal of Environment and Pollution, 2012, 50, 53.	0.2	2
75	The role of annual circulation and precipitation on national scale deposition of atmospheric sulphur and nitrogen compounds. Journal of Environmental Management, 2012, 109, 70-79.	3.8	26
76	The influence of model grid resolution on estimation of national scale nitrogen deposition and exceedance of critical loads. Biogeosciences, 2012, 9, 1597-1609.	1.3	46
77	Local regression models for spatial interpolation of urban heat islandâ€"an example from WrocÅ,aw, SW Poland. Theoretical and Applied Climatology, 2012, 108, 53-71.	1.3	76
78	Application of remotely sensed data for spatial approximation of urban heat island in the city of Wrocław, Poland. , 2011, , .		5
79	Application of geographically weighted regression for modelling the spatial structure of urban heat island in the city of Wroclaw (SW Poland). Procedia Environmental Sciences, 2011, 3, 87-92.	1.3	36
80	Application of a land - use regression model for calculation of the spatial pattern of annual NOx air concentrations at national scale: A case study for Poland. Procedia Environmental Sciences, 2011, 7, 98-103.	1.3	4
81	Modelling of marine base cation emissions, concentrations and deposition in the UK. Atmospheric Chemistry and Physics, 2011, 11, 1023-1037.	1.9	11
82	Modelling deposition and air concentration of reduced nitrogen in Poland and sensitivity to variability in annual meteorology. Journal of Environmental Management, 2011, 92, 1225-1236.	3.8	25
83	Changes in Sulphur and Nitrogen Deposition in Poland due to Domestic and European Emission Abatement. NATO Science for Peace and Security Series C: Environmental Security, 2011, , 279-283.	0.1	1
84	Nitrogen Deposition in the UK: The Influence of Grid-Space and Time on the Exceedance of Critical Loads and Levels. NATO Science for Peace and Security Series C: Environmental Security, 2011, , 669-673.	0.1	0
85	Spatial information on total solar radiation: Application and evaluation of the r.sun model for the Wedel Jarlsberg Land, Svalbard. Polish Polar Research, 2010, 31, 17-32.	0.9	23
86	The Effect of Emission from Coal Combustion in Nonindustrial Sources on Deposition of Sulfur and Oxidized Nitrogen in Poland. Journal of the Air and Waste Management Association, 2010, 60, 856-866.	0.9	20
87	The influence of long term trends in pollutant emissions on deposition of sulphur and nitrogen and exceedance of critical loads in the United Kingdom. Environmental Science and Policy, 2009, 12, 882-896.	2.4	64
88	GIS-based techniques for urban heat island spatialization. Climate Research, 2009, 38, 171-187.	0.4	48
89	Application of a Lagrangian Model FRAME to Estimate Reduced Nitrogen Deposition and Ammonia Concentrations in Poland. , 2009, , 359-366.		2
90	Modelling the National and Regional Transport and Deposition of Ammonia. , 2009, , 409-421.		2

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91	The role of meteorological factors on year-to-year variability of nitrogen and sulphur deposition in the UK. , 2009, , .		0
92	Modelling the Deposition of Reduced Nitrogen at Different Scales in the United Kingdom. NATO Security Through Science Series C: Environmental Security, 2008, , 127-135.	0.1	3
93	Poster 12 Modelling past and future trends in sulphur and nitrogen deposition in the United Kingdom. Developments in Environmental Science, 2007, 6, 764-767.	0.5	0