Elisa Manzini

List of Publications by Year
in descending order

71 papers	7,078 citations	76326 40 h-index	88630 70 g-index
71 all docs	71 docs citations	71 times ranked	5556 citing authors

#	Article	IF	Citations
1	Sensitivity of Simulated Climate to Horizontal and Vertical Resolution in the ECHAM5 Atmosphere Model. Journal of Climate, 2006, 19, 3771-3791.	3.2	1,066
2	Simulations of anthropogenic change in the strength of the Brewerâ€"Dobson circulation. Climate Dynamics, 2006, 27, 727-741.	3.8	371
3	The Influence of Sea Surface Temperatures on the Northern Winter Stratosphere: Ensemble Simulations with the MAECHAM5 Model. Journal of Climate, 2006, 19, 3863-3881.	3.2	368
4	Effects of Tropical Cyclones on Ocean Heat Transport in a High-Resolution Coupled General Circulation Model. Journal of Climate, 2011, 24, 4368-4384.	3.2	296
5	The Max Planck Institute Grand Ensemble: Enabling the Exploration of Climate System Variability. Journal of Advances in Modeling Earth Systems, 2019, 11, 2050-2069.	3.8	288
6	Uncertainties and assessments of chemistry-climate models of the stratosphere. Atmospheric Chemistry and Physics, 2003, 3, 1-27.	4.9	272
7	On the lack of stratospheric dynamical variability in lowâ€top versions of the CMIP5 models. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2494-2505.	3.3	268
8	The HAMMONIA Chemistry Climate Model: Sensitivity of the Mesopause Region to the 11-Year Solar Cycle and CO2 Doubling. Journal of Climate, 2006, 19, 3903-3931.	3.2	247
9	A Comparison between Gravity Wave Momentum Fluxes in Observations and Climate Models. Journal of Climate, 2013, 26, 6383-6405.	3.2	245
10	Climatology and Forcing of the Quasi-Biennial Oscillation in the MAECHAM5 Model. Journal of Climate, 2006, 19, 3882-3901.	3.2	210
11	Forcing of the quasi-biennial oscillation from a broad spectrum of atmospheric waves. Geophysical Research Letters, 2002, 29, 86-1-86-4.	4.0	182
12	Impact of the Stratosphere on the Winter Tropospheric Teleconnections between ENSO and the North Atlantic and European Region. Journal of Climate, 2009, 22, 1223-1238.	3.2	167
13	The GCMâ€"Reality Intercomparison Project for SPARC (GRIPS): Scientific Issues and Initial Results. Bulletin of the American Meteorological Society, 2000, 81, 781-796.	3.3	146
14	Assessing and Understanding the Impact of Stratospheric Dynamics and Variability on the Earth System. Bulletin of the American Meteorological Society, 2012, 93, 845-859.	3.3	146
15	The effect of varying the source spectrum of a gravity wave parameterization in a middle atmosphere general circulation model. Journal of Geophysical Research, 1998, 103, 31523-31539.	3.3	135
16	Northern winter climate change: Assessment of uncertainty in CMIP5 projections related to stratosphere-troposphere coupling. Journal of Geophysical Research D: Atmospheres, 2014, 119, 7979-7998.	3.3	131
17	Impact of the Doppler spread parameterization on the simulation of the middle atmosphere circulation using the MA/ECHAM4 general circulation model. Journal of Geophysical Research, 1997, 102, 25751-25762.	3.3	129
18	A New Look at Stratospheric Sudden Warmings. Part II: Evaluation of Numerical Model Simulations. Journal of Climate, 2007, 20, 470-488.	3.2	129

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19	Predictability of the quasiâ€biennial oscillation and its northern winter teleconnection on seasonal to decadal timescales. Geophysical Research Letters, 2014, 41, 1752-1758.	4.0	124
20	ICONâ€A, the Atmosphere Component of the ICON Earth System Model: I. Model Description. Journal of Advances in Modeling Earth Systems, 2018, 10, 1613-1637.	3.8	123
21	A stratospheric connection to Atlantic climate variability. Nature Geoscience, 2012, 5, 783-787.	12.9	108
22	Stratosphere key for wintertime atmospheric response to warm Atlantic decadal conditions. Climate Dynamics, 2014, 42, 649-663.	3.8	104
23	Tropical Cumulus Convection and Upward-Propagating Waves in Middle-Atmospheric GCMs. Journals of the Atmospheric Sciences, 2003, 60, 2765-2782.	1.7	96
24	Gravity Waves from Fronts: Parameterization and Middle Atmosphere Response in a General Circulation Model. Journals of the Atmospheric Sciences, 2002, 59, 923-941.	1.7	94
25	Chemistry-climate model SOCOL: a validation of the present-day climatology. Atmospheric Chemistry and Physics, 2005, 5, 1557-1576.	4.9	94
26	A Simulation of the Separate Climate Effects of Middle-Atmospheric and Tropospheric CO2Doubling. Journal of Climate, 2004, 17, 2352-2367.	3.2	85
27	Impact of an improved shortwave radiation scheme in the MAECHAM5 General Circulation Model. Atmospheric Chemistry and Physics, 2007, 7, 2503-2515.	4.9	77
28	Middle Atmospheric Traveling Waves Forced by Latent and Convective Heating. Journals of the Atmospheric Sciences, 1993, 50, 2180-2200.	1.7	76
29	Climate change under aggressive mitigation: the ENSEMBLES multi-model experiment. Climate Dynamics, 2011, 37, 1975-2003.	3.8	75
30	Global and regional ocean carbon uptake and climate change: sensitivity to a substantial mitigation scenario. Climate Dynamics, 2011, 37, 1929-1947.	3.8	74
31	Extra-tropical atmospheric response to ENSO in the CMIP5 models. Climate Dynamics, 2014, 43, 3367-3376.	3.8	67
32	Stratospheric influence on tropospheric climate change in the Northern Hemisphere. Journal of Geophysical Research, 2012, 117, .	3.3	61
33	European blocking and Atlantic jet stream variability in the NCEP/NCAR reanalysis and the CMCC-CMS climate model. Climate Dynamics, 2014, 43, 71-85.	3.8	57
34	Northern winter stratospheric temperature and ozone responses to ENSO inferred from an ensemble of Chemistry Climate Models. Atmospheric Chemistry and Physics, 2009, 9, 8935-8948.	4.9	56
35	Challenges and opportunities for improved understanding of regional climate dynamics. Nature Climate Change, 2018, 8, 101-108.	18.8	56
36	Ural Blocking Driving Extreme Arctic Sea Ice Loss, Cold Eurasia, and Stratospheric Vortex Weakening in Autumn and Early Winter 2016â€“2017. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11313-11329.	3.3	54

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37	Decadal climate predictions with a coupled OAGCM initialized with oceanic reanalyses. Climate Dynamics, 2013, 40, 1483-1497.	3.8	53
38	Uncertainty in the Response of Sudden Stratospheric Warmings and Stratosphereâ€Troposphere Coupling to Quadrupled CO₂ Concentrations in CMIP6 Models. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032345.	3.3	50
39	Interannual variation patterns of total ozone and lower stratospheric temperature in observations and model simulations. Atmospheric Chemistry and Physics, 2006, 6, 349-374.	4.9	48
40	The Stratospheric Pathway of La NiÃ±a. Journal of Climate, 2016, 29, 8899-8914.	3.2	47
41	A model study of tropospheric impacts of the Arctic ozone depletion 2011. Journal of Geophysical Research D: Atmospheres, 2014, 119, 7999-8014.	3.3	41
42	On the role of Ural Blocking in driving the Warm Arcticâ€“Cold Siberia pattern. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 2138-2153.	2.7	38
43	The simulation of the Antarctic ozone hole by chemistry-climate models. Atmospheric Chemistry and Physics, 2009, 9, 6363-6376.	4.9	36
44	The quasi-biennial oscillation in a warmer climate: sensitivity to different gravity wave parameterizations. Climate Dynamics, 2015, 45, 825-836.	3.8	36
45	Troposphereâ€“stratosphere response to large-scale North Atlantic Ocean variability in an atmosphere/ocean coupled model. Climate Dynamics, 2016, 46, 1397-1415.	3.8	36
46	Kelvin and Rossbyâ€gravity wave packets in the lower stratosphere of some highâ€top CMIP5 models. Journal of Geophysical Research D: Atmospheres, 2014, 119, 2156-2173.	3.3	35
47	Northern Hemisphere Stratospheric Pathway of Different El NiÃ±o Flavors in Stratosphere-Resolving CMIP5 Models. Journal of Climate, 2017, 30, 4351-4371.	3.2	34
48	Global response to solar radiation absorbed by phytoplankton in a coupled climate model. Climate Dynamics, 2012, 39, 1951-1968.	3.8	33
49	Stratosphereâ€troposphere coupling at interâ€decadal time scales: Implications for the North Atlantic Ocean. Geophysical Research Letters, 2012, 39, .	4.0	33
50	The Dynamics and Variability Model Intercomparison Project (DynVarMIP) for CMIP6: assessing the stratosphereâ€“troposphere system. Geoscientific Model Development, 2016, 9, 3413-3425.	3.6	32
51	A convectionâ€based gravity wave parameterization in a general circulation model: Implementation and improvements on the QBO. Journal of Advances in Modeling Earth Systems, 2014, 6, 264-279.	3.8	28
52	Characteristics of stratospheric warming events during Northern winter. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5368-5380.	3.3	25
53	Intercomparison of Gravity Wave Parameterizations: Hines Doppler-Spread and Warner and McIntyre Ultra-Simple Schemes.. Journal of the Meteorological Society of Japan, 2002, 80, 335-345.	1.8	21
54	ENSO and the stratosphere. Nature Geoscience, 2009, 2, 749-750.	12.9	20

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55	Convectively Generated Gravity Waves in High Resolution Models of Tropical Dynamics. Journal of Advances in Modeling Earth Systems, 2018, 10, 2564-2588.	3.8	20
56	Role of stratospheric dynamics in the ozoneâ€“carbon connection in the Southern Hemisphere. Climate Dynamics, 2013, 41, 3039-3054.	3.8	17
57	Tropical Deep Convection Impact on Southern Winter Stationary Waves and Its Modulation by the Quasi-Biennial Oscillation. Journal of Climate, 2019, 32, 7453-7467.	3.2	17
58	Nonlinear Response of the Stratosphere and the North Atlanticâ€European Climate to Global Warming. Geophysical Research Letters, 2018, 45, 4255-4263.	4.0	15
59	Arctic Stratosphere Dynamical Response to Global Warming. Journal of Climate, 2017, 30, 7071-7086.	3.2	14
60	Reconciling different methods of highâ€latitude blocking detection. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 1070-1096.	2.7	11
61	Impact of a Stochastic Nonorographic Gravity Wave Parameterization on the Stratospheric Dynamics of a General Circulation Model. Journal of Advances in Modeling Earth Systems, 2018, 10, 2147-2162.	3.8	10
62	An assessment of scale-dependent variability and bias in global prediction models. Climate Dynamics, 2020, 54, 287-306.	3.8	9
63	A model intercomparison analysing the link between column ozone and geopotential height anomalies in January. Atmospheric Chemistry and Physics, 2008, 8, 2519-2535.	4.9	8
64	Diagnostics of the Tropical Tropopause Layer from in-situ observations and CCM data. Atmospheric Chemistry and Physics, 2009, 9, 9349-9367.	4.9	7
65	Stratospheric climate and variability from a general circulation model and observations. Climate Dynamics, 1996, 12, 615-639.	3.8	7
66	Interaction between decadalâ€toâ€multidecadal oceanic variability and sudden stratospheric warmings. Annals of the New York Academy of Sciences, 2021, 1504, 215-229.	3.8	6
67	Climate change reduces warming potential of nitrous oxide by an enhanced Brewerâ€Dobson circulation. Geophysical Research Letters, 2016, 43, 5851-5859.	4.0	5
68	Parameterization of gravity wave drag in comprehensive models of the middle atmosphere. Advances in Space Research, 1997, 20, 1241-1251.	2.6	3
69	Estimating Subseasonal Variability and Trends in Global Atmosphere Using Reanalysis Data. Geophysical Research Letters, 2018, 45, 12999-13007.	4.0	3
70	Regional hydrological cycle changes in response to an ambitious mitigation scenario. Climatic Change, 2013, 120, 389-403.	3.6	2
71	Challenges and opportunities for improved understanding of regional climate dynamics. , 0, .		1